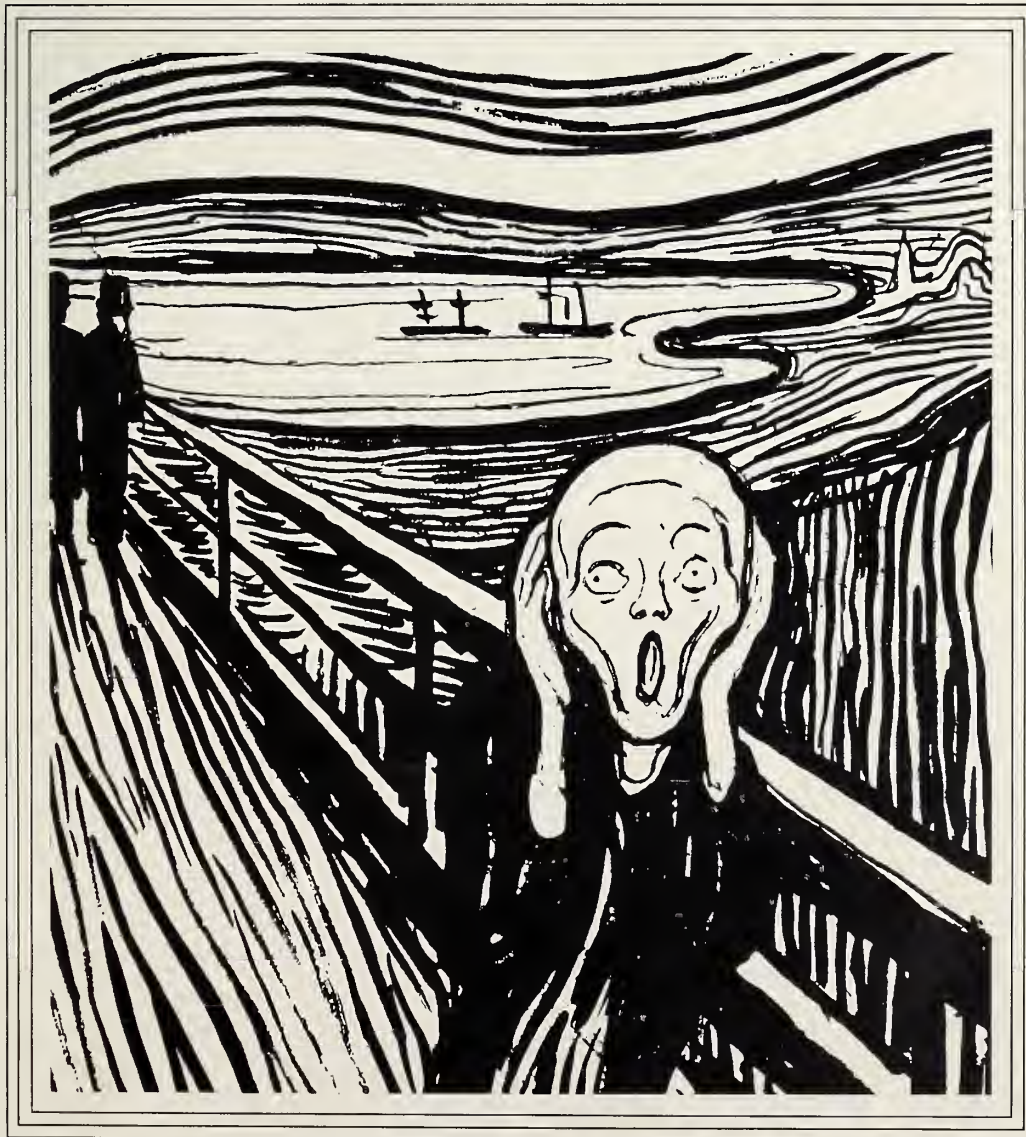






Research Issues 17

DRUGS AND CRIME



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Alcohol, Drug Abuse, and Mental Health Administration
National Institute on Drug Abuse

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THE SCREAM
1895. Edvard Munch, 1895

DRUGS AND CRIME

**The Relationship of Drug Use and
Concomitant Criminal Behavior**

Edited by:

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Documentation Associates

and

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Division of Research
Psychosocial Branch
National Institute on Drug Abuse

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Foreword

The issues of psychosocial drug use and abuse have generated many volumes analyzing the "problem" and suggesting "solutions." Research has been conducted in many disciplines and from many different points of view. The need to bring together and make accessible the results of these research investigations is becoming increasingly important. The Research Issues Series is intended to aid investigators by collecting, summarizing, and disseminating this large and disparate body of literature. The focus of this series is on critical problems in the field. The topic of each volume is chosen because it represents a challenging issue of current interest to the research community. As additional issues are identified, relevant research will be published as part of the series.

Many of the volumes in the series are reference summaries of major empirical research and theoretical studies of the last fifteen years. These summaries are compiled to provide the reader with the purpose, methodology, findings, and conclusions of the studies in given topic areas. Other volumes are original resource handbooks designed to assist drug researchers. These resource works vary considerably in their topics and contents, but each addresses virtually unexplored areas which have received little attention from the research world.

The Research Issues Series is a group project of staff members of the National Institute on Drug Abuse, Division of Research, Psychosocial Branch. Special gratitude is due Dr. Louise Richards for her continued guidance and support. Selection of articles for inclusion in this volume was greatly aided by the suggestions of a peer review group, researchers themselves, each of whom reviewed a topic of particular interest. It is my pleasure to acknowledge their contribution to the project.

Dan J. Lettieri, Ph.D.
Project Officer
National Institute on Drug Abuse



Woodcut from THE CITY
Frans Masereel, 1925

Preface

This is the first of two volumes presenting abstracts of major research and theoretical studies that explore various aspects of the relationship between drugs and criminal behavior and the law. Each abstract is intended to be a faithful representation of the original study, conveying what was done, why it was done, what methodology was employed, what results were found, and what conclusions were derived from the results. Each author's word usage and spelling were followed as closely as possible.

Drugs and Crime addresses the issue of the relationships of drug use and concomitant criminality--that is, criminal acts other than the possession of, or trafficking in, illicit drugs. The second volume, Drug Users and the Criminal Justice System, will focus on drug-related offenses--that is, drug use, possession or trafficking as a crime--and the effect of the criminal justice system, the law, and law enforcement on drug abuse and the drug user.

Most of the 107 studies included in this first volume focus on habitual offenders who are engaged in a criminal lifestyle. Each of the studies selected explores one or more of the following areas:

- What kinds of crimes are committed by what types of drug users? Is crime a necessary corollary to drug use? What proportion of drug users engage in criminal acts other than violations of drug laws?
- What is the causal relationship between drug abuse and criminal behavior? Which comes first, for whom?
- Do some or any drug abuse treatment modalities have an effect on criminal behavior?
- What impact have changes in drug laws had on criminal behavior?

The volume itself is divided into seven topic areas:

- I. Reviews and Theories
- II. Drug Use and Criminal Behavior
- III. Addiction and Criminal Behavior
- IV. Drugs and Delinquency
- V. Crime and Female Drug Users
- VI. The Impact of Treatment Modalities
- VII. The Economics of Drugs and Crime

These subdivisions were considered the most logical categories within which present research could be classified. While a number of studies dealt with a variety of topics, each was classified according to major purpose and focus. The abstracts are arranged alphabetically within each section.

The studies abstracted in this volume are listed alphabetically following the table of contents.

A supplementary bibliography of additional reading is included at the end of the volume. Several indexes also are provided, carefully designed to meet the needs and interests of drug researchers.

An extensive and comprehensive literature search was carried out to identify materials for inclusion in this volume. Major clearinghouses, data bases, library collections, and special bibliographies were searched. The editors also corresponded with professional organizations, institutions, and research specialists in searching for relevant materials. Current issues of newsletters and journals were scanned throughout the project. The list of bibliographic sources searched included:

Addiction Research Foundation, Bibliographies
Dissertation Abstracts
Index Medicus
Index to Legal Periodicals
Index to Periodical Articles Related to the Law
National Clearinghouse for Drug Abuse Information
National Criminal Justice Reference Service
Psychological Abstracts
Public Affairs Information Service
Research in Education
Social Sciences Citation Index
Sociological Abstracts
SPEED: The Current Index to Drug Abuse Literature

The criteria for selection of documents were drawn up by a consultant group of drug researchers working with the contractor and representatives of the National Institute on Drug Abuse. For inclusion, a study had to meet the following general criteria:

- Empirical research studies with findings pertinent to the particular topic, or major theoretical approaches to the study of that topic.
- Published between January 1960 and June 1975, preferably in the professional literature, with the exception of certain older "classics" which merited inclusion, and unpublished dissertations.
- English language, with a focus on American drug issues.

After a first review of citations and annotations, to weed out obviously irrelevant materials, the body of collected literature was subjected to two reviews: one to ensure that materials met the selection criteria; and a second, accomplished by a peer review group, to ensure that studies representative of the universe were included. Each completed abstract was subsequently reviewed to ensure that it reflected accurately and faithfully the contents of the study.

The talents and contributions of many individuals made this volume possible. Researchers who served on the peer review panel provided critical input in the selection of the articles and studies. Drs. William McGlothlin and Peter Bentler provided special assistance in selecting the literature; Stephanie Greenberg reviewed each abstract.

Peer Review Group

John Ball, Ph.D.	James Inciardi, Ph.D.
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Peter Schneider

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PURPOSE

The relationship between various types of drugs and the occurrence of violent behavior was explored by analyzing the significant findings of pertinent studies. Examined were the connections between violence and violent crimes, and the following types of drugs: alcohol, opiates, amphetamines, barbiturates, marihuana, hallucinogens, inhalants, and combinations of these. Violent concomitants of drug-dealing, chemical warfare, and civil disturbances, and the results of experiments on animals were also investigated.

RESULTS

General Considerations

The concern about the connection between drug use and violence has been generated more by political leaders than by social and biological scientists. The violent offender, well-known to police, prison officials, and taxpayers, is relatively unknown to researchers. Law enforcement's causal linking of drug use and violent crimes is offset by research indicating a drop in violent crimes following addiction and a sociological sub-culture view of drugs and violence.

The sample group of drug users is itself subject to constant change; consequently, all investigators tend to be behind the times in estimates of drug use and its consequences. Thus, researchers must identify dozens of changing factors influencing drug use and its effects, as well as newly emerging social definitions of violence. Other methodological problems include instrumentation, sample selection, and the adequacy of concepts serving as the basis of inquiry or the interpretation of results.

Current Myths and Misunderstandings

Many prevalent and persistent misconceptions about drug use and its results derive from incorrect historical notions. Furthermore, there is a tendency to attribute animate force to drugs, as though they were demons capable of possession. Actually, no drug presently known will inevitably cause violence; a violent act is necessarily a complex sequence of events involving intentions and impulses towards others; it is the human and not the drug which acts violently. In the matter of violence itself there is also a problem of definition, involving drug, drug-taker, history, setting, victim, and reporter.

Alcohol and Violent Crime

According to the President's Task Force on Law Enforcement, arrests for alcohol use account for more than half of all reported offenses in the United States. Alcohol is implicated in homicides, crimes of violence, and unskilled property crimes. Alcoholic patterns are group-specific, linked to crime in various ways, as part of a general maladaptive pattern (in youths, particularly) or to facilitate misbehavior, but rarely prompting criminal behavior in the nonproblem drinker.

Supplemental observations indicate that alcohol is most often implicated in male criminality. A German study links youthful alcohol use to a rise in juvenile offenses, and an Argentinian report identifies it as a major contributing factor in crimes of vengeance and passion. The California Youth Authority (1967) found that drinking delinquents committed significantly more crimes of assault than nondrinkers.

Several U. S. studies indicate that parental alcoholism correlates significantly with psychopathy. One study linked alcoholism to crime and violence risks, the predictability of which could be determined by parental alcoholic-sociopathic life style, in a manner comparable with patterns of heroin addiction.

Opiates and Violence

Most known opiate addicts have been delinquent prior to being identified as users, and continue to be arrested after release from hospitals and prisons. Often, arrest frequency increases for property crime but decreases or stabilizes for crimes of violence. (Reports from Lexington, Kentucky, U.S. Public Health Service Hospital indicate that many post-addiction crimes are committed during periods of abstinence from opiates but indulgence in alcohol.) Individuals do not become increasingly violent after addiction even when they remain criminal. Evidence also indicates that opiates often suppress aggression and sexuality, which may decrease the risk of violent crime. California Youth Authority findings show no dramatically greater or less risk of violence among opiate-involved youths compared to other delinquents. However, the FBI, making use of data in Careers in Crime, recorded the absolute number of violent crimes attributable to heroin users was greater than that of nonusers.

The Federal Bureau of Narcotics and Dangerous Drugs found no important increase in crimes of resisting arrest among heroin users, although 10% of these individuals were armed. Observations by victims, police, and others have raised the question of a possible increase in the risk of violence in connection with the irritability concomitant with drug withdrawal and/or deprivation, but no data are yet available.

Advocates of methadone therapy have claimed in 2-year follow-up reports that this procedure can practically eliminate heroin use and drug-related street crime (robbery, burglary, peddling, possession, etc.) in volunteer patients. However, these findings are offset by contradictory ones indicating that methadone therapy does not necessarily facilitate general social rehabilitation. Substitution therapy appears to work best when drug involvement, delinquent life style and emotional disturbance were minimal before addiction. Likewise, punishment is not a deterrent for offenses symptomatic of a life style involving crime and addiction. Thus, the social cost of legitimizing drug use would not seem likely to decrease use, or physical, social, and psychic disability.

Amphetamines and Violence

Research done to date directly contradicts claims linking amphetamine use to crimes of violence, sexual crimes, or accidents. A British study comparing delinquent users and nonusers found no difference in delinquency rates, but no crimes of violence, road accidents or firearms violations among the users. A review of literature and evidence submitted to government hearings in the U. S. produced no verified instance of sexual offense arising out of amphetamine use. Psychosis, not limited to individuals with a prior personality disorder, is a documented outcome of use. High school students surveyed in one study reported emotional upsets, but no crimes, accidents, or violence related to amphetamine use. However, a survey of amphetamine-users in Haight-Ashbury (1969) attributes violence there (including 17 homicides in a two-month period) to use within a specific anti-social milieu. Other researchers warn of the paranoia, hyperactivity and violence potential of users, despite medical use of amphetamines in treatment of hyperactive children to achieve precisely the opposite effects.

Barbiturates, Tranquilizers, and Violence

There is no reliable evidence to the effect that tranquilizers are associated with antisocial behavior, although barbiturates are the most frequent female suicide device. Although continuous use may lead to irritability rather than sedation, there are no verified cases of crimes against persons or property resulting from barbiturate use, nor do extant reports indicate differences between treated and untreated noninstitutionalized persons.

Marihuana and Violence

In studies conducted in the U. S., Brazil, India, North Africa, and Nigeria, there was no reliable evidence that marihuana caused crime. In the La Guardia Report (1940) in New York City, marihuana was not found to be either criminogenic or to be associated with criminal sub-groups. Individual idiosyncratic reactions occasionally might elicit violent behavior. The California Youth Authority data (1968) indicates no difference in violence rates for users and nonusers, but conversely, no evidence that this drug suppresses violent crime capabilities.

Hallucinogens and Violence

Although psychosis following LSD is verified, crime associated with hallucinogen use appears minimal. There may be long-term personality changes associated with drug use, in which criminal acts could conceivably occur as part of a syndrome of poor judgment.

The California Youth Authority data show a slight tendency for habitual users of hallucinogens to be involved less often than nonusers or infrequent users in robberies, but indicate no rate differences for homicides, assault, burglary, and rape. Hallucinogen users are also infrequently users of other drugs as well. A safe conclusion is that the hallucinogens neither insulate delinquents from acts of violence, nor predispose them to violence.

The same conclusion may be drawn for many other drugs in this large sample of identified offenders, with the probable exception of alcohol.

Multiple Drug Users and Violence

There is no evidence to support a strong relationship between any form or combination of drug use and the occurrence of violent as opposed to nonviolent crime. Characteristic styles of delinquency emerge from a background of general misbehavior.

Drug Dealers and Violence

The underworld nature of dealing fosters increasing risk of harm and potential violence. However, the majority of California dealers sampled do not live in fear of their lives, carry guns, or engage in theft of drugs or money.

Special interviews conducted with professional criminals, foreign residents active in drug traffic from Asia, Europe, and Mexico-Central America to the U.S. indicated that market conditions (increased traffic and suppression) are increasingly lucrative, competitive, and violent on the international scale. Such violence tends to occur within the drug world rather than against property or persons outside it.

CONCLUSIONS

In absolute terms, the drug most often implicated in violence is alcohol. Most drugs except hallucinogens have demonstrable medical benefit when administered under controlled conditions. On the whole, the emergence of violence is rarely attributable only to the influence of drugs. A user is not more violent, and is generally less violent than an offender with a chronic history of aggressive actions. These generalizations do not apply to the typical dealer, for whom there is strong evidence linking drugs and violence.

Major drug law revisions must be considered, minimizing criminal penalties for exploratory drug use but providing rehabilitation. Legislation should exercise stricter controls over the problem drinker in particular. Control over organized crime and the elimination of handguns are necessary for control of violence connected with drug use. All these measures involve a heightened humanistic concern for the common welfare of all members of society.

Blumberg, Abraham S. The politics of deviance: The case of drugs. Journal of Drug Issues, 3(2): 105-114, Spring 1973.

PURPOSE

Drawing upon data from a variety of sources, the drug problem and concomitant crime control measures are seen as generating three major social trends which have obscured realistic assessment and constructive action. These trends are: (1) the violation of traditional personal rights and freedoms; (2) the equation of drug offenses with the total crime problem, particularly in the area of street crimes; and (3) a symbiotic relationship between the illicit drug industry and the crime control establishment.

The material is documented by figures from sources including the IRS, the Task Force Report of the President's Commission on Law Enforcement and the Administration of Justice, and the Department of Justice. Trends and approaches to addiction and law enforcement are analyzed, evaluated, and used as a basis for prediction of future trends and recommendations.

SUMMARY

Evidence indicates that increased use of such techniques as wire-tapping, stop-and-search laws and no-knock statutes has resulted in no decrease in crime prevention. During 1960-1970, crimes against property (\$50 and over) rose 147%, and violent crimes rose 126%. During approximately the same time period (1960-1972), national expenditures for the criminal justice system rose from \$3.5 billion to \$10 billion. Federal outlays for drug-related enforcement and treatment programs were purported to reach \$700 million in 1973, with Attorney General Ramsey Clark estimating 5% rehabilitative use of this sum.

The treatment of drug addiction and related crime has itself become a problem. Under the guise of law and order, drug enforcement bureaucracies have eroded person freedoms, due processes and constitutional immunities from invasion of one's person, home and possessions. Such procedures tend to victimize the poor and/or deprived, without halting the spread of addiction and crime.

Equating drug offenses with the total crime problem has intensified national anxiety about crime, but deflected attention from other social concerns. Politicians use this anxiety for their own public-relations purposes, calling for extensive and costly studies and thus currying popularity. Treating the drug-crime problem as a crusade distracts from dealing realistically with inflation, unemployment, pollution, health care needs, and other social ills.

The various treatment and control methods all serve to create a symbiotic counterpart to the illicit heroin industry; this counter-industry has a vested interest in self-maintenance, and consequently in the continued existence of the drug problem. Methadone therapy in particular lends itself to police-state supervision and control of addicts, as part of impending cybernetic authoritarian control over all types of deviants.

Chambers, Carl D. Narcotic addiction and crime: An empirical review. In: Inciardi, James A., and Chambers, Carl D., eds. Drugs and the Criminal Justice System. Beverly Hills, Calif.: Sage Publications, Inc., 1974. pp. 125-142. (25 References)

PURPOSE

In light of the contradictions concerning the type, degree and significance of the relationship between narcotic addiction and crime, an examination of recent empirical studies was conducted. Specific areas examined were: (1) pre- and post-addiction criminal activity; (2) supporting one's habit; (3) arrest/incarceration liability for criminal activity; and (4) treatment as an interrupter of criminal activity.

RESULTS

Pre- and Post-Addiction Criminal Activity

A significant change appears to have occurred in criminal activity associated with narcotic addiction: addicts are much more likely to be criminally involved prior to using drugs than they were in the past. Dai (1937) and Pescor (1943) reported pre-addiction arrest rates of 19% and 25% respectively in study populations of more than 1,000 addicts. Vaillant and Brill (1965) reported a 46% pre-addiction arrest figure among 100 addicts treated at Lexington during 1952-53, a rate which has remained relatively stable since that time as supported in several subsequent studies. The consistency of the cited statistics suggests their legitimacy as an index of criminality prior to addiction. However, the studies do little to satisfy the analyst who is concerned with the biases of arrest data and largely demonstrate the emptiness of most arrest statistics in trying to assess the content of criminal activity.

Plair and Jackson (1970) provide one of the most comprehensive assessments of pre- and post-addiction criminality. Some of their findings were: (1) the arrest rate of their study population increased from 10% before addiction to 80% after addiction; (2) property crimes increased from 4% to 70%; and (3) specific percentage increases for robbery (61%), shoplifting (77%), burglary (56%), and pickpocketing (75%). In summary, the contemporary addict was more likely to be criminally involved prior to his addiction than not, with a sharp increase in intensity and diversity after addiction. This study needs replication.

Supporting One's Habit

In contrast to the widely held assumption that most addicts must steal in order to support their addictions, there are large numbers of addicts who do not steal most of the time. Evidence suggests that criminality as a primary means of support ranges from a low of about 30% (among White females) to a high of about 80% (among Black males).

A major change in the nature of addict criminal involvement has also occurred. The contemporary narcotic addict is much more likely to commit crimes against persons than his counterpart of recent years. In the study of Inciardi and Chambers (1972), 29% of the males and 28% of the females admitted committing assaultive robberies (muggings) and 32% of the males admitted committing armed robberies.

Two interview studies of female narcotic addicts conducted in 1965 and 1970 (Chambers and Inciardi, 1971) highlighted the following changes in how female addicts support their habits: (1) drug selling increased from 25.0% to 38.5%, while drug selling as a means of complete support decreased from 17.7% to 7.7%, (2) prostitution decreased from 47.0% to 28.8%, and prostitution as means of complete support decreased from 41.1% to 5.7%. Ethnic differences in type of criminal activity were also reported, with Puerto Ricans more likely to sell drugs, and Whites more likely to combine drug selling and prostitution.

Arrest/Incarceration Liability for Criminal Activity

Both arrest and incarceration liabilities are low for the criminal activities of narcotic addicts, due to the existence of "conspiracies" against the reporting of much addict crime.

Prostitution and drug selling are unlikely to produce a "victim" who will report to the authorities, and the buyers of stolen merchandise are also unlikely to report.

Treatment as an Interrupter of Criminal Activity

It is reasonable to accept the validity of reports that providing treatment for narcotic addicts significantly reduces the amount of criminal activity and produces changes in the nature of criminal activity. Such charges, however, have not been carefully documented and it is not known by how much, or with whom, criminality is reduced.

CONCLUSIONS

This review indicates the following unrelated conclusions:

- Criminal involvement is a part of the pre-addiction life style of most contemporary addicts.
- The vast majority of contemporary addicts support their addictions by committing crimes, and there is an alarming increase in crimes against persons and drug selling.
- The risks of arrest and incarceration are extremely low.
- Younger addicts appear to be criminal opportunists, and
- The reduction in criminal involvement by treatment is probably transitory.

Well designed studies by competent and truly independent researchers are needed to address these and related issues.

Drug Abuse Council. A Perspective on "Get Tough" Drug Control Laws. Washington, D.C.: The Drug Abuse Council, Inc., 1973. Publication No. PPS-1. (42 References)

PURPOSE

Deeply concerned about the use of "get tough" criminal laws for solving drug problems--including the crime associated with them--the Drug Abuse Council, Inc. analyzed three broad areas:

- (1) Would stronger criminal sanctions reduce crime and reduce use of the drugs covered by them?
- (2) Would they do active harm?
- (3) Are they necessary?

SUMMARY

Efficacy of Tougher Criminal Penalties

An unintentional effect of enacting sweeping laws to reduce the supply of specific drugs may be to lead users to other, potentially more harmful drugs, as shown in the instances of Prohibition and the attempt to control marihuana usage in Vietnam. We sought to control supply without effectively addressing demand, and what we got was much worse than what we had--and it wasn't what we expected.

To the public, the real issue in drug-related crime is heroin. It is the addiction to heroin and the costs of maintaining that addiction--not the chemical action of the drug itself--that are related to crimes against property and the violent crimes associated therewith.

However, the exact relationship between heroin and crime is far from clear. The number of individuals who commit crimes solely to purchase heroin is unknown. It is further not known how many of the estimated total heroin using population are "chippers"--those who use heroin only occasionally, are not addicted or dependent, and do not commit crimes to support their level of use.

It is therefore easy to exaggerate the connection between heroin addiction and crime. Many estimates of addict-related crime are based on the false assumption that an addict's income is solely derived from burglary or crimes against persons, which in many cases do not account for income from the sale of narcotics, prostitution, or legitimate sources. If heroin users commit crimes to support their habits, they must commit more crimes as the price of heroin rises. New law enforcement efforts seeking to reduce the supply of illicit drugs might tend to decrease crime by removing drug-using criminals from society; they also could cause more crime to be committed by the remaining users. Which trend would predominate is unpredictable.

We are discussing one of the most difficult areas of law enforcement. Drug sales are "victimless" crimes, with few if any complaining witnesses, and police must usually proceed by using undercover methods. Prosecutable cases cannot be developed out of more than a few sales, a fundamental problem for law enforcement agencies for sixty years. Increasingly severe penalties and mandatory minimum sentences for narcotic use were criticized in the early 1960's by many groups, including the Federal Bureau of Prisons. Neither did attempts at treatment through civil and criminal commitment provide the longed-for panacea. In 1970, new federal statutes abolished mandatory minimums, a move widely supported.

Finally, there has been insufficient comprehensive research on the supposedly successful effect of Japan's harsh penalties and intense police efforts in countering the widespread use of injectable methamphetamine. Medical personnel in San Francisco's Haight-Ashbury district state that widespread methamphetamine use died out after a year or two without such law-enforcement effort, because of the inability of the human body to tolerate the high physical and psychological toxicity of injectable methamphetamine. There was, further, a report of an increase in the use of heroin in Japan, concurrent with the decrease of methamphetamine use.

Potential Adverse Consequences

The suspicion is that if tough new laws could succeed in significantly diminishing the use of the proscribed drugs, at least three things could happen. First, there will be a steady rise in alcoholism. Heroin treatment programs report that one of the most perplexing problems is that patients who give up heroin may begin drinking heavily.

Second, there will be an immediate and large rise in the use of barbiturates, which are generally not covered by drug control legislation. Barbiturates are widely used medically and are thus much more difficult for governments to control than is heroin.

Third, there will likely be a marked increase in the introduction of new and more potent psychoactive drugs with new and unknown side effects. When pressure is put on the illicit drug distribution system, it generally reacts by making available drugs of higher potency and less bulk. It is theoretically possible to synthesize opiate-like substances many times stronger than heroin itself, and laws seeking to curtail the supply of heroin would seem to provide substantial incentives for the underground chemist to do so.

There is no way to predict the magnitude of these changes, but it can be predicted that the illicit drug dealers will be very inventive; the potential market is very large and the potential profits are enticing.

Necessity

Tougher criminal sanctions against non-medical drug use assume that our current approaches are not working to improve the drug abuse situation. This is simply not true, particularly with regard to heroin addiction and perhaps even with drug-related crime. There are reliable signs that progress is being made.

Local treatment program operators are beginning to report believable statistics documenting decreasing involvement in crime by individuals in treatment. These reports are coming from methadone maintenance programs and drug-free, abstinence therapeutic programs. Addicts in treatment are becoming able to function in society, available for training and jobs.

Now is the time to establish a system of evaluation, and mechanisms for reallocating resources from those programs that don't work to those that do. Now is the time for active, creative outreach and recruitment to treatment.

Efforts in supported employment of ex-addicts should be expanded, because the lack of jobs for rehabilitated addicts impinges upon successful treatment in a number of ways. Attitudes and laws, such as the refusal of government agencies to assist ex-addicts in seeking employment, can and must be changed.

We have learned that scare tactics and horror films not only do not work, but can be counter-productive. We must in all honesty say to the public that there are encouraging signs of hope and progress. Now is not the time to take a leap into the unknown, especially when we have valid reasons to believe that the unknown harbors the real potential for making things worse.

Finestone, Harold. Narcotics and criminality. Law and Contemporary Problems, 22:69-85, Winter 1957. (26 References)

PURPOSE

Using a variety of secondary sources, three topics were examined:

- (1) how narcotics use and criminality coincide in the experience of many adolescent users,
- (2) how narcotics use is related to criminality and
- (3) how this relationship changes during the career of the individual addict.

Law enforcement, medical and psychiatric models of the addiction-criminality relationship were analyzed and evaluated in terms of their applicability to the young addict.

Data was taken from 26 studies and reports, published between 1934 and 1956, including the FBI Uniform Crime Reports, the Chicago Narcotics Survey, publications of the Illinois Institute for Juvenile Research, the Journal of the American Medical Association, the American Journal of Psychotherapy, and similar sources.

RESULTS

Data indicate a trend since the early 1930's, interrupted only by the war years, towards increase in narcotics arrests and involvement of youth in drug law violations. Nationally, not only has the arrest figure climbed from 2,648 (1932) to 13,030 (1950), but within this group, arrested persons 24 years old and under comprised 15% in 1932, 29% in 1941, and 56% in 1951.

Indicators suggest that among addicts charged with serious crimes in 1951, 58.8% nationally and 31.0% in Chicago were charged with larceny; 16.2% nationally and 7.3% in Chicago with robbery; 9.9% nationally and 9.4% in Chicago with breaking and entering. These are nonviolent, income-producing crimes. Addicts charged with crimes against the person (rape, assault) accounted for only 2.9% nationally and 30.7% in Chicago.

Demographically, criminal activity and narcotics are both associated with disadvantaged urban areas. These areas are defective in two vital social functions: they lack controls originating in conventional institutions which define limits of permissible behavior for adolescents, and they cannot act as cohesive units to make community disapproval effective. Lacking the sanctions of community solidarity, adolescents in disadvantaged areas become members of street-corner society.

Both criminality and experimentation with narcotics among adolescents stem in part from exposure to adult models. In localities frequented by adult criminals the notoriety, glamour and symbols of material success sometimes associated with them makes it easier to identify with them than with conventional role models. Interviews with young addicts in 1952 also indicated that known "junkies" enjoyed a notorious prestige. Many of the young addicts reported having tried to simulate the mannerisms and philosophy of life of addicts before they had become addicted themselves.

Delinquency and narcotics use exist side by side as independently valued patterns of behavior, each activity being modified within the individual's behavior when conditioned by each other. For example, street-corner boys marginally engaged in criminal behavior might seize upon drugs to enhance status; once addicted, they are forced into regular income-producing criminal activities to support their habits.

The impression gained from interviewing addicts is that they are petty "operators." In status terms, they are at the bottom of the criminal population or underworld. The typical young addict spent so much time in a quest for drugs, dodging the police, and in confinement that he was not in a position to plan major crimes. Some addicts committed violent crimes, but had

usually done so before becoming addicted. Data from the Chicago Police Department in 1951 indicated that addiction appears to reduce both the inclination to violent crime and the capacity to engage in sophisticated types of crime requiring much planning.

Detachment from conventional society remains the most serious obstacle to addict rehabilitation. If not rehabilitated, the addict of many years probably modifies his criminal activities to minimize risk and maximize return.

The correctional and the medical models represent the points of view of the two groups of officials dealing most directly with the addict. The correctional model draws little or no distinction between the addicted and nonaddicted offender, emphasizes the gravity of the criminality associated with addiction, and assumes that for most addicts criminality precedes addiction. Addiction is seen as one incident of an anti-social attitude towards life, and addicts are seen as originating primarily from the criminal element.

By contrast, the medical perspective minimizes the extent and seriousness of the criminality associated with addiction, and considers the addict to be a sick person in need of medical treatment. Addiction is viewed as the antecedent factor, and criminality merely one of its consequences. One survey, conducted at the U.S. Public Health Service Hospital in Lexington, Kentucky, over 1936-37, indicates that 75% of the patients treated there had no delinquency record prior to addiction.

The conception of the addict as a sick person has led to psychiatric speculations about addiction. One prevalent opinion holds that addiction is one manifestation of a basic personality difficulty. A contrary view maintains that addiction is often a transitory adolescent phenomenon, a function of psycho-social development within a certain milieu.

CONCLUSION

All aspects of the milieu of addiction--physiological, psychological, and sociological--must be better understood in order to develop treatment for the young addict still close to the social situation in which he became addicted. The limitations of the correctional and medical models for the treatment of the young addict should be recognized, so that these perspectives become modified so as to be able to deal with addiction as an aspect of a special type of community setting, with a particularly destructive impact on young persons.

Glaser, Daniel. Interlocking dualities in drug use, drug control, and crime. In: Inciardi, James A., and Chambers, Carl C., eds. Drugs and the Criminal Justice System. Beverly Hills, California: Sage Publications, Inc., 1974. pp. 39-56.

PURPOSE

Previous studies indicate that two patterns of narcotic addiction exist as consequences of two policies of drug control and two types of crime. These interlocking dualities reflect interactions among legal, economic, physiological, psychological, and cultural variables. This pattern helps explain the association of drug use and crime, and the failure of efforts at drug use control; and helps predict future trends.

SUMMARY

Drug use in the United States may be dichotomized as instrumental (used to create a specific effect, sporadic or habitual) and appreciative (used to conform to specific socio-cultural expectations, norms, and values). Drug use control may be divided into two policy extremes, prohibition (suppressing all use) and regulation (restricting only the circumstance, procedure, and subjects of use).

The types of crime associated with drug use may be categorized as complaint-generating and other. Complaint-generating crimes include robbery, violence, and public acts; other crimes include illegal use and sale, prostitution, illegal gambling and victimless crimes generally. Crime is any act lawfully punished by the state.

Drugs and crime are most directly related when the use of drugs is defined by law as a crime per se. Such laws relate drug use to crime by definition, and create subsequent socio-economic patterns, such as an illegal drug market and a complex pattern of illegal activity to sustain it. Prohibitive measures are also complex, ranging from local law enforcement to diplomatic agreements with source nations.

Prohibition of drugs in great demand is feasible only in a tightly regulated society or an isolated community. In the U.S., prohibition has closed off only a few channels of supply and market. Of regular marihuana users identified in a 1971 study, 48% were students. At least 13% of all white collar workers have some marihuana experience, and 5% currently smoke the drug at least 6 times per month. At least 15% of all blue collar workers have marihuana experience and 4% smoke it at least 6 times per month.

Several of the most widely used drugs, notably the opiates and barbiturates but also marihuana and LSD, have physiological effects which impede criminal and non-criminal activity: drowsiness and indifference to one's surroundings, needs, or desires. Stimulants, amphetamines and alcohol are more commonly associated with criminal, specifically violent, behavior. The reduction of seriously assaultive crime, however, is more likely to be fostered by gun control, upgrading public education, and reducing poverty, than by drug control policies--except in the case of alcohol.

Prohibition policies engender crime as a means of habit support. Chief among the prohibition-engendered crimes is addiction-supporting professional property crime. Other negative side-effects are irregular law enforcement practices which generally corrupt justice practices and create public disrespect and antagonism towards legal procedures.

Predictable trends include movement from prohibition policies viewed as non-functional in long range terms, to regulation in the instance of addiction drugs, through prescription and therapy recruitment in non-criminal settings. These trends should result in a marked reduction of property crimes committed to pay for drug purchase, and they should eliminate the role of organized crime in drug distribution.

Glaser, Frederick B. Drug addiction and crime: Is methadone maintenance preferable to withdrawal? International Journal of Offender Therapy and Comparative Criminology, 16(1):18-24, 1972. (15 References)

PURPOSE

Public concern over the drug problem, especially as it relates to crime, has led to oversimplified attitudes about the efficacy of methadone maintenance vs. other treatment methods. Some of the problems are: (1) flaws in methadone research, (2) toxicity dangers associated with methadone, (3) reliance on methadone to solve the complex problem of crime, and (4) lack of understanding of the nature of addiction and withdrawal.

SUMMARY

Methadone maintenance is currently the most prevalent method of treatment for drug addicts, and plans for its expansion are underway. More research has been done on this treatment modality than on any other, but there are serious flaws in the methodology employed: a lack of controlled studies, the subjective bias of self-reports by addicts rather than objective criteria of success, and the use of personnel committed to this treatment method to carry out research.

As with all drug treatments, there are drawbacks to the use of methadone. The dangers of acute toxicity, leading to overdose deaths, are known; the effects of chronic toxicity are not, although experience with other nonnarcotic drugs illustrates the risk of chronic high dosages.

The appeal of methadone maintenance programs to a financially burdened society has to do with the metabolic hypothesis of the cause of addiction, i.e., the administration of methadone is all that is needed to deal with the addict. Even the need for expensive rehabilitative services is called into question.

Methadone maintenance is even more attractive as the solution to the problem of the increasing crime rate. In this view, addiction and crime are directly related by the addict's need to obtain money to avoid the agony of withdrawal. The administration of methadone will protect him from this need, and the crime rate will decrease. There are, however, major weaknesses to this argument. Most addicts are not physically dependent on narcotics, due to the poor quality of illegal drugs today. In addition, the seriousness of withdrawal symptoms for those who are actually physically dependent has been exaggerated. Clinical experience with users indicates they exhibit severe withdrawal symptoms mainly when such an exhibition will lead to more medication, and that most are aware of the essential mildness of the withdrawal syndrome. Finally, addicts themselves often claim that they are obliged by their addiction to commit crimes, both to avoid personal responsibility for their actions and to attempt to receive lighter punishment.

CONCLUSIONS

While there is undoubtedly some relationship between addiction and crime, the nature of the relationship is more complex than the simple causal chain which underlies the crime prevention hypothesis of methadone maintenance. The danger in concentrating on methadone maintenance rather than investigating the root causes of crime is that crime may continue to be a serious problem after addiction itself has been dealt with.

Gould, Leroy C. Crime and the addict: Beyond common sense. In: Inciardi, James A., and Chambers, Carl C., eds. Drugs and the Criminal Justice System. Beverly Hills, California: Sage Publications, 1974. pp. 57-75.

PURPOSE

Whether or not drug addiction increases the rate of street crime (robbery, assault, larceny, burglary, etc.) is an empirical matter which, surprisingly, has little direct evidence in its support. Calculations based on indirect evidence, however, are compelling. A review of the findings of earlier research and some common sense considerations concerning social pathology suggested seven tentative hypotheses on the relationship between heroin addiction, violent crime, and theft.

SUMMARY

The available evidence is presented on addict responsibility for theft and crimes of violence, on how many drug users are thieves and on how much they steal, and whether the evidence on addiction per se causes or increases theft.

Drug users and non-users arrested for theft, crimes of violence, and other illegal acts in six major American cities were compared. Information on regional differences and on primary and secondary sources of income for addicts currently in treatment is also included.

This analysis revealed that data pertinent to the relationship between drug addiction and crime were fragmentary, tangential, and often of dubious quality. Seven tentative hypotheses, however, seemed to be most consistent with the data reviewed:

1. Heroin addicts are less likely than non-users to commit crimes against the person.
2. Heroin addicts are more likely to commit theft than are non-users.
3. Heroin addiction per se does not increase the propensity to commit theft.
4. Heroin addiction, where the cost is high, induces some addicts to commit theft.
5. Approximately 25% to 30% of the heroin users in the United States are engaged in theft.
6. Theft by heroin users increases the overall level of theft in the community.
7. But, increases in theft due to the activities of heroin users is less than the total amount of theft committed by these users.

CONCLUSIONS

The seven hypotheses require confirmation in future research. The first is inconsistent with popular concepts of the addict, but is explainable in common-sense terms. Hypotheses six and seven, while not obvious in common-sense terms, are supported by data. This may be a function of inadequate economic models. The economic notions of supply, demand, and markets have not generally been applied to crime in this country. The blackmarket, supply-demand model of heroin use and theft, suggested in hypotheses 6 and 7, is quite compatible with the "classical-utilitarian" theory of crime. Addicts steal because there is profit in theft. As addicts compete for these profits, however, they take away profits from non-addict thieves and probably also make theft a riskier, more "costly" economic enterprise. Thus, market mechanisms operating in the world of crime should be expected in the long run to prevent theft from expanding in anything like direct proportion to the number of addicts in society.

Drug use resembles the sort of crime epidemic which coincides with periods of social conflict and stress, and heroin use (or at least social hysteria surrounding heroin use) should subside. As heroin use subsides, a modest decline in the overall amount of theft might be expected. The decreases, however, will not be dramatic. The exit of addicts from the criminal marketplace will

not eliminate the marketplace; it will only readjust the equilibrium between supply and demand. This should mean less theft, but not its elimination.

Crime in America may be the product of rather ordinary and otherwise respectable social processes, such as a free market. Few Americans are likely to accept this.

Greenberg, Stephanie W., and Adler, Freda. Crime and addiction: An empirical analysis of the literature. 1920-1973. Contemporary Drug Problems, 3(2):221-270, 1974.

PURPOSE

Since the turn of the century, one of the constant themes running through both the journalistic and the academic study of drug dependency is its connection to crime. The complex relationship of addiction and crime was examined through a review of the literature from 1920-1973. Three areas were explored:

1. The temporal sequence of criminal involvement.
2. The extent and types of crime committed while addicted.
3. The impact of treatment on criminal behavior.

RESULTS

The Temporal Sequence

Chronologically, the first issue in the study of the life history of the addict is whether he exhibited criminal behavior prior to drug use or only afterward. Researchers through the years have taken firm stands in both camps. Early studies in the 1930's indicated that criminal behavior is a direct result of addiction rather than a continuation of a prior lifestyle; that individuals were predominantly noncriminal before onset of addiction. However, the evidence collected in the 60's and early 70's indicates that criminal behavior precedes addiction. Only four out of sixteen studies on the temporal issue in the 1960's dissent from this conclusion; all contain methodological problems which tend to discount their results. In two of these (DeFleur, et al., 1969; Bean, 1971) controls for significant variables were not included. In the two others (Brill and Lieberman, 1969; Schur, 1968), the samples were not representative.

Part of the reason for this difference may be found by examining the change in the addict population itself--from White, middle-aged, rural, medically addicted subjects to Black, young, urban and non-medically addicted subjects who are immersed in a criminal subculture. Hypotheses which attempt to explain this shift are discussed.

The temporal sequence discussion leads to the question of whether criminals are more likely to become addicts than noncriminals. The only study that deals directly with this issue is the work of Robins and Murphy (1967). When they excluded respondents who began drug use prior to delinquency, they found that delinquents were much more likely to start using drugs than nondelinquents, and once started, were much more likely to become addicted to heroin. The studies concluding that crime precedes addiction obviously imply that criminals are more likely to become addicts than noncriminals and that, in fact, participation in the criminal subculture may make it easier to obtain illicit narcotics. Certainly, however, more than one study is required in order to draw valid conclusions.

There is also a clear need for studies to be conducted that examine the entire scope of the addict population with its various types. It is almost impossible to deal adequately with causality in a retrospective study using a sample of offenders or patients in drug programs, as virtually all studies have done. In order to gain any real insight into the nature of causality, it is necessary at the very least to study a general population in order to trace the criminal history of addicts and nonaddicts, and the drug use history of criminals and noncriminals.

Given the present state of research, there is no reason to believe that addiction is the crucial variable which accounts for increase in the criminality of those already involved in crimes. A number of studies indicate that crime increases after addiction, but the increase might have occurred in any case. The question of causality is still very much open.

What Types of Crime are Most Closely Associated with Addiction?

Much of the scholarly literature concludes that violent crimes are rarely committed by individuals while addicted because of the calming effects of the opiates. Gordon (1973) found a high incidence of violent crimes, but a large proportion of the "heroin" sample was actually more habituated to amphetamines than to heroin; and violence among amphetamine users seems to be much more common than among heroin addicts. Despite a few contradictory reports, the weight of the evidence suggests that the probability of violent behavior is not substantially increased by heroin abuse. Even though a number of major studies suggest that in the last few years crimes against the person are escalating, this may be attributable to violence which occurs during a property offense rather than to aggressive behavior alone. Several studies show that addicts avoid those crimes of violence that show little likelihood of monetary return.

Focusing attention on the extent and types of crimes committed while addicted may help to discern the relationship between crime and addiction. Several questions are pertinent to this issue: (1) What proportion of addicts engage in criminal acts other than violation of narcotics laws? (2) For those addicts with a pre-addiction criminal background, does addiction result in an increase in crime? (3) What types of crime are most closely associated with addiction? Virtually every study that contains information on criminal behavior during addiction reports an extensive amount of such activity. However, they typically select their samples from arrest records or treatment programs, and it is not possible to evaluate whether they are representative of the total population of addicts. Since by definition those with arrest records have been accused of a crime, and since most addicts turn to treatment centers during crisis periods (e.g., confrontation with the law), there is a high probability that bias exists. Another unfortunate characteristic of many studies is that they fail to differentiate between arrests and convictions for narcotic law violations and nondrug crimes.

Whatever the temporal relationship might be, the data indicate a strong relationship between criminality and drug abuse, regardless of any causal link. It may well be that many of these acquisitive crimes would be committed for reasons other than the support of a drug habit.

The Impact of Treatment on Criminal Behavior

Approximately twenty follow-up studies of methadone patients have focused on the impact of this synthetic drug on criminality. Although the weight of the current evidence suggests that methadone maintenance has reduced crime, there are contradictory reports. Two studies present direct evidence as to the lack of efficacy of this modality. (Dobbs, 1971; Cuskey, 1973)

There have also been studies on other modalities, but the generally poor quality of evaluation makes it almost impossible to reach any conclusions about the efficacy of particular modalities, and treatment in general, in reducing drug-associated crime. The problems most often encountered, any one of which would be a serious threat to validity, were (1) poor sampling, (2) questionable methods for the measurement of criminal activity, (3) lack of control for time in treatment, (4) poor or unclear definition of success, and (5) lack of control for crime prior to treatment.

With regard to methadone follow-up studies, a number of serious and thoughtful criticisms have been leveled against their validity. Most of these criticisms have revolved around two issues--changes in law enforcement during the late 1960's and characteristics of the treatment population in methadone programs.

The only conclusion that can be drawn is that a great many more carefully controlled studies must be done before it becomes possible to make valid inferences concerning the impact of treatment on the criminal behavior of addicts. One aspect central to testing the treatment hypothesis is that programs must be aware of the population--or populations--of addicts with which they deal. Perhaps most programs make the mistake of believing that their modality is appropriate for all addicts. Addicts who were entrenched in a criminal subculture may require intensive re-socialization that is usually not available in out-patient programs.

CONCLUSIONS

Some general statements based on the literature can be made concerning the relationship between crime and heroin addiction. Since the quality of the research is often questionable, and there is much data that is contradictory, these statements must perforce be based on the

weight of evidence:

1. The majority of current heroin addicts have substantial criminal histories prior to the first use of opiates.
2. It would seem that while engaging in criminal acts does not lead to addiction in all cases, or even most cases, it increases the probability of addiction.
3. Among addicts who are criminal prior to addiction, there is no reason to believe that addiction is the causal factor in increasing criminality.
4. Contrary to early studies, the most recent evidence suggests that addicts commit primarily those crimes that yield a financial gain, regardless of whether they are violent or not.

Petersen, David M. Some reflections on compulsory treatment of addiction. In: Inciardi, James A., and Chambers, Carl, eds. Drugs and the Criminal Justice System. Beverly Hills, California: Sage Publications, Inc., 1974. pp. 143-169. (79 References)

PURPOSE

In light of data suggesting that the criminal justice system occupies a significant role in the control and treatment of narcotic addicts, a literature review was undertaken. The treatment of addicts within the criminal justice system was examined in terms of program availability, retention, and relapse. Along with a summary assessment of the nature, extent, and effectiveness of such compulsory treatment, major studies of groups such as Narcotics Anonymous operating within penal facilities were also considered.

RESULTS

Institutional Programs

Despite the conflicting viewpoints on the desirability and efficacy of the treatment of addiction in prison and a considerable body of descriptive and/or philosophical writing on the subject, a paucity of evaluation research appeared in print. Furthermore, the data available (Rosenthal and Shimberg, 1958; Dole et al., 1969) were not too enlightening concerning the effects or consequences of incarceration for the treatment of narcotics addiction.

A follow-up of 359 releases from the NARA program (U.S. Bureau of Prisons, n.d.) from August 1, 1968 through June 30, 1971 provided some evidence of institutional variables that differentiated between successful and unsuccessful performance of the releasee in the community. The study examined nearly 100 items of information for possible relationships to parole performance, and indicated that 55% of the subjects remained in satisfactory status in the community from at least six months to as long as three and one-half years of aftercare supervision. However, the major finding of this study was that in-care "treatment" variables are not related to post-incarceration performance in the community.

Little hard data were available which bear directly on the issue of the extent to which compulsory treatment for drug addiction in prison alters the subsequent criminal behavior, drug use, and drug-seeking behavior of prisoner-addicts upon release. While the NARA data indicated that over half of the releasees managed to remain in the community, they did not show whether they were drug-free or if they had further contact with components of the criminal justice system. Other studies indicated that roughly one-fourth of the experimental subjects were subsequently rearrested. In sum, the limited data available were not supportive of treatment for addiction in the prison setting.

Community-Based Programs

There was very little research which documented the effectiveness of compulsory treatment of narcotic addicts in community criminal justice facilities. It was also difficult with the existing studies to distinguish which component of criminal justice--prison, parole, etc.--had a greater impact.

Three of the eight studies reviewed (Adams and McArthur, 1969; Geis, 1966; Brill and Lieberman, 1969) provided some information on this issue. Some type of community supervision appeared to be better than none at all, but "special" treatment programs had not fared well compared to standard criminal justice programs such as parole and probation.

Outcome rates overall for community-based programs varied from a low of 24% under intensive parole supervision in the New York Parole Project, to a high of 72% in the New York methadone program. Rearrest rates varied from 20% to 49%, and freedom from narcotic use from 22% to 55%.

Compulsory community treatment, whether in a parole, probation, or halfway house setting, was not dramatically effective in improving the adjustment of addict patients, and had not been shown to be more effective than other treatment modes.

Finally, few studies attempted to identify factors that differentiated between the successful cases and those who fail, as they generally concentrated on establishing the efficacy of one approach over another.

CONCLUSIONS

Neither incarceration nor compulsory community supervision are highly effective in the rehabilitation of the narcotic addict, despite good intentions, generous expenditures, and attempts at innovative programming. There are, however, individual offenders who are likely to have a greater probability of success under compulsory supervision than with voluntary hospitalization.

Reasons, Charles E. The addict as a criminal: Perpetuation of a legend. Crime and Delinquency, 20(1):19-27, January 1975.

PURPOSE

The legislative and enforcement history of the U.S. approach to addiction and drug use in the 20th century reveals the development and perpetuation of the legend of the addict as a criminal.

SUMMARY

The Narcotics Division of the Treasury Department was influential in having its definition of the drug problem--the "criminal approach"--institutionalized in the early 1900's. Although the Linder decision (Linder vs. United States, 1925) vindicated the medical approach, lower federal courts dismissed the implications of Linder. The medical profession largely acquiesced in the criminal approach, and the image of the addict, and subsequently that of addiction, was changed from ailment to evil. This change in imagery determined policy for quite some time. Arrests for federal narcotics violations increased, as did the budgetary appropriations for the Narcotics Division.

In 1930 a separate Bureau of Narcotics was established headed by Harry J. Anslinger, who had an enormous influence on national drug policy for the next 32 years. Anslinger's philosophy was that the addict was an "immoral, vicious, social leper" who cannot escape responsibility for his actions and who must feel the force of swift, impartial punishment.

In the 1930's the Bureau became aware of marihuana, initially discounting it as a national threat. However, newspaper and magazine stories on the negative effects of marihuana and its use by the nation's youth aroused the public; the demonology of marihuana was shaped, and it was sustained by the Bureau of Narcotics. The resulting Marihuana Tax Act of 1937 placed a prohibitively high tax on the drug and created a whole new class of "criminals."

In 1951 the Kefauver Committee on Crime turned its televised attention to narcotics and marihuana, causing a flurry of public apprehension. Anslinger's testimony included recommendations for increased personnel for the Bureau and stiffer penalties. Dozens of "tough" measures were introduced in the 81st Congress by lawmakers competing for public recognition as saviors in the face of this menace. The Boggs Amendment of 1951 attached mandatory minimum sentences to narcotic violations, with no suspended sentence or probation for repeaters. The 1956 Narcotics Control Act made the penalties more severe and inflexible, and was copied in state statutes, making addiction per se a crime.

Criticism of the criminal approach increased during the late 1950's. Joint American Bar Association-American Medical Association reports suggested that drug addicts be treated at out-patient experimental clinics and concluded that law enforcement was not the answer to the problem. The Bureau vehemently attacked the "un-American" ABA-AMA committee members, the sources cited in their report, and the Supreme Court.

Much of the public attention to the "drug problem" in the second half of the 1960's concerned the use of non-opiates, particularly marihuana. In response to those asserting that marihuana is no more harmful than alcohol and tobacco, the Bureau began plans for a counterattack in 1966.

In 1968 the HEW and Treasury departments' agencies responsible for control of narcotics were merged and transferred to the Department of Justice as the Bureau of Narcotics and Dangerous Drugs. John E. Ingersoll, the Bureau's new director, instituted a more academic strategy, relying on social scientists to present evidence and conduct studies, but the criminal approach remained the prevailing method of handling the drug problem in the United States. On October 27, 1970, President Nixon signed into law the Comprehensive Drug Abuse Prevention and Control Act, the first major drug legislation since the Harrison Act. Although penalties were generally reduced, the approach to the problem is today still essentially criminal.

It appears that the criminal approach will remain the dominant method of handling the "drug problem." While "treatment" and "rehabilitation" receive more emphasis today than previously, the drug problem remains shaped largely by law enforcement personnel and societal conceptions of the user. Recent organizational changes and revelations regarding drug enforcement practices suggest that the criminal approach remains dominant.

Tinklenberg, Jared. Drugs and crime. I. Literature review. In: National Commission on Marihuana and Drug Abuse. Drug Use in America: Problems in Perspective. Appendix, vol. 1: Patterns and Consequences of Drug Use. Washington, D.C.: U.S. Government Printing Office, March 1973. pp. 242-267.

PURPOSE

To examine the relationship between several classes of psychoactive drugs and criminal behavior, a massive literature review was conducted. The review surveyed the evidence regarding the criminogenic potential of alcohol, marihuana, amphetamines, barbiturates, LSD and other psychedelics, opioids, and cocaine, etc., used in social and illicit settings. Also examined were the pharmacological and nonpharmacological factors affecting the alleged relationships between drug use and crime, including the limitations of present data.

RESULTS

Overview: The Limitations and Complications of Research

While the pharmacological characteristics of drugs have been defined, there was little information on the specific mechanisms whereby they influence aggressive behavior. The drug-crime association is complex. Behavioral changes attributed to the most obvious drug may actually derive from adulterants or drug-drug interactions. Effects may vary with dosage levels, and with change during the course of the drug action. Individuals respond differently, and the cumulative effects of previous use may influence subsequent behavioral responses.

Investigations are complicated by the interplay of pharmacological and psychosocial factors. Drug response, especially at the lower range of the dose-response curve, is also determined by psychosocial variables, such as the users' expectations. Pre-drug personality characteristics are very important. Some individuals manifest recurrent tendencies towards deviancy, and seem predisposed toward both criminal behavior and drug abuse. Both forms of deviancy originate in adolescence and tend to subside after age 35.

Patterns of both crime and drug use are rapidly changing. Crime has increased, especially by the young (18-24). Drug use has spread widely, drug costs have risen, and minor property crimes may not suffice to support a habit. More intensive law enforcement, reducing the flow of drugs, also may have contributed to increasing serious crime by forcing costs up. Data obtained only a few years ago may, therefore, no longer be applicable.

As indicated by four reports of previous commissions and research groups, it is extremely difficult to establish direct relationships between drug use and crime. Most data on drug use are unsubstantiated by chemical testing. Data that relies on self-reporting or inferences are not valid for formulating clear-cut evidence. Crime statistics underreport criminal behavior since they are based on arrest charges only.

Alcohol

The major behavioral effects of alcohol are due to depressant action on the central nervous system. Group and personal expectations play an important role; alcohol consumption and assaultive behavior may be companion features of personal or cultural subgroups.

Alcohol is present in a large proportion of persons charged with violent crimes. It is present in over half of criminal homicides (esp. "violent homicides"), and in over half of homicide victims. It is linked with sex crimes, and juvenile delinquents who drink are implicated in more crimes of assault than those who do not. Studies show an interrelatedness of alcohol abuse, sociopathy and violence. Methodological considerations do limit generalizations on the criminal proclivities of alcohol abusers, but the evidence indicates that alcohol increases the probability of violent crime.

Marihuana

THC and their metabolites are the active ingredients. Potency varies very widely. The effects of marihuana frequently include euphoria, lassitude, heightened sensory experiences, some memory and attention lapses; it reduces physical strength and inclination to exertion. Occasionally, but rarely, subjects may become paranoid, agitated, and aggressive. No withdrawal syndrome occurs upon cessation of use, but heavy users may become psychologically dependent and turn to other drugs. This progression has been documented by several studies.

Marihuana enhances sexual experience but does not lead directly to sexual aggressiveness. All the available evidence also strongly indicates that its use is not associated with violent crimes. Marihuana users commit fewer violent crimes than users of alcohol, barbiturates, and amphetamines. Some subgroups of users do commit property crimes, but nonpharmacological variables are probably more influential on such behavior than drug effects per se. The link between marihuana and the use of other drugs associated with crime is influenced by many intervening variables.

Barbiturates

Barbiturates induce nervous system depression that ranges from mild sedation to coma. Phenobarbital, pentobarbital, secobarbital and amobarbital differ in speed of onset and duration of action. The behavioral effects of barbiturates and alcohol are strikingly similar: anxiety reduction, mood changes, muscular uncoordination, slurring of speech, and drowsiness. Both barbiturate abusers and alcoholics suffer mental confusion and are often obstinate, irritable and abusive. Many theories have been advanced for this aggressiveness but supportive data is lacking.

The evidence in respect to crime has not been consistent. One study on barbiturate use and crime indicates that users' crimes against persons decreased after initial drug arrest, as did crimes against property. Inferences from psychiatric data suggest that more aggression was controlled by barbiturates than evoked by them, and another study was unable to locate evidence to show that barbiturate use leads to criminality. But an increasing amount of recent data do link barbiturate use to crime. In a comparison with ten other chemical substances (alcohol was excluded) barbiturates were most often linked to criminal arrests. Amphetamine use demonstrated similar arrest patterns.

Amphetamines

The primary effects of amphetamines have been extensively studied: increased alertness, wakefulness, physical endurance, motor and speech activity, sensations of well-being, decreased fatigue and boredom. There is commonly a detriment in performance if used excessively. Influence on sexual behavior is variable, complex and multidetermined. Amphetamines also reduce destructive outbursts in hyperactive brain damaged children. It is clear that dose-response and individual variation factors are very important in evaluating the effects relating to violence. Variable tolerance develops with repetitive use. Abrupt cessation causes withdrawal symptoms though less pronounced than with opiates. An amphetamine habit also costs less than heroin addiction. Few studies have focused directly on amphetamine-crime relations. Most research prior to 1969 does not link amphetamines to violence, sexual crimes, or accidents. More intensive investigation is recommended. It is difficult in many studies to separate drug effects from personality, and clinical reports suggest that assaultive behavior can directly result from the pharmacological properties of amphetamines when used repetitively in high doses. Paranoid psychoses are the most extreme amphetamine-induced behavior predisposing to criminal activity.

Opioids

Opium, morphine, heroin, meperidine, and methadone--drugs whose primary use is to relieve pain--are widely abused. They induce analgesia, drowsiness and mental clouding. Acute effects result in satiation of drives. Clinical reports tend to support the theory that such effects disincite users toward assaultive action. All opioids have a high potential for drug dependency. Tolerance develops rapidly; heroin addiction may cost \$50-\$100 a day or more; and withdrawal is very painful.

Some studies support the thesis that generally addicts have criminal predispositions. Others emphasize the criminogenic effects of opioid use per se, especially the necessity to resort to crime to support an addiction. Crimes by users, therefore, tend to be nonviolent and money-making. Evidence indicates that users are less likely to commit homicide, rape and assault than users of alcohol, amphetamines and barbiturates.

Cocaine

The effects of cocaine are similar to those of amphetamines: increased alertness, well-being, decreased hunger, fatigue, and boredom. But there is no evidence that cocaine increases muscular strength. Cocaine has a very short half-life, thus no physiological tolerance develops.

There are little data on cocaine-crime association. Cocaine can induce a paranoid reaction. A few isolated crimes against persons have been reported, but these are very rare. One study suggests that some users are involved in robbery, burglary and larceny-theft at a greater rate than users of other drugs, but that they are less frequently involved in assaultive crimes. At this time, the limited use of cocaine does not present a significant problem.

Psychedelics

The precise mechanisms of action of psychotomimetic drugs are not known. Common effects include dizziness, nausea, hyper-reflexia, followed by perceptual disorder and psychic changes. Most users claim the effects militate against any type of assertive or aggressive behavior. Yet unexplainable reactions are common with high doses. During panic reaction, deviant behavior does occur, including aggression. After the effects have worn off, flashbacks and prolonged psychotic reactions can occur. Links, if any, between flashbacks and crime are unclear and exceedingly rare. Repetitious use develops rapid tolerance. Patterns of excessive use are thus discontinuous, leading to speculation that crimes to support a habit would be less frequent than for drugs used continuously.

Information regarding psychedelic-crime association is limited to verbal reports and direct observation. Except in the rare instances of panic reactions, use of psychedelics does not enhance criminal activity, but rather reduces inclinations toward assaultive behavior.

Other Substances

The use of tranquilizers, non-barbiturate sedative-hypnotics, glue, gasoline and other psychoactive substances is generally so infrequent that concerns about relations with crime are not warranted.

CONCLUSIONS

Within the limitations of present research, it can be justifiably asserted that alcohol, the most widely used drug in the world, is clearly linked with violent crime. Increasing data link barbiturate and amphetamine users with assaultive crime. Marihuana, the second most widely used drug in the world, is not associated with violent crime. Use of opioids is associated with robbery and crimes related to acquiring money, but users are less likely to commit assaultive crimes. No drug can be said to induce crime. Each user has a particular set of predispositions and personal and group expectations. Drug use and criminal behavior may form mutually reinforcing relationships.

Wilson, James Q.; Moore, Mark H.; and Wheat, I. David, Jr. The problem of heroin. Public Interest, 29(4):3-28, Fall 1972.

PURPOSE

An analysis of earlier studies compared and evaluated several models of addiction and related criminality, and formulated a conceptual framework for understanding the heroin problem. Also examined were the effects of law enforcement and various treatment modalities.

RESULTS

Explanatory Models

Punitive and medical models reflect underlying political assumptions about the addict and his relationship to society, and about society's responsibilities to itself (self-protection) and to the addict (public welfare). A third model, that of peer/group contagion, explains some patterns of epidemic increase among youths and subsequent maturing out of the syndrome of heroin use; the myth of the pusher as the instigator of heroin use is contraindicated by evidence supporting this model. But no theory explains the addiction increase in a fully satisfactory manner--why some individuals in addiction-prone sub-cultures become addicts, while others do not. The analogy between heroin use and disease is imperfect. Optimum strategy depends upon whether the objective is to treat existing addicts or to prevent recruitment of new ones.

Crime and Heroin

The exact amount of crime committed by addicts is large, but unknown. Various studies suggest that between half and three-quarters of known addicts were also known delinquents prior to drug use. A St. Louis sampling of adult Blacks indicated that 60% of those who tried heroin, and 73% of those who became addicted, had previous police records. However, the recruitment of addicts from the ranks of previous criminals may be a recent phenomenon.

O'Donnell found that, among 266 addicts at the U.S. Public Service Hospital in Lexington, Kentucky, only 5% of those addicted before 1920, but 47% of those addicted between 1950-59, had pre-drug criminal records. The younger the age of addiction, the more probable a prior criminal record. Once addicted, persons are likely to commit more crimes than otherwise. Of the non-drug crimes, shoplifting, burglary and prostitution account for the largest proportion of addict income, perhaps 40% to 50%. Violent crimes occur occasionally.

Max Singer estimated that even if the total amount lost yearly in property crimes in New York (\$500 million) were attributed to addicts, the theft loss would average only \$5,000 to \$8,000 per addict. Actual addict theft is necessarily less than this amount, and far less than is indicated by popular estimates. Addiction does, however, produce a significant increase in theft and in heroin sale.

Law Enforcement and Heroin

The effect of making heroin illegal in 1920 was that middle-class use of opiates declined. Strict law enforcement measures produced a decline in addict arrests prior to 1960. Subsequent decline in severity correlated with an increase in heroin use, according to a Chicago study. All evidence suggests that the total decriminalization of heroin would lead to a sharp increase in its use, as experienced in Britain.

The assumption that law enforcement has no influence on the size of the addict population but does have an effect on the price of heroin rests chiefly on the showing that the majority of known addicts have been arrested at least once, and that, despite this, the addict returns to his habit and the criminal life needed to sustain it. These facts are essentially correct. The difficulty lies in equating "law enforcement" with "arrest." One could as easily make the argument that law enforcement has not even been tried as that it has been tried and failed.

Since only a small proportion of heroin addicts will voluntarily seek and remain in any form of treatment, care, or confinement, more stringent law enforcement is necessary; and it should involve the user as well as the pushers and big connections. Enforcement aimed at sources of supply may simply drive up the price of heroin without curtailing its use.

CONCLUSIONS

This discussion of the complexities of heroin use, marketing, and control should suggest the futility of arguments between the so-called "punitive" and "medical" approaches to addiction, the simplistic nature of unqualified recommendations that we adopt the "British system," and the imprecision of angry disputes between those who wish to "get tough" on "pushers" and those who wish to "decriminalize" heroin. The underlying issue is whether the state is justified in protecting addicts from themselves. The state has a responsibility for the quality of human life within its governance. The punitive and medical models may be reconciled by a policy of treatment facilities bolstered by coercion. This is particularly necessary when the treatment involves (heroin or methadone) maintenance.

2 ● Drug Use and Criminal Behavior (General)

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Bean, Philip. Social aspects of drug abuse: A study of London drug offenders. The Journal of Criminal Law, Criminology and Police Science, 62(1):80-86, 1971.

DRUG	Multi-Drug
SAMPLE SIZE	100
SAMPLE TYPE	Incarcerated
AGE	Adolescents; Adults (mean age: 20)
SEX	88 Male; 12 Female
ETHNICITY	White; Other
GEOGRAPHICAL AREA	London, England
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	Spring 1968
NO. OF REFERENCES	4

PURPOSE

In an effort to establish patterns of drug abuse, London drug offenders undergoing court procedures were interviewed by researchers from the Home Office in an exploratory, descriptive examination of social background and criminal history.

METHODOLOGY

One hundred drug users were interviewed during various stages of legal procedures at two London courts during the spring of 1968. The interview schedule was restricted to seven drugs: amphetamines, heroin, cocaine, physeptone, methedrine, marihuana, and LSD. Sixteen percent, however, had also taken opium, mescaline and peyote. In addition to drug history, subjects were interviewed for sociological factors (family circumstances, class, education, and employment) and criminal history before and after drug use. Offense data by crime were tabulated prior and subsequent to drug use.

Because of problems of definition and measurement, the term "daily use" was preferred over "addiction." All subjects were charged with violations of drug laws; persons charged with unrelated offenses, but known incidentally to be drug abusers, were not included in the sample.

RESULTS

Of the 88 males and 12 females (mostly British, a few from America and the West Indies), 12 were under age 17, and 77 under age 25 (mean: 20 years, 5 months).

Ninety percent were multiple drug users, 75% acknowledged use of amphetamines, 67% heroin, 45% cocaine, 50% phsyseptone, 80% methedrine, 90% marihuana, 99% alcohol, and 43% LSD. Twenty-five percent took both heroin and alcohol within the same time period. Of the heroin users, 76% had a pattern of daily use. None of the users of LSD were daily users.

Amphetamines and marihuana were used at younger ages (median age: 16) than heroin (age 19) and hard drug use was preceded by these drugs in 95% of the sample.

Sociological findings indicated that 85% of the sample were single, 30% were from broken homes, 40% had either run away from home or been ejected from home, and an additional 25% left home following first drug use. The sample tended to have histories of problems: illegitimate birth or illegitimate children of their own, and homosexuality. Educational, class, and employment factors were not significant.

Fifty percent had two or more previous convictions, and 30% had five or more. The number of offenses for larceny prior to drug use was 38; for breaking and entering, 27; for violence, 4; auto theft, 4; drugs, 1; other offenses, 14; a total of 88 various offenses. After drug use larcenies increased to 43; breaking and entering dropped to 11; violence rose to 17; auto theft to 14; drug offenses to 19; other violations to 32; and the total number of offenses increased to 136. Offenses against property predominated.

CONCLUSIONS

Unlike many classic studies in the U.S., there were no indications of cultural deprivation, nor evidence of any form of crime inhibition due to drug use. No evidence supports the notion of a criminal class; however, many offenders were involved in criminal activity before and after taking drugs.

Eckerman, William C.; Bates, James D.; Rachell, J. Valley; and Poole, W. Kenneth. Drug Usage and Arrest Charges. A Study of Drug Usage and Arrest Charges Among Arrestees in Six Metropolitan Areas of the United States. Final Report BNDD Contract No. J-70-35. Washington, D.C.: U.S. Department of Justice, Bureau of Narcotics and Dangerous Drugs, Office of Scientific Support, Drug Control Division, December 1971. 388 pp.

DRUG	Multi-Drug
SAMPLE SIZE	1,889
SAMPLE TYPE	Jailed
AGE	Adolescents; Adults (74% under 30)
SEX	Not Specified
ETHNICITY	1,081 Black; 233 Mexican-American; 87 Puerto-Rican; 465 White; 23 Other
GEOGRAPHICAL AREA	6 U.S. Metropolitan Sites; Cross-Sectional
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews; Criminal History; Drug Registers
DATE(S) CONDUCTED	1970-1973
NO. OF REFERENCES	0

PURPOSE

Drug usage has ordinarily been associated with minor property crimes that sustain the user's habit. With the recent dramatic increase in crime rates, the new hallucinogenic drugs, and increased abuse of legal drugs (e.g., barbiturates, amphetamines), there has developed concern over whether a change in the nature and pattern of crimes associated with drug use has occurred. This report, prepared for the Bureau of Narcotics and Dangerous Drugs, U.S. Dept. of Justice, presents the findings of an intensive inquiry into the relationship between drugs and serious crime.

METHODOLOGY

Data were assembled beginning in 1970 on the drug usage history and criminal records of 1,889 arrestees selected from 6 metropolitan sites (approximately 300 from each site). Cook County, Illinois; Los Angeles County, California; New Orleans Parish, Louisiana; and the Borough of Brooklyn, New York, provided regional distribution. Bexar County, Texas, including San Antonio, was chosen for its high proportion of Mexican-Americans, and St. Louis, Missouri, to represent a nonport city in middle America. All incoming off-the-street (i.e., excluding transfers from other units) arrestees in the central jail formed the study population. Exceptions were those arrested on drug charges alone, those released on bail, and those arrested on minor municipal charges such as traffic violations. Los Angeles had such an enormous intake that the use of a random sample was necessary.

Of the respondent sample, 74% were under 30 years of age, with the 20-24 year olds composing the largest single age group (32.5%). Thirty-seven percent completed high school; 57.2% were Negro and 24.6% Caucasian; about 50% were employed when arrested.

For each selected arrestee, a record of his criminal history was made. Local, BNDD's, regional and national drug registers were checked. A urine sample was collected from each, and subjected to a thin layer chromatographic process to detect heroin, cocaine, methadone, amphetamines or barbiturates. A personal interview was conducted that included questions regarding these five drugs plus morphine, marihuana, hashish, psychedelics, tranquilizers, and special substances such as ether, gasoline, glue, etc.

Based on all these measures, respondents were classified as "Drug Users" or "Nondrug Users."

For the distribution of current arrests, the null hypothesis tested was that there are no differences in types of arrest charges, particularly between Property Crimes and Serious Crimes Against the Person, among "Drug Users" and "Nondrug Users." The Chi-square statistic was used to test the independence of the distributions as well as to indicate general associations between variables. For trends in drug use and arrest charges, FBI rap sheets were obtained for all respondents and coded within the same classification as for current charge analysis. A trend analysis of differences in criminal behavior according to year of first drug use was also undertaken. A multi-variable analysis of variance technique was used to look for significant differences in the patterns of arrest charges between "Drug Users" and "Nondrug Users," then among "Narcotic Drug Users," "Nonnarcotic Drug Users" and "Nondrug Users."

RESULTS

Based on the broadest definition of drug usage, approximately 68% of all arrestees were classed as "Drug Users," but the percentage varied greatly by drug type and study site. Heroin users ranged from 59% in New York to 20% in St. Louis. Marihuana usage ranged from 71% in Los Angeles to 34% in New Orleans.

Drug Usage and Current Arrest Charges

Urine sample results and questionnaire responses identified "Current Drug Users," defined as persons with either a positive urine sample or who admitted to use of one or more illicit drugs during the month prior to the study. Offenses were divided into "crimes against the person" and "crimes against property." Data were analyzed twice; the first time, robbery was considered a property crime; the second time, robbery was considered a crime against the person. In both analyses, arrest charges indicated that "Nondrug Users" had a greater concentration of arrests among Serious Crimes Against the Person (criminal homicide, forcible rape, aggravated assault) than did "Drug Users" (33.6% versus 28.4% when robbery was classified as a Serious Crime Against The Person; 21.4% versus 10.1% when robbery was classified as a Property Crime). "Drug Users" were more often charged with Property Crimes than were "Nondrug Users" (45.9% versus 42.1% when robbery was categorized as a Serious Crime Against the Person; 64.9% versus 54.3% when robbery was shown as a Property Crime). In only three arrest categories were "Drug Users" found to be arrested more often than were "Nondrug Users": (1) robbery, 18.3% versus 12.2%; (2) burglary, 21.2% versus 12.9%; and (3) narcotics drug laws, 13.6% versus 4.3%.

By examining urine results and questionnaire data, and then adding cases identified through crime files and drug registers, a group was formed classed as "ever having used a drug." Respondents with an indication of ever having used a drug were significantly less likely to have been charged with a Serious Crime Against the Person, regardless of how robbery was listed, than were those who had never used a drug (28.6% versus 36.2% when robbery was a Serious Crime Against a Person; 11.6% versus 24.9% when robbery was a Property Crime).

To study the relationship of type of drug used, current arrest charges were examined separately for respondents identified through urine analysis as "Current Illicit Users" of heroin, cocaine, methadone, amphetamines and barbiturates. No significant differences in arrest charge distributions were indicated for users of methadone and barbiturates compared with "Other Urine Analysis." Cocaine cases were too few to permit analysis. Heroin users showed a highly significant tendency to be charged with Property Crimes as opposed to Crimes Against the Person, regardless of how robbery was listed. When robbery was considered a Property Crime, 74.2% of the heroin users and 55.4% of those with "Other Urine Analysis" were arrested for such a crime; only 5.9% of the heroin users were arrested for Serious Crimes Against the Person, while 18.1% of those with "Other Urine Analysis" were arrested for such crimes. For "Amphetamine Users" there were no

significant differences for arrest charge distributions when compared with "Other Urine Analysis," but an unusual concentration of cases among Serious Crimes Against the Person needs further inquiry. Too few users were detected to make a definitive statement.

Combining urine results and questionnaire data provided a larger count of "Current Illicit Users" of a wider variety of drugs that included heroin, morphine, cocaine, methadone, marihuana, hashish, psychedelics, amphetamines, barbiturates, tranquilizers and special substances. Analysis of these findings showed a similar concentration of arrest charges for robbery, burglary, and larceny-theft for "Users," and crimes of violence for "Nonusers."

These analyses of drug usage and arrest charges were undertaken one at a time. In addition, for the urine sample, a data analysis was made when the presence of more than one drug was identified. No significant differences were detected as a function of the combinations of drugs. Again, however, the combination of amphetamines and barbiturates showed 12 out of 15 cases among the Uniform Crime Report's Index Crimes.

Only for cocaine was there an indication of a differential distribution of arrest charges as associated with frequency of use. Overall, cocaine users were arrested more often for burglaries than were other drug users (26% versus 18.9%). Among cocaine users themselves, current users were more often arrested for robbery than were past users (27.9% versus 16.8%).

Drug Usage and Trends in Arrest Charges Over Time

Arrest rates for all charges in total were higher for "Drug Users" than "Nondrug Users." For time periods prior to 1960, and 1960-1967, arrest rates for Serious Crimes Against the Person were higher for "Drug Users" than for "Nondrug Users," regardless of how robbery was classified. For 1968-1971, there was a downturn among "Drug Users" for arrests for Serious Crimes Against the Person when robbery was listed as a Property Crime, indicating a lower arrest rate among "Drug Users." However, for long-term users of nonnarcotic drugs, the rate of arrests for Serious Crimes Against the Person was higher, when robbery was included, than for Nondrug Users during all time periods. Among this group of long term users, arrests were and are more often made than among the "Nondrug Users."

CONCLUSIONS

These analyses are based on arrest charges, not convictions. It may be useful to re-analyze the data once the cases have been determined. Though not truly representative, the sample is very appropriate to the inquiry of this study. If no positive relationship between drug usage and serious crime emerges here, there need be less concern about the overall relationship between drug usage and crime in general.

There is no indication, based on current arrest charges, that drug users are more often involved in crimes of violence. They are charged with these crimes, but not more often, and for most drugs it is less often, than "Nondrug Users." There are only two drugs for which more intensive investigation is suggested. There was an unusually high concentration of Index Crime arrest charges among "Amphetamine Users," and the distribution of charges for "Barbiturate Users" was the closest to that of "Nondrug Users."

There is strong evidence that robberies account for a large proportion of arrest charges among "Current Drug Users." It was typically the most frequent arrest charge for "Drug Users" in the entire Uniform Crime Report's classification system. It is important to distinguish between crimes that are basically acquisitive (including robbery) and those involving injury or death. If "Drug Users" were found to be disproportionately involved in the latter, this would represent a relationship of a different order of magnitude, and introduce different implications regarding drug abuse as a societal problem. This has not turned out to be the case. However, the seriousness of robbery should not be downgraded. Robbery involves either force or the opportunity for force to occur. For the victims of robberies, this involvement of "Drug Users" constitutes a definite threat.

The study also confirms certain earlier findings that suggest it is not that heroin users avoid crimes of violence, but that they avoid crimes not involving financial gain.

It is hoped that the downturn of arrests for Serious Crimes Against the Person for 1968-1971 is indicative of a continuing trend. For future studies it is recommended that a multiple approach be used to identify "Drug Users," and that they focus on behavior found among users of other dangerous drugs besides narcotics.

Ellinwood, Everett H. Assault and homicide associated with amphetamine abuse. American Journal of Psychiatry, 127(9):1170-1175, March 1971.

DRUG	Amphetamines; Multi-Drug
SAMPLE SIZE	13
SAMPLE TYPE	Violent Offenders
AGE	Adults
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Interviews; Observations; Psychological Tests
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	12

PURPOSE

The histories of 13 persons who had committed homicide while intoxicated with amphetamines were investigated in an attempt to (1) clarify the relationship between amphetamine use and acts of aggression and violence, and (2) to elucidate other variables in the evolution of behavior leading to violent acts.

METHODOLOGY

Case histories were compiled on 4 interviewed persons who had committed murder after taking large doses of amphetamines. Letters were then sent out to 6 forensic psychiatrists asking for examples of such cases. Nine additional cases were reported, and a detailed analysis and comparison of the total sample of 13 was conducted. This was supplemented by background information from similar cases involving assault, rape, kidnapping, attempted homicide, and "near misses."

The 13 subjects were examined in terms of age, amphetamine use (acute or chronic), use of other drugs, primary condition during homicide (paranoid, impulsive, induced panic), and whether or not the subjects were found to be schizophrenic after withdrawal.

RESULTS

The case history of the four interviewed persons seemed to illustrate the direct effect of amphetamine-induced paranoid ideation or emotional lability leading to a violent act. Three of these cases illustrated: (1) the rapid evolution of paranoid thinking after acute high-dose use to combat the effects of sleep deprivation; (2) the gradual development of paranoid delusions in a chronic amphetamine abuser who lived an isolated life; (3) the intense ambivalence combined

with emotional lability to which the individual might be reacting, while appearing to others to be bizarrely unconcerned about the violent act.

The review of all 13 case histories made it abundantly evident that many other variables were involved. Three subjects were classified as acute users, seven were chronic, and three were borderline acute/chronic. Five used other drugs infrequently or not at all; three used alcohol in combination with amphetamines; four used LSD; and one used barbiturates and heroin. Seven were classified as having been paranoid during the violent act, and the others in a panic-stricken or emotionally impulsive state. Five (including three of the "paranoids") were schizophrenic after withdrawal.

The most important variables in amphetamine-induced violent behavior were found to be: (1) predisposing personality; (2) environmental conditions; and (3) the use of other drugs.

Overall, the main problem appeared to be a loss of intellectual awareness of the nature of drug-induced paranoid thinking and a lowering of impulse control. This often occurred in connection with a long-term solitary life-style.

CONCLUSIONS

In the cases reported, homicide was clearly related to an amphetamine-induced delusional process and/or state of emotional lability. Three fairly distinct phases leading to the violent act appear to occur for many drug users: (1) chronic amphetamine abuse; (2) an acute change in the individual's state of emotional arousal; and (3) a situation that triggers the specific events leading to the act of violence, which can be a minor incident bearing little or no relation to the reality of the user's situation.

The reported incidence of amphetamine-induced assault and homicide might be higher if physicians were more fully aware of the problem. There are no data showing the number of assaults and homicides committed by people under the influence of amphetamines or other drugs. Routine urine examinations to detect the presence of drugs in the system of every person arrested for a violent crime would be of great help in evaluating the incidence of this problem.

PURPOSE

The evidence is reviewed in the areas of the two major approaches to the subject of drugs and crime. The first part of the study deals with the relationship of drug use to violent and nonviolent crime on the part of the individual user, the problem of organized crime in relation to drugs, and the violence surrounding the use of drugs and drug programs.

The present body of literature has mainly concentrated on three main issues: (1) does the use of drugs cause the user to become psychologically inclined to commit crimes, (2) does the use of drugs lead the addict to commit crimes for the purpose of supporting his habit, and (3) is the use of drugs merely a symptom of a deviant personality, i.e., does drug use correlate with, but not cause, crime? Not as extensively explored have been the issues of (1) crime associated with rackets which have developed around the marketing of drugs, and (2) the violence surrounding the use of drugs.

SUMMARY

I. Drug Use and Crime

(1) Drugs and crime

The findings of Jared Tinklenberg (1973) in his review of the literature on drugs and crime are summarized, emphasizing his conclusion on the importance of alcohol in relation to violent crime.

The use of barbiturates in combination with alcohol by persons guilty of assaultive behavior was singled out as a subject for needed investigation; it was seen that the present evidence on the relationship between barbiturates and crime is slim and difficult to interpret. No reliable evidence that marijuana has any relationship to crime was found.

The law has failed to control drug addiction, but despite the evidence of failure, laws have become more stringent, resulting in heavier punishments while having no effect on drug traffic. The U.S. has also been involved in diplomatic agreements on the international level to control drug production and marketing. This has resulted in the creation of an enormous international industry in illegal drugs which threatens the integrity of lives at every level. To deal with this, an equally enormous and profitable law enforcement agency has been created to deal with the problem. In addition, a drug treatment industry has developed, with vested interests and political pressures involved. The complexities of these structures have drawn so much attention that the needs of the drug addict have become secondary.

(2) Organized crime

The consideration of crime related to drugs on the level of organized trafficking and crime was considered probably much more important than the study of the relationship of drug use to crime on the level of the individual user. Organized crime has always been a road to success for newcomers to American cities, and today the "newcomers" who are involved in drug traffic are the Blacks, Mexicans, Puerto Ricans, etc. Racket-associated violence, a result of intense competition for enormous profits involved in drugs, is flourishing. This is not the "crime in the streets" which is often associated with drugs, but an underworld in which ordinarily those people suffer from violence who in one way or other have become related to the traffic. The correction of this situation goes far beyond the problem of preventing or correcting drug addiction; it is related to the much larger issue of law and social control that is discussed in Part II.

(3) Homicide and violent assault around drug treatment programs

There is a surprising amount of homicide and violent assault affecting participants in drug treatment programs, both patients and staff. Fully one-quarter of the deaths reported in NIDA drug treatment programs are homicides, and homicide has been shown to be the leading cause of death among drug users (Zahn and Bencivengo, 1975). In fact, taking drugs per se constitutes a risk of being a homicide victim, and the risk has increased in recent years. The importance of noting the use of drugs (or alcohol) by the victims of homicide, in terms of the role the victim may have played in provoking the assault and in terms of his inability to disengage or defend himself, is emphasized (Wolfgang, 1966). However, the hypothesis is also strongly suggested that these deaths are related to the petty trafficking in drugs on the local level. Failure to pay one's debts, the removal of a potential informer, the elimination of competitors in the traffic and the variety of situations which prompt petty gangsters to rub people out, all more than likely contribute to this widespread phenomenon.

II. Drug Policy and Crime

The discussion of drugs and crime has little meaning unless it is examined in the context of public policy about the use and marketing of drugs. The identification of drug use as a criminal activity has resulted in a vast network of national and international crime, as well as the intervention of Federal law enforcement agencies that make violence an inevitable result of drug use.

CONCLUSIONS

In the area of drug use and crime, the lack of evidence of the harmfulness of marihuana makes it difficult to understand the continued resistance of the legal authorities and the public. This is especially so when alcohol, which is legal, has been shown to be a far more dangerous drug. Crime in relation to drugs must be seen as something that involves much more than the behavior of an individual drug user or a mugging on the street. It must also be seen in a structural context as a phenomenon related to the pursuit of large scale interests within highly complicated institutions of government, industry and trade.

In terms of public policy, the possibility exists that public policies have created the drug problems themselves. Despite the evidence that alcohol is the most dangerous of drugs, no international structures exist to restrict its consumption. A decided shift in public policy is indicated if the problem of drugs and crime is to be solved.

Goode, Erich. Excerpts from marihuana use and crime. In: National Commission on Marihuana and Drug Abuse. Marihuana: A Signal of Misunderstanding. Appendix, volume 1. Washington, D.C.: U.S. Government Printing Office, March 1972. pp. 453-469.

DRUG	Cannabis
SAMPLE SIZE	559
SAMPLE TYPE	General Population
AGE	Adolescents; Adults (15-34)
SEX	559 Males
ETHNICITY	50% White; 40% Black; 10% Not Specified
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	August 1971
NO. OF REFERENCES	0

PURPOSE

Two models have previously been used to discuss the issue of whether marihuana is meaningfully and causally related to the commission of crimes: the causal model, which posits that marihuana use stimulates the commission of anti-social acts; and the spurious model, which says that marihuana is unrelated to criminal and aggressive behavior.

Males living in West Philadelphia were interviewed in order to test the above models and to comment on the previously inconsistent treatment of crime and marihuana use. The report is divided into sections on:

- (1) the effects of marihuana,
- (2) crime under the influence,
- (3) who commits crimes and who doesn't, and
- (4) marihuana use and crime: causal or spurious.

METHODOLOGY

The study sample consisted of 559 males between the ages of 15 and 34 living in a section of West Philadelphia. This area contains primarily members of the lower-middle and working class, high school educated blacks, and college-associated whites. Forty percent of those interviewed were Black, just over 50% were White, and the remainder were Puerto Rican, Mexican-American, or Oriental. This racial composition is approximately the same as the census figures for the sample area.

Subjects were asked about their use of marihuana and other drugs, use among their friends, and the commission of 16 various offenses. These offenses ranged from those which would not be

considered crimes in most instances (i.e., disturbing people) to felonies. Users' attitudes about marihuana in relation to crime were also queried. A quarter of the sample had never smoked marihuana; 3% of the cases did not provide information regarding marihuana use; the remainder of the respondents varied in their marihuana usage between several times a year and daily.

RESULTS

The Effects of Marihuana

Regarding the subjective self-reported effects of marihuana, indications were that the classical descriptions relating to aggressive behavior and the commission of crimes--feeling angry, frustrated, wanting to hurt someone, being willing to follow any and all suggestions of others, being deranged, wanting to do something violent--have no empirical support whatsoever.

When asked whether the effect of marihuana made them want to hurt someone, 96% answered "never" or "almost never." Ninety-five percent answered "never" or "almost never" when asked if they wanted to do something violent when under the influence of marihuana. Eighty-eight percent said they never or almost never felt more angry when high, and 78% said that they never or almost never felt frustrated when high.

Those sensations usually seen as inhibiting criminal and aggressive behavior were more prevalent in the responses. Fifty percent of the respondents said they felt a feeling of relaxation almost all the time while under the influence of marihuana. Thirty-one percent said they felt less angry than usual almost all the time, 22% felt drowsy and sleepy almost all the time, and another 25% felt this more than half the time.

Crimes Under The Influence

The survey asked the respondents about using marihuana and/or alcohol 24 hours or less before various crimes were committed. Marihuana very rarely figured into the commission of crimes in any way. For only a tiny minority of all crimes committed was the respondent under the influence. This was especially the case for serious and aggressive crimes. Alcohol was far more likely to be used soon before criminal activity than marihuana.

Figures for six out of the 16 criminal offenses are presented. Of 208 respondents who admitted having stolen goods from a store, less than one-half of one percent said they were under the influence of marihuana during their first offense, and only 2% were under the influence during their most recent offense. Of 102 who admitted to property damage, a total of 6% were under the influence of marihuana either during the first or most recent offense. For the 270 who said they hurt someone in a minor way, the figure was 3%; for breaking into a house or store, it was 17%; for a stolen car it was 0%; and for hurting someone badly, it was 5%. The interview results in this area showed that the classic aggressive, violent crimes traditionally associated with marihuana intoxication were very rarely committed under the influence of marihuana.

Those Who Commit Crimes

Two basic issues were explored in regard to the self-admitted offense rate of users versus nonusers: (1) Do marihuana users commit crimes and offenses any more frequently than nonusers do? (2) Are any variables with which marihuana use is strongly related also correlated with criminality? Over a third (38%) of the respondents who have never smoked marihuana said that they committed none of the 16 criminal offenses asked about, but only 12% of the regular marihuana smokers said they had committed none. Four or more offenses were admitted to by 41% of regular users, but only 24% of nonusers admitted to four or more.

The simple relationship between using marihuana and committing offenses was positive and statistically significant, and there was also a high correlation between frequency of smoking marihuana and committing offenses. However, a wide range of other variables, also related to both crime and to marihuana use, were also correlated--race, education, age, the use of other drugs, and having drug-using friends.

CONCLUSIONS

The findings strongly support the view that marihuana use by itself is not related in any meaningful way to criminal behavior; that marihuana use probably does not cause criminality.

The spurious model seems to be a far more accurate description of the relationship between marihuana use and criminal behavior than the causal model. Effects usually described as being related to aggressive and criminal behavior appear to be nonexistent or extremely rare in marihuana users. The difference in crime rate between users and nonusers of marihuana is dependent not on marihuana use per se, but upon larger sociological variables.

Guze, Samuel B.; Goodwin, Donald W.; and Crane, J. Bruce. Criminal recidivism and psychiatric illness. American Journal of Psychiatry, 127(6):832-835, December 1970.

DRUG	Multi-Drug
SAMPLE SIZE	176
SAMPLE TYPE	Incarcerated
AGE	Adults (Mean age 27)
SEX	Male
ETHNICITY	51 Black; 125 White
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Program/Clinic Statistics; Parole and FBI Records
DATE(S) CONDUCTED	1959-1968
NO. OF REFERENCES	7

PURPOSE

In 1959, a long-term project was begun to characterize and measure associations between criminality and psychiatric disorders in convicted male felons and to analyze the effects of specific disorders on recidivism during an 8 to 9 year period. Associations examined were psychiatric illness, family history, parent-home experiences, delinquency and crime history, and school, job, military and marital histories.

METHODOLOGY

Investigation began with a systematic psychiatric study of 125 White and 51 Black convicted felons. Results of the study were supplemented by parole and recidivism data as well as an extensive psychiatric study of first degree relatives 3 to 5 years after the index study. Parole data extended the study an additional 5 to 6 years. Recidivism data were obtained from FBI records and from subjects during interviews.

Recidivism data were calculated using 6 measures: percentage rearrested, reimprisoned and reconvicted of a felony, at least once and more than once for each criterion. Rates were also calculated for each psychiatric diagnosis at each interview and also for active and remitted alcoholism and drug dependence.

RESULTS

The principal psychiatric disorders associated with male criminality were sociopathy, alcoholism and drug dependence. These were the only psychiatric disorders seen more frequently among the subjects, and their first-degree relatives, than in the general population. Among both index subjects and their relatives, sociopathy, alcoholism and drug dependence were frequently seen in

the same individual. The recently completed 8 to 9 year follow-up study confirmed these findings.

Recidivism rates were higher among "flat-timers" (convicted criminals serving sentences and ineligible for parole), Blacks, subjects under 40, and subjects who were diagnosed as actively alcoholic or drug dependent (upon opiates, barbiturates and amphetamines.) Remitted alcoholics and drug abusers had a lower recidivism rate.

Recidivism rates for the entire sample were very high. Eighty-five percent were rearrested at least once, 62% more than once. Nearly 50% were reimprisoned at least once, almost 25% more than once. Over 40% were reconvicted of a felony at least once, more than 15% more than once.

CONCLUSIONS

Increased recidivism rates were associated with a more extensive criminal career, relative youth, sociopathy, alcoholism and drug dependence. Most closely associated were extent of prior criminal behavior and age. The lower recidivism rate for subjects over 40 is consistent with the view that crime is a manifestation of youth. Active alcoholism and drug dependence aggravate sociopathic and criminal tendencies; successful treatment for these disorders could help reduce recidivism rates. Although Blacks had a higher rearrest rate, they did not have higher reimprisonment or repeat felony conviction rates, suggesting that they may be more vulnerable to arrests for "suspicion."

Jacoby, Joseph E.; Weiner, Neil; Thornberry, Terence; and Wolfgang, Marvin. Drug use and criminality in a birth cohort. In: National Commission on Marihuana and Drug Abuse. Drug Use in America. Appendix, volume 1: Patterns and Consequences of Drug Use. Washington, D.C.: U.S. Government Printing Office, 1973. pp. 300-345.

DRUG	Cannabis; Opiates; Multi-Drug
SAMPLE SIZE	9,945
SAMPLE TYPE	General Population; Birth Cohort
AGE	Children; Adolescents; Adults (range 10-26)
SEX	Both Sexes
ETHNICITY	Black; White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Cohort Analysis
DATA COLLECTION INSTRUMENT	Interviews; Police Records
DATE(S) CONDUCTED	1972-1973
NO. OF REFERENCES	7

PURPOSE

The relationship between heroin and marihuana use and engagement in delinquent and criminal activity was studied by using extensive data analysis from a large cohort sample. The data also provided suggestions for intervention strategies to reduce the social harm caused by drugs and crime. A total of 34 tables is presented.

This was the first drug study based on a cohort methodology, and the report includes a discussion of the strengths and weaknesses of cohort analysis.

METHODOLOGY

The first phase of the study examined police records of a 1945 birth cohort whose members lived in Philadelphia from age 10 through 18. The second phase examined a 10% sample of the original cohort in both juvenile (before 18) and adult (after 18) years to age 26, through interviews and police sources. The original sample included 9,945 members. The second sample consisted of 995 whose records were searched, and 567 who were interviewed.

The major variables measured were drug usage and delinquency or crime; these results were then controlled for race and socioeconomic status. Four analyses were performed:

1. The incidence of marihuana and heroin use measured through police records and interviews. Background variables for users and non-users before and after age 18 were then compared in an attempt to construct a picture of the "typical" drug user.
2. The relationship of marihuana use and delinquency, according to frequency of delinquent acts and categories of delinquent acts.

3. The relationship of drug use and seriousness of offense measured by frequency and by the Sellin-Wolfgang scale of weights.
4. Drug offense and recidivism rates measured by frequency and seriousness of offense.

RESULTS

Drug Use and Drug Users

Drug offenses increased from a single arrest out of 10,214 individuals in the original cohort to 42 (or 2.5%) in the follow-up sample. Paralleling this was a sharp increase in marihuana use after age 18 (far more prevalent than heroin use), though a small minority of chronic offenders accounted for most of the use.

Marihuana users were disproportionately Black, but of similar socioeconomic backgrounds. When these two factors were controlled, the relation to marihuana use of other background variables (marital patterns, education, military service, occupation, peer relations and gang membership) disappeared. This makes it impossible to describe a "typical" marihuana user. Data on heroin users yielded the same pattern.

Marihuana Use and Self-Reported Delinquency

No significant results emerged from a comparison of marihuana use with frequency of delinquent acts. When frequencies of acts were combined into categories, heroin and marihuana use after age 18 were related. Marihuana use before 18 was also related to heroin use after 18. Even when race and SES were controlled, marihuana users committed proportionately more offenses in each grouping than non-users.

Before and after 18, and controlling for race and SES, marihuana users reported more police contacts and arrests of all kinds than non-users. Users also reported more negative evaluations of police behavior, although both groups received uniform treatment.

Seriousness of Offense Careers

In measuring the frequency and seriousness of offenses related to drug use (mean number of offenses, mean career seriousness, and mean offense seriousness), drug offenders committed more offenses as well as more serious ones. Delinquent users (users who admitted drug use before 18) also scored higher on all three measures than non-users. Heroin users demonstrated the same pattern, but the magnitude of difference in scores compared with non-users was much greater. Although these findings were somewhat related to race and SES, the disparities in scores remained.

Recidivism and Offense Seriousness

Measuring the percentage of offenders who recidivated (ranked according to seriousness of offense), drug offenders had higher rates of recidivism at each point. Heroin users were most likely to recidivate, and delinquent users had the highest probabilities of recidivating after each offense. Though users and non-users showed an increase in mean seriousness of offenses up to age 26 (mostly a function of growing older), drug offenders and users showed higher scores at almost all age intervals.

CONCLUSIONS

Though drug offenses increased during the cohorts' young adult years, it cannot be determined whether this increase is due to advancing age or to the general increase in drug use since 1963. Though drug use was strongly associated with number and seriousness of offenses, both marihuana and heroin users had more police contacts, more arrests, more serious offenses, and more serious offense careers than the non-users of the two drugs. Heroin users had even more serious offense careers than the marihuana users, and delinquent marihuana and heroin users and drug offenders recidivated in greater proportion than did the delinquent non-drug offenders. However, this does not indicate causal relationship between drug use and law violation, since the data do not show that drug use precedes non-drug offenses. The Sellin-Wolfgang seriousness scale permits the ranking of sub-groups in the cohort according to the amount of social harm they produce, which can then be used to establish intervention priorities. Allocation of resources would be more effective if applied to drug-using rather than non-using groups. Within the drug-using groups, the order of priority should be: drug offenders, heroin users, marihuana users before 18, and marihuana users after 18.

New Jersey State Police, Uniform Crime Reporting Unit. Drug Abuse and Crime in New Jersey: A Uniform Crime Reporting Survey. Dissemination Document No. 10. New Jersey: State Law Enforcement Planning Agency, June 1971. 49 pp.

DRUG	Multi-Drug
SAMPLE SIZE	22,418 Total; Subsample 4,177
SAMPLE TYPE	Criminal Offenders
AGE	Adolescents; Adults
SEX	Both Sexes
ETHNICITY	Cross-Cultural
GEOGRAPHICAL AREA	New Jersey
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Police Records
DATE(S) CONDUCTED	1970
NO. OF REFERENCES	0

PURPOSE

To analyze the relationships between drug abuse and crime in the state of New Jersey, a survey was conducted for information on all criminal offenders for one month (August 1970). Sociological and psychological factors which contribute to drug abuse were not considered, nor were type or degree of addiction.

The goal of the survey was to measure factors relating to the known drug used and the individual's criminal involvement. Information was analyzed on a state-wide and regional basis, as well as for major cities.

METHODOLOGY

Information was collected about each person arrested for a criminal offense (violation of a municipal ordinance or state statute) in New Jersey during the month of August 1970: demographic data and details of the specific category of narcotic law violation, prior offense record, and present arrest charge for August. The Uniform Crime Reporting scoring procedures were used.

The nature of a crime was determined by the type of threat it posed to the community. Crime was considered "violent" when physical harm, and/or psychological trauma, resulted.

State Troopers acting as field representatives to the Uniform Crime Reporting Program familiarized and counseled 508 law enforcement agencies within the state which prepared the survey forms. Verification of data took place at the Uniform Crime Reporting Unit at the State Police Headquarters.

RESULTS

Of the 22,418 persons arrested, 19% (4,177) were identified as drug abusers.

Almost 45% of the drug abusers reflected use of marihuana or hashish; 35% use of opium or cocaine; and almost 13% use of other nonnarcotic drugs (barbiturates, LSD). Possession of paraphernalia accounted for 6%, and the remaining 2% related to synthetic narcotic substances (demerol, methadone).

Involvement with substances such as marihuana, hashish and LSD declined as the age of the user increased. Forty-nine percent of the adults (over age 21), 29% of the young adults (18-20), 16% of the adolescents (15-17), and 7% of the juveniles (14 or under) were involved in hard drugs.

Of the drug abusers, more than 57% were associated with offenses other than those of a drug nature. They accounted for 12% of the arrests for crimes of violence, and 24% of the arrests for robbery. Of 31 persons arrested and charged with murder, 21 were drug abusers, as were nearly 6% of the total arrested for atrocious assault, 5% of those arrested for forcible rape, and 14% of those arrested for property crimes. Nearly 15% of the 15-17 year old group arrested for violent crimes were drug abusers, and the predominant crime again was robbery (31%).

Over 22% of the drug abusers committed an offense in order to purchase drugs. Among the adult and young adult group, nearly one-half who committed violent crimes did so to support a habit, usually in the opium-cocaine category. This trend was also reflected in juvenile crime, with increasing age concurring with increased participation in violent crime.

Almost 57% had no prior arrest records, and almost 45% of those with prior arrest records had arrests for nondrug-related crimes. Over 48% of the juveniles and 59% of the adults had prior arrest records.

A regional analysis for New Jersey indicated that an individual's crimes, drug habits, mobility and social status were varied. Urban areas felt the greatest impact of drug abuse related crimes, although rural areas were also affected.

Nearly 16% of the drug abusers did not reside in the community in which the offense took place. Fourteen percent came from states other than New Jersey.

Although male involvement vastly predominated over female (89% to 11% respectively), since 1967 a slight upward trend in female arrests has been noted. Racially, Whites accounted for 68% of involvement, and non-Whites for 32%.

CONCLUSIONS

Evidence indicates that adults, young adults and juveniles take large risks to fund their drug habits, with juveniles taking increasing risks as they grow older. These risks, for all groups, took the form of violent and property crimes, particularly robbery and selling of drugs.

Antisocial behavior seems to recur, as over one-half of the drug abusers had prior arrest records for both drug-related and nondrug-related offenses.

The high degree of urbanization of population density in New Jersey contributes to pressures which influence drug abuse. Proximity to drug markets of New York and Philadelphia contribute to a great accessibility of drugs.

Rosenthal, Seymour J.; Young, James; Wallace, Donald B.; Koppel, Ross; and Gaddis, Geoffrey. Summary. Illicit Drug Use and its Relation to Crime: A Statistical Analysis of Self-Reported Drug Use and Illegal Behavior. Philadelphia, Pa.: Center for Social Policy and Community Development, Temple University, 1973.

DRUG	Multi-Drug; Opiates
SAMPLE SIZE	216
SAMPLE TYPE	Treatment
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Black; White
GEOGRAPHICAL AREA	Philadelphia
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	January 1 - June 30th, 1973
NO. OF REFERENCES	44

PURPOSE

It is often assumed that the relationship between drug use and crime is direct and causal. Certainly many individuals who enter the criminal justice system are drug users. But is the "craving" for narcotics the major factor in causing crime? To explore this relationship, three hypotheses were investigated using questionnaires administered to 216 treatment patients:

- Can a linear cause and effect association between drug use and crime be supported?
- Can it be shown that drug users' criminal behavior patterns are continuous, independent of drug use?
- Can it be shown that drug use and crime are correlated with common social causes?

Findings were then examined in regard to implications for policy makers within the criminal justice system responsible for determining an approach to the joint problems of drugs and crime.

METHODOLOGY

A questionnaire was developed and administered to 216 respondents drawn from a client population of 14 separate drug treatment agencies in the Greater Philadelphia area. Rigorous controls insured confidentiality and anonymity.

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RESULTS

Drug Causation Hypothesis

This hypothesis was confirmed in one instance only. Heroin, the drug of choice during the year prior to respondents' entry into treatment, was directly associated with burglary. It was, however, not significantly associated with robbery, prostitution, or shoplifting, whereas other nondrug factors were. Social-structural and pre-drug crime variables emerged as the most efficient and comprehensive explanations of respondents' crimes as they occurred during the year prior to entry into treatment.

Crime Continuities Hypothesis

Burglary, robbery and prostitution activities prior to drug use significantly correlated with the same activities during the period following first opiate use (year prior to entry into treatment). This confirms the hypothesis that designated criminal activities persist through time in spite of drug involvement. It further suggests that onset of criminal behavior is located in the period prior to opiate use.

Opiate use was, however, associated with changes in criminal patterns. Heroin use was related to an expanded crime repertoire, and White respondents were "discontinuous" with respect to a shift in crime activity prior and subsequent to opiate use onset. Additionally, White respondents tended to terminate opiate use in favor of a poly-drug non-opiate pattern simultaneous with an expanded crime repertoire. Though heroin users who used the drug more than once a day spent at least ten times as much money per day as those who used non-opiate drugs, opiates were not as strongly associated with crime as other, nondrug factors.

Black respondents reported heroin as the drug of choice. A discontinuous crime pattern was found, whereby robbery, burglary and prostitution in evidence prior to opiate use was superseded by a less "serious" and extensive pattern following opiate use. Heroin was not associated inevitably with increased crime, either in type or seriousness.

"Common Cause" Hypothesis

Low educational attainment was directly associated with the burglary reported for the pre-treatment year. Pre-drug burglary was also associated with burglary following drug onset, as was heroin use. However, heroin accounted for less than half the observed association (i.e., heroin was overshadowed by nondrug factors with respect to its effect on burglary). When all direct associations with adult crime were assessed by a comprehensive statistical model, three social-structural factors (education, sex, and age) were related to three of the crimes (burglary, prostitution, shoplifting). Three pre-drug crimes were directly related to the same crime types which occurred following opiate onset (burglary, robbery, prostitution).

Other Findings

Burglary, in the pre-drug period, was an almost exclusively male activity, and Blacks in the sample were overrepresented in pre-drug robbery. These findings imply an association between property crime and male "culture" (as expressed in the peer group), and between minority group status and "people" crime. This demonstrates the utility of the sociological approach to delinquency.

Pre-drug burglary also was significantly associated with post-drug burglary, as was robbery. This suggests that the prevalence of these serious crimes should be associated with the same social factors, such that racial differences should persist independent of drug factors. In fact, Whites were found overrepresented in burglary and Blacks in robbery, both prior and subsequent to opiate use, showing that opiate use had not altered these basic patterns.

CONCLUSIONS

This preliminary inquiry is supportive of social planning theories which argue against the consideration of a particular social ill independent of the social context in which it arises.

A comprehensive theory of association between narcotics use and crime must necessarily incorporate propositions that specify the way in which differential expressions of social deviance are related to the social context in which they occur.

The association between drug use and crime should not be minimized. But these findings lead one to question whether the elimination of the sale and distribution of illegal drugs, with nothing more, would substantially assist the elimination of urban crime. The same community conditions which nurture both drug abuse and criminal activity would remain largely unaffected. Further research in the area of drug use epidemiology is needed.

Drug abuse and criminal behavior, as two symptoms of social deviance, affect each other differentially, depending on the social context in which they occur. Strategies for their prevention must be geared to the elimination of the social conditions which give rise to them. Such background factors represented the most accurate predictors of criminal behavior, as well as being significant in predicting drug career patterns.

Community-wide crime prevention efforts should be undertaken that enhance the viability of community institutions and services. Criminal justice planners should assess the potential impact of drug prevention strategies on criminal behavior by types of crime. Primary drug abuse prevention activities must also be community-rooted.

The findings confirm a pattern in which drug abuse is greatly influenced by the peer culture which sanctions it. Furthermore, no one explanation for the relationships between drugs and crime is sufficient. No single response is adequate. Overall strategy must be to facilitate the efficient interaction of social control and social service functions.

NOTES

The final section of the report applies this strategy to programmatic activity with a list of specific recommendations. For the establishment of long range policy, areas of research and evaluation critical to the formation of a cohesive theory of social deviance are outlined.

Smith, Roger C. Speed and violence: Compulsive methamphetamine abuse and criminality in the Haight-Ashbury district. In: Zarafonitis, Chris J.D., ed. Drug Abuse: Proceedings of the International Conference. Philadelphia, Pa: Lea & Febiger, 1972. pp. 435-448.

DRUG	Methamphetamine
SAMPLE SIZE	Not Specified
SAMPLE TYPE	Urban Drug Users
AGE	Adults (Over 20)
SEX	Not Specified
ETHNICITY	Typically White
GEOGRAPHICAL AREA	San Francisco, California
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Interviews; Observations
DATE(S) CONDUCTED	1968+
NO. OF REFERENCES	3

PURPOSE

The Amphetamine Research Project, funded by the National Institute of Mental Health, began collecting data on patterns of high dose methamphetamine ("speed") abuse in the Haight-Ashbury district of San Francisco early in 1968. At the time the study began, the pattern of drug use in the area had shifted to the compulsive use of intravenous speed, with a spiraling level of violence as illicit speed labs moved from the area and distribution became increasingly rigid.

This report is descriptive rather than statistical. From interviews and observations, information was gathered on the patterns of induction into the speed scene, the impact of the subculture and the illicit market on behavior (particularly as it relates to violence), the subjective experience of users in the scene, and the divergent career routes observed. Informants agreed to participate in the study after they had become acquainted with staff members who had provided "no strings" assistance.

RESULTS

Characteristics of the Population

Typical newcomers to the neighborhood in the 1967 "Summer of Love" were just over 20 years old, White, came from an urban middle or upper-middle class family, and had spent time in college. The only thing they had in common was the use of drugs, primarily speed. Two major types of drug users existed: the "head" and the "freak." The head used drugs primarily to gain insight; the "freak" used drugs, particularly speed, primarily for the immediate effect, although the term also applied to anyone who engaged in violent, bizarre, or destructive behavior.

In the beginning, there was no culture to initiate the newcomer. As this culture developed, "speed palaces" were formed--neighborhood residences where the primary activities were acquiring and shooting speed. These palaces were characterized by a high level of activity, a steady stream of visitors (some of whom might drop in for a quick visit and end up staying for months), occasional violence, and frequent arrests.

The Speed Experience

Most heads viewed speed-users as self-destructive and impossible to live with. When the group had little to do in the way of purposeful activities, they became frantic and irrational. The potential for violence increased greatly, leading to such incidents as the suddenly triggered and unstoppable gang-rape of a girl accused by another member of her group of stealing a pill.

Progression Within the Speed Scene

Three distinct user career patterns were observed: (1) continued marginal adjustment, usually terminated by arrest, hospitalization, voluntary treatment, or death; (2) elevation to the upper levels of the speed marketplace; and (3) progression to barbiturates or heroin as drugs of choice.

The first group generally failed to rise above the level of the street, either because they lacked the criminal skills necessary to succeed in the speed scene, or because they tended to lose control of the amount and duration of speed use. Most speed users were bizarre in appearance and behavior, and were thus regarded as a "bust" or bad risk by others involved in organized criminal activities. The street-level user's cyclical life ranged from euphoria and confidence when speed was available to suicidal depression when he was unable to "score."

The street-level speed freak existed through a series of high-risk, low-pay-off hustles, such as "working the meatrack" (male prostitution), "rip-offs" (strong-arm robbery, usually involving someone in the speed scene), "burning" (selling phony or highly adulterated substances on the street as drugs), or dealing "nickel and dime bags" (five and ten dollar bags) of speed on the street.

The primary cause of violence on the streets was "burning." In the speed culture, "burning" was considered an offense which could not go unpunished, because someone with a reputation for buying adulterated drugs without taking action could rarely find good speed. Victims would spend days and weeks seeking the offending dealer to deliver punishments ranging from beatings, knifings, and shootings to an enforced massive dose of LSD or the adulterated drugs he was selling.

Violence in the Marketplace of Speed

The level of violence in Haight-Ashbury increased since 1967 when the patterns of drug use began to change--there were, for example, 17 murders in the first two months of 1969. Police statistics on assault and attempted murder are, however, poor indicators of the actual level of violence. Most residents had a hatred or distrust of police, and most victims were unwilling to file a complaint because their own criminal activity may have precipitated the assault.

Many researchers have suggested that violence in the speed scene is related primarily to the paranoid psychosis which develops after extended use of the drug. Little is known about the paranoia of individuals who use massive amounts of the drug within the context of a supportive drug culture that helps individuals to recognize and deal with the paranoia. In this study the usual response of the user when he felt paranoid was to avoid the possibility of harm to himself.

Most users interviewed carried either knives or guns, and stories circulated about the availability of heavy weaponry in the area. These arms were, however, just part of the trappings of the speed freak, and often were inoperable.

Many individuals were interviewed who used barbiturates and amphetamines in combinations, and such individuals were regarded as highly irrational, aggressive, and dangerous.

CONCLUSIONS

In the speed scene, most of the criminality is directed toward other members of the drug scene. Most of the violence results from an interaction among drug effect, lack of social controls within the subculture, and a variety of economic factors, including the way the marketplace is

sustained by the individual users. Unable to generate money outside the community, the culture has turned on itself, creating a climate of fear, suspicion, and violence which shows little sign of abating.

Heroin now has replaced speed as the drug of choice. The entire direction of the marketplace may be altered toward the heroin scene with its more experienced individuals and sophisticated hustling techniques. With a stabilized marketplace, the level of violence might decrease significantly, with a corresponding rapid increase in other types of criminal activity.

The brunt of the burden of increased legal penalties is borne by the low-level street user. This leads both to more violence on the street and to increased profits on the upper levels of the marketplace. In the long run, an educational and therapeutic approach might be more effective than a punitive one.

Stanton, John M. Lawbreaking and Drug Dependence. State of New York, Division of Parole, Bureau of Research and Statistics, 1969. 29 pp.

DRUG	Cannabis; Heroin; Multi-Drug
SAMPLE SIZE	150
SAMPLE TYPE	Paroled Addicts
AGE	Adults (18-55)
SEX	150 Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New York State
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Police and Other Official Records
DATE(S) CONDUCTED	1968
NO. OF REFERENCES	8

PURPOSE

The records of one hundred fifty male parolees released from New York State correctional institutions were surveyed to evaluate whether or not they originally became lawbreakers as a result of drug usage. Since heroin and marihuana are the drugs most commonly resulting in commitment in New York State, the survey concerned itself mainly with drug dependence of the opiate or marihuana type.

METHODOLOGY

The subjects were 150 males with histories of drug dependence released from New York State correctional institutions to the supervision of the Division of Parole in the first six months of 1968. Criteria for determining drug dependence were: (1) ever having been medically diagnosed or described in official records as having been addicted; (2) ever having been arrested for a drug trafficking offense and also known to have used a dangerous drug; or (3) self-described. Data on the subjects were obtained from their case folders.

RESULTS

Statistical findings are detailed in 11 tables which show the relationship of first arrest and first drug use in terms of: (1) offenses for which the subjects were presently on parole; (2) age at the time of parole; (3) number of known prior arrests; (4) number of known arrests prior to first drug use; (5) drugs used at the time of commission of the offense for which they were on parole; (6) drugs used during the subjects' lifetimes; (7) drug first used; (8) age at time of first drug use and of first arrest; and (9) approximate period of time intervening between first drug use and first arrest or vice versa.

Eighty-seven percent of the subjects had histories of heroin use, 77% were using heroin at the time of the present offense, and in 28% the current offense involved possession or sale of heroin. Fifty percent of the heroin users had no history of marihuana use.

One hundred eight (72%) had been arrested before they ever used drugs. In the other 42 cases, drug use preceded or occurred at about the same time as the first arrest.

Among the 27 parolees who used drugs before their first arrest, six were arrested about one year after their first drug use, and 21 were not arrested for from two to 20 years following onset. In this group of 27, a higher proportion of present offenses were drug-related than in the group which was arrested before onset. Ten were arrested for drug possession or sale, five for robbery, six for burglary, one for grand larceny and one for assault.

Among the 108 arrested prior to drug use, 23 first used drugs about one year after their first arrest, and 85 did not use drugs for anywhere from two to ten years or more afterwards. Thirty-two were arrested for drug possession or sale, 16 for robbery, 12 for burglary, 21 for grand larceny, and three for assault.

Thirty of the 150 subjects had first used drugs before they were sixteen, and 81 had first been arrested before that age.

CONCLUSIONS

Although drug use was not the reason for the first arrest of the majority of parolees in the study, it definitely is a contributing factor in lawbreaking. For most parolees, dependence on dangerous drugs is not a cause of crime, but it is one of the effects of an unstable and anti-social personality. Among those conditioned to lawbreaking, drug dependence does contribute to criminal behavior.

It is the high cost of heroin--the drug most often involved in the illegal activities of this sample--which is mainly responsible for the crimes associated with drug dependence. Drug dependence of the heroin type in New York State cannot persist without the user breaking the laws relating to possession of dangerous drugs. Almost invariably this results in the breaking of other laws to procure money to purchase the heroin.

It is fallacious to state that marihuana use leads to heroin use, but it would be true to say that for some individuals under certain conditions the use of marihuana will lead to the use of heroin.

Swezey, Robert W., and Chambers, Armand N. Drug use and criminal activity: Some relationship indices. Drug Forum, 3(2):161-171. Winter 1974. (25 References)

PURPOSE

There is a widespread belief that drug addicts are responsible for substantial amounts of criminal activities, but few sources of data relate specific crimes to specific drug use. Researchers at the Bureau of Dangerous Drugs and Narcotics analyzed five such sources of data on drug abuse and criminal activity, using the FBI crime classification system. Drug users and controls were compared with regard to 29 specific crimes.

METHODOLOGY

The five sources of data were diverse and of questionable comparability, but were considered the best available:

1. Voluntary urine samples from persons charged with crimes in the District of Columbia during one month in 1969 were tested for heroin use. Data by crime was reported for 323 individuals showing positive reactions and for 552 who declined to be tested.
2. Criminal data on 332 out of 770 defendants, who were sent to the D.C. Narcotics Treatment Administration and who were given urine tests that showed positive reactions.
3. Interviews with 50 Black male heroin addicts (ages 18-56), residents at D.C. Narcotics Treatment Administration half-way houses. Their self-reported criminal activity prior to addiction was considered representative of crimes committed by nonaddicts.
4. New Jersey State Police files reported drug arrests for marihuana, hashish, opium, cocaine, heroin, barbiturates, amphetamines and LSD. Also reported were the number of drug users arrested in each of 29 FBI crime categories. By subtracting the number of drug-user arrests from total arrests in each category the researchers obtained a quasi control sample of nonusers or use unknown persons.
5. Arrest records in the Philadelphia BNDD files for the years 1967-71 were isolated. Data were summed for each crime over all categories of drug use including heroin, amphetamines, marihuana, and/or multiple drug use.

Percentages of drug-related crimes were calculated for each situation. Chi-square statistics were calculated to compare heroin users versus controls against a criminal/non-criminal dichotomy by crime; otherwise the binomial test was employed.

RESULTS

Results for 29 crime categories by drug users vs. controls are reported. For the five data sources, 85 statistical analyses were calculated of which 36 were significant. Thirty-three significant statistics showed 17 indicating a greater tendency for controls than for drug users to commit specific types of crimes, and 16 in which the reverse was true.

Only in the case of robbery were significant chi-squared statistics in crime by drug users paired with figures over 50% for two or more data sources. As sample size increased, the percentage of drug-related crime appeared to decrease.

CONCLUSIONS

Several factors must be considered in interpreting these results. These are:

1. The characteristics of the data source upon which the results are based.
2. The numbers of drug abusers and controls on whom data are presented.

3. The magnitude of the percentage of drug related crime.
4. The existence or nonexistence of a significant chi-square or binomial test.
5. The directionality of significant statistics.

There is no doubt that a large number of crimes are committed by drug users. The belief that addicts are responsible for the majority of criminal activity of any kind is, however, seriously questioned. Various types of drug abuse and criminal activity must be considered individually along with the socio-cultural antecedents of both.

Swezey, Robert W. Estimating drug-crime relationship. The International Journal of the Addictions, 8(4):701-721, 1973.

DRUG	Multi-Drug
SAMPLE SIZE	179
SAMPLE TYPE	Primarily Law Enforcement and Drug Rehabilitation Officials
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	National
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires
DATE(S) CONDUCTED	After 1972
NO. OF REFERENCES	3

PURPOSE

To obtain information on drug-crime relationship estimates, effectiveness of anti-drug abuse programs, and similar topics, the Drug Abuse Description Questionnaire was developed. Responses were gathered and analyzed from 179 subjects in law enforcement, rehabilitation, and therapy professions in selected localities throughout the United States. This was one of the most comprehensive samplings of expert opinion on drug-crime topics ever undertaken.

METHODOLOGY

The Drug Abuse Description Questionnaire asked that respondents make quantitative estimates on topics involving drug abuse and crime for specified time periods. Item requests included estimates of most abused drugs and number of local users; identifying characteristics of drug abusers; and effectiveness estimates of specific anti-drug abuse techniques such as enforcement, education, propaganda, methadone therapy, etc. Several items asked respondents to estimate variance of drug use in hypothetical situations.

The questionnaire was distributed to state law enforcement agencies, treatment and research personnel, local police chiefs, BNDD agents, and narcotics squad officers in 35 cities selected for geography, size, and perceived importance and diversity of drug problems. Questionnaires were distributed to 378 individuals; of 182 returned, 179 were included in the data base. The response rate was low among treatment and rehabilitation professionals.

Responses were analyzed by item according to several strategies. Data were retrieved for the entire nation-wide sample, for geographic areas, for respondents' job types, and for city sizes in six categories.

RESULTS

Respondents estimated that marihuana was the most widely abused drug throughout the population (12%), followed by amphetamines, opiates, cocaine, and barbiturates in that order. They further estimated that all drug usage except hallucinogens would increase in the future.

An overwhelming majority responded "Yes" when asked, "Does drug use cause crime?" Respondents indicated that prostitution heads the list of drug-caused crimes; 40.8% of all prostitution was caused by drugs. Percentages for other money-producing crimes were: burglary, 38.4%; possession of stolen property, 35.3%; larceny, 33.5%; and robbery, 31.8%. Such crime was expected to increase.

Race was singled out as the best variable for predicting heroin usage, while age was the predictive variable mentioned most frequently for other drugs. Strict law enforcement measures were seen as more effective than methadone therapy.

CONCLUSION

The results must be interpreted with full recognition of the fact that the majority of responses are those from persons in the law enforcement professions. The low response rate among treatment and rehabilitation professionals is presumably due to the fact that the BNDD is a law enforcement agency, and the questionnaire enforcement-oriented. Even so, the percentage estimates for drug-related crime are lower than other recent appraisals. This may be an indication that the sample was not representative, that sociopolitical and geographic areas can not be cumulatively combined, or that respondents were conservative in their estimates.

Zahn, Margaret A., and Bencivengo, Mark. Violent death: A comparison between drug users and nondrug users. Addictive Diseases: An International Journal, 1(3):283-296, 1974.

DRUG	Not Specified
SAMPLE SIZE	476
SAMPLE TYPE	Homicide Victims
AGE	Children; Adolescents; Adults (range 10-49)
SEX	Male; Female
ETHNICITY	89% Black; 11% White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Medical Examiner's Records
DATE(S) CONDUCTED	1969-1972
NO. OF REFERENCES	27

PURPOSE

Recent data indicated that homicide among drug users appreciably increased in Philadelphia from 1969 to 1972 (107.7% from 1969-70; 222.2% from 1970-71; and 65% from 1971-72). In 1972 it was the leading cause of death among drug users, higher even than deaths due to the adverse effects of drugs and accounted for approximately one of every three homicides in 1972. This study addressed the question of why such rates of homicide occurred among this population.

Data were gathered to test two hypotheses. First, the subculture of violence thesis advanced by Wolfgang, Ferricuti and others to explain why certain populations are more likely to be victims was tested. Second, the investigators tested whether user lifestyle itself was related to homicide rate. To sustain their habit, users resort to crime, which increases their chances of being killed by police, guards or robbery victims. They also are engaged in high risk activities when obtaining drugs.

METHODOLOGY

Data were drawn from the records of the Medical Examiner's Office of the City of Philadelphia on a population consisting of all drug using homicide victims between 1969-1972 (N=271), plus a random sample of homicide victims who were not drug users (N=205). Data included:

- A fact sheet of demographic information on the victim.
- An autopsy report determining cause of death; a toxicology report of drugs within the victim's system at the time of death; and the presence of track marks.
- A report filed by the Philadelphia Police Dept., which included a description of the surroundings, statements of witnesses, a description of the offender and the arrest record of the victim.

Criteria for inclusion in the drug using population included: (1) positive toxicology; (2) two or more arrests for possession of narcotics within five years prior to death; (3) drugs on or near the body at death; (4) admission by victim's family that the victim used drugs; and (5) track marks.

To test the effect involvement in illegal activities had on the likelihood of being murdered, data were collected on: (1) who killed the victim (friend, spouse, police officer, etc.); (2) whether the decedent was killed during a felony; and (3) whether the decedent had a record of other offenses and what these were.

RESULTS

Among drug users 88.7% of the victims were male, 11.3% female. Among nondrug users, 80% were male, 20% female. Blacks were more frequent homicide victims than Whites (89% to 11%), and Black drug users were more likely to be victims than White users or Black nonusers. Ninety-five percent of all drug users were Black. Black users comprised 61% of all Blacks, White users only 27% of Whites. Mean age at time of homicide was 25.8 years, and age ranged from 10-49, for drug users. For nonusers, mean age was 33.5 and ranged 1-85. Single persons were more frequently victims than married, divorced or widowed; and single users more than single nonusers.

In many cases the killer was unknown. When this category was removed, however, significant differences occurred. A higher percentage of nonusers were killed by spouse or family member; in both cases friends were often the assailant. Drug users were more often killed by police or by the person they were attacking. Only 9% of nonusers were killed while committing a felony, but 18½% of users were.

Arrest record analysis further pointed to the likelihood that drug use was related to other criminal activity, especially property crimes, and that criminal activity was associated with increased risks of being a homicide victim. Eighty-three and a half percent of users, vs. 45.7% of nonusers had records for nonnarcotic offenses. There were no differences between users (53.9%) and nonusers (50.6%) for assaultive crimes. Both were also likely to have been arrested for minor crimes (gambling, intoxication, etc.) but nonusers (85.6%) were much more likely to have had police contact for these crimes than users (62.4%). Data show that 78.5% of users had been arrested for property crimes, vs. only 50.6% of nonusers. The involvement of users in robbery, burglary and theft may help account for the high rate of homicide among them.

The records used in the study included descriptions of the transaction between victims and offenders prior to the homicide, whenever these were available. Drug related arguments were shown to serve as a basis for risk of homicide among users. After robberies, the second largest category of homicides (11.1%) involved drug-related arguments. Nonusers were more likely to be victims of robbery attempts, arguments in bars, or domestic quarrels, and equally likely to be accidental victims or slain in gang-related activities.

CONCLUSIONS

There are significant differences in the circumstances of death by homicide between drug users and nonusers. For drug users death is likely to be a result of involvement with drugs, attempts to secure them or money for them. Taking drugs constitutes a risk toward homicide. As drug use increases in a society in which it is illegal, robbery will tend to increase, as will homicides among drug using populations.

3 ● **Addiction and Criminal Behavior**

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Ball, John C. The reliability and validity of interview data obtained from 59 narcotic drug addicts. American Journal of Sociology, 72(6):650-654, 1971.

DRUG	Heroin
SAMPLE SIZE	59
SAMPLE TYPE	Incarcerated; Treatment (inpatient)
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Puerto Rican
GEOGRAPHICAL AREA	Puerto Rico
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Interviews; Laboratory/Examination; Program/Clinic Statistics; Official Records
DATE(S) CONDUCTED	Not Specified (after 1962)
NO. OF REFERENCES	0

PURPOSE

A sample of 59 Puerto Rican narcotic drug addicts was interviewed in depth in an attempt to clarify two conflicting opinions on the reliability and validity of interview data obtained from various deviant populations. One position argues that deviant groups, and especially those engaged in illegal behavior, are motivated to--and do--conceal or deny their proscribed behavior. The other position maintains that deviant subjects will, under appropriate research conditions, report their deviant actions.

METHODOLOGY

The 59 addicts were drawn from a study population of 242 former patients at the U.S. Public Health Service Hospital, Lexington, Kentucky. The interview schedule consisted of six pages of questions pertaining to the addiction, employment, and criminal history of the 59 former patients. Most of the interviews were conducted in Puerto Rico by an experienced interviewer. Data thus obtained were compared with (1) clinical and administrative records of the hospital, (2) FBI arrest records, and (3) urine samples obtained from the subjects.

RESULTS

There was agreement as to the year of birth among 82.8% of the 59 subjects. When data on age at onset of drug use were compared for 55 subjects, 36 (65.5%) were in agreement, and another 15 (27.3%) differed by only one to three years. No response bias was found among those who did not reliably report age at onset.

In 31 of 57 comparisons for first arrest (54.4%), the data were in agreement. Another 15 reported an earlier arrest than their records showed, making agreement total 80.7%.

For numbers of arrests, the data were less clear due to the difficulties in defining what is and what is not an arrest, and because of the time and the number of events involved. However, it was determined that 70.7% of 58 subjects had given valid reports of their criminal history in the strict sense that they reported those events recorded by the FBI. Among the others, it was for the most part minor offenses which were not reported.

Employing the criterion of chemical analysis, it could be said that 92% of the subjects' reports of current drug use were valid. A preferable statement might be that 71% of those using heroin admitted such use.

CONCLUSIONS

The results indicate a rather surprising veracity on the part of the former addicts; former narcotic addicts can and will recount their illicit personal behavior validly under specified research conditions. Addicts can also recall events of ten to twenty years in the past with surprising accuracy. It appears that the first shot of heroin or the first felony arrest are dramatic events in the addict's life.

Ball, John C., and Snarr, Richard W. A test of the maturation hypothesis with respect to opiate addiction. Bulletin on Narcotics, 21(4):9-13, October-December 1969.

DRUG	Opiates
SAMPLE SIZE	108
SAMPLE TYPE	Formerly Hospitalized Addicts
AGE	Mean Age 33
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Puerto Rico
METHODOLOGY	Statistical Analysis; Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Official Records; Program/Clinic Statistics
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	12

PURPOSE

To test the maturation hypothesis postulated by Charles Winick in 1962, a follow-up study of 108 former addict patients at Lexington Hospital was conducted. Winick observed that some two-thirds of the opiate addicts in the United States "mature out" of their addiction during their adult years. In his discussion, Winick also noted that addicts tended to commit more crimes when using drugs than when abstinent, and examined two hypotheses in this regard: (1) that opiate addiction increases criminality; and (2) that criminal behavior itself may be subject to the maturation process. Specific questions investigated in this study were: 1. Can a more precise association between addiction and criminality be established? 2. How likely is a person to be arrested during the time that he is an addict? and 3. Do arrests increase or decrease with years of addiction?

METHODOLOGY

The subjects were 242 addicts admitted to the U.S. Public Health Service Hospital at Lexington between 1935 and 1962 who were residents of Puerto Rico. In a follow-up study undertaken in Puerto Rico during 1962-1964, 122 were located and interviewed. The study was confined to the findings regarding 108 male opiate addicts who were specifically interviewed with respect to their drug history, treatment, criminality and employment careers.

The 108 subjects were interviewed some 13 years after the onset of opiate use, at a mean age of 33 years.

Data sources were (a) medical records at the Lexington Hospital; (b) hospital, police and penal records in Puerto Rico; (c) hospital and prison records in the United States; (d) FBI arrest history up to 31 October 1964 (federal prisoners only); (e) Bureau of Narcotics Records;

(f) interviews with relatives and friends; (g) interview of subject; (h) analysis of urine specimen; and (i) such other sources as newspaper accounts and death certificates.

RESULTS

Addiction Status at Time of Interview

Forty percent of the subjects had used opiates during the entire three-year period prior to interview, 19% were imprisoned for part of the three years but otherwise used opiates; and 8% were in prison all three years--a total of two-thirds of the subjects. Thus, 35 males were not continually addicted and at risk during the three years. Of these, 21 were entirely abstinent and classified as cured.

The addicted subjects were classified into groups by years since onset of opiate use (4-9 years, group 1; 10-14 years, group 2; 15+ years, group 3) and compared with the cured group (group 4). There was no evidence to support the interpretation that abstinence increases either with years of drug use or with the aging process itself.

Criminality and Maturation

For all 108 male addicts, arrest occurred once every four years while they were using drugs, with this likelihood of arrest varying only from 23% to 32% among the four sample groups. Only 5.2% of the abstinent years were characterized by arrest, with only five arrest years out of 180 abstinence years in the cured group. The tabulations indicated that opiate addiction increased the probability of arrest by more than five times.

For all 108 subjects, the percentage who were arrested or imprisoned during the last three years of opiate use, in comparison to the first three years after onset of addiction, increased from 44% to 61%. Comparing the addicted and cured groups, in the post onset period 58% of the addicted subjects were not arrested contrasted to 26% in the pre-interview period, with 40% in prison at that time. Conversely, over 90% of the cured subjects were without arrest during the three years preceding interview.

Principal Employment

Forty-five subjects, almost half of the sample males, had been engaged principally or exclusively in criminal means of support during their entire adult lives. Most were between extremes of affluence, sophistication, and ability to avoid arrest or incarceration on the one hand, and unsuccessful criminality with much of the adult life spent in prison on the other. The common means of illegal support were selling drugs, theft of property, procuring, and gambling.

Of the remaining 63 subjects, 36 pursued some illegal means of support but also worked irregularly, 8 were dependent upon parents or relatives, and 19 were able to maintain steady legitimate employment. In the years since leaving school, only 19 of the 108 men were able to maintain steady employment, designated as holding any job or jobs for more than half of the years since leaving school.

CONCLUSION

At time of follow-up, some two-thirds of the addicts were still using heroin or were incarcerated. As Winick hypothesized, addiction does increase criminality, by more than five times, but there is no support for his second hypothesis that most opiate users mature out of their criminality. Indeed, there is further substantiation that unless abstinence is obtained, the life course of the addict is toward greater social disability as years go by. A sizeable minority (one-third) did become abstinent and give up their criminal behavior, but the extent of social impairment and criminality tended to increase, rather than decrease, over the years if drug use was continued. Official records on addicts underestimate the extent of criminality and overestimate the legitimate employment.

It appears that two major patterns exist in the life course of opiate addiction in the United States: (1) the addict becomes increasingly enmeshed in a non-productive or criminal career as his dependence upon opiates progresses; or (2) less frequently, the addict terminates his addiction and assumes a legitimate role in society.

Brown, Barry S.; Gauvey, Susan K.; Meyers, Marilyn B.; and Stark, Steven D. In their own words: Addicts' reasons for initiating and withdrawing from heroin. The International Journal of the Addictions, 6(4):635-645, December 1971.

DRUG	Heroin
SAMPLE SIZE	218
SAMPLE TYPE	Volunteer; Treatment (inpatient)
AGE	77 Adolescents; 41 Adults
SEX	182 Male and 36 Female
ETHNICITY	Cross Cultural
GEOGRAPHICAL AREA	District of Columbia
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	5

PURPOSE

The purpose of this study was to: (1) learn the addicts' reasons for initial and continued heroin use; (2) compare the thinking of adult and juvenile addicts with a view toward exploring the changing role of heroin in the lives of its users; and (3) explore the extent to which the addict has placed himself outside the law before his first use of heroin.

Other investigators have contended that most addicts do not become involved in criminal activity until after becoming addicted to heroin. This study proposed to learn not only about initial use and withdrawal from heroin, but also about the ages at which the street-visible addicts under study first began using heroin and first became involved in criminal activity.

METHODOLOGY

Three accidental samples of addict-clients were drawn from three treatment facilities of the Narcotics Treatment Administration of the District of Columbia:

1. One-hundred five adult males--age 21 or older; average age 28.6 years; average education 10.3 years; 89% Black; 33% married, 44% single; the remainder formerly married. Ten addicts came to the treatment program through the District of Columbia criminal justice system; all of the remainder were voluntary clients.
2. Thirty-six adult females--age 21 or older; average age 27.4; average education 10.4 years; 95% Black, 22% married; 44% single; the remainder formerly married. All were voluntary clients.

3. Seventy-seven juvenile males--age 18 or younger; average age 17.2 years; average education 9.58 years; 96% Black; 4% married, 96% single. Seven addicts came to the treatment program through the juvenile court system; all of the remainder were voluntary clients.

Subjects were given a structured questionnaire making use of the critical-incident technique. They were asked to describe the incidents relating to the situation in which heroin was first used, then withdrawn and resumed again, and finally, in which the decision was made to withdraw voluntarily at the time of the questionnaire. They were also asked to describe their commission of the first act that they knew to be illegal, their age at the time of commission, and their first arrest. The data were compared to determine the length of time between initial use and first arrest.

RESULTS

First Use

As compared with juveniles, adult males more often cited curiosity as a major reason for the first use of heroin. Juveniles placed disproportionately large emphasis on the influence of friends. For all groups, the influence of others and curiosity about the effects of heroin were the major reasons given for first heroin use.

Initial Withdrawal From Heroin

The two male groups resembled each other closely in their response to the question about initial effort at withdrawal. Both groups placed greatest stress on their intentions to change the overall patterns of their lives. Female clients gave drug-related physical problems as the reason for their decision to make an effort to withdraw from heroin. For all groups, neither the threat of punishment for illegal activities nor the influence of friends was an important factor in the decision to attempt withdrawal.

Failure of First Withdrawal Effort

There was general agreement among addict-clients that the major reason for the failure of their first efforts at withdrawal was that they had given up drugs only physically and that a psychological need remained. The next most cited reason for male juveniles was the influence of friends; for females it was the relief of personal problems; and for adult males, it was the easy availability of heroin and the use of heroin to relieve personal problems.

Current Withdrawal From Heroin

For all groups of addicts, a major reason cited for attempting withdrawal at the present time of the questionnaire was once again the addicts' concern with changing their overall functioning and life patterns. For women, family problems came to be of particular significance. For all, the threat of punishment and the influence of friends were of relatively small importance to the decision to attempt withdrawal.

Initial Illegal Act

A third of the female addicts who became involved in criminal acts cited the effort to obtain drugs as the reason for their first illegal act. By comparison, only 18% of the men and 14% of the juveniles so responded. Thirty-two percent of males, 24% of females, and 39% of juveniles reported that their first illegal act was to obtain money or material benefit. Seventy-four percent of the male addicts and 78% of the juvenile addicts committed illegal acts before their first use of heroin. However, only 40% of the female addicts committed illegal acts prior to the first use of heroin.

CONCLUSIONS

This study supports findings reported elsewhere suggesting that the addict, particularly the male, is drawn from a culture or subculture already engaged in illegal activity. This means that treatment programs must be organized to deal with the problems of the addict-criminal. Any treatment program intended to serve effectively the inner-city addict population must provide an alternative not only to the addict's life style, but to the criminal life style as well. The community, as seen by the addict, acts to produce and maintain addiction. It is necessary to organize treatment programs that place themselves more significantly between the addict and his community. Possibilities in this vein include: (1) heroin replacement programs (e.g., methadone maintenance); (2) regular counseling in the addicts' community; and (3) isolation from the community to provide a viable living alternative, such as Synanon.

Chambers, Carl D.; Cuskey, Walter R.; and Moffett, Arthur D. Demographic factors in opiate addiction among Mexican-Americans. Public Health Reports, 85(6):523-531, June 1970.

DRUG	Opiates
SAMPLE SIZE	271
SAMPLE TYPE	Treatment (inpatient)
AGE	Adults (median age: 25-29 years)
SEX	247 Male; 24 Female
ETHNICITY	Mexican-American
GEOGRAPHICAL AREA	California; Texas
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	Program/Clinic Statistics
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	16

PURPOSE

Empirical data were gathered to provide a definitive description of the contemporary Mexican-American opiate addict. To determine whether demographic characteristics had changed, a sample of Mexican-American addicts first admitted for treatment in 1961 was compared to a sample first admitted in 1967.

METHODOLOGY

Histories of the Mexican-American addicts admitted to the federal hospitals at Lexington, Kentucky and Fort Worth, Texas, during the first 6 months of 1961 were compared statistically with the histories of the Mexican-Americans admitted during the same period in 1967. During the 1961 sampling period, out of a total of 1,745 addicts admitted, 102 or 5.8% were Mexican-Americans. During the 1967 sampling period, out of a total of 1,438 addicts admitted, 169 or 11.8% were Mexican-Americans. All statistical comparisons and descriptions were accomplished with these 2 populations.

RESULTS

The number of Mexican-American addicts among the total addicts admitted to the hospitals doubled between 1961 and 1967, even though the total number of hospital admissions decreased by almost 20%. The increase was only among male addicts. Female representation was half that of 1961.

An overwhelming majority of the Mexican-American addicts, regardless of sex, were school dropouts. Although the addicts averaged 28.1 years of age in 1967, almost one-third had never been married. More than 40% of those who had attempted a marriage had been unable to sustain

the relationship. A large majority of the Mexican-American opiate addicts in 1967 had histories of smoking marihuana prior to their use of opiates. Opiate use most often began during the adolescent years. The Mexican-American addicts were most frequently found to be young adults; their mean age decreased between 1961 and 1967. Almost all were addicted to heroin and used it intravenously. Even though the Mexican-American addicts supplemented their incomes from illegal sources, a majority maintained some legal occupational role while addicted (44.1% in 1961 and 66.3% in 1967).

The prevalence of arrest among Mexican-American addicts was the highest for any ethnic-cultural group. Every one of the 169 Mexican-Americans admitted in the first half of 1967 had a history of arrests. Among addicts of other ethnic groups admitted during the same period, 93.2 percent of the Negroes, 86.3 percent of the Puerto Ricans, and 83.4 percent of the Whites reported that they had been arrested.

The average age of the Mexican-American addicts at first arrest was 16.8 years. Five of the males had been arrested before age 10. Almost 80 percent of the Mexican-American addicts had been arrested as juveniles or adolescents. Although all the female addicts had been arrested, their arrests tended to occur at later ages than those among males. Half of the women were not arrested until after age 20.

Since all of the Mexican-American addicts had been arrested, the age at first arrest and at the start of use of opiates was compared. The majority of the 169 addicts had been arrested before they began using opiates; 61.5 percent were arrested before any opiate use while 21.3 percent were using opiates before their first arrests. The remaining 17.2 percent were arrested and began to use opiates at the same age.

CONCLUSIONS

The data generated several questions. First, why is the sex ratio so out of balance? Mexican-American females seem somehow buffered or insulated from the illicit drug subculture. Second, why does a minority group representing only 2% of the U.S. population contribute 10% of the opiate addict population? Finally, why has the incidence of addiction shifted geographically? Data should be collected which will answer these questions and permit a full range of comparisons between Mexican-American addicts and Mexican addicts, between Mexican-American addicts and Mexican-Americans who do not use drugs, and between Mexican-American addicts and other addicts.

Chambers, Carl D.; Moffett, Arthur D.; and Jones, Judith P. Demographic factors associated with Negro opiate addiction. The International Journal of the Addictions, 3(2):329-343, Fall 1968.

DRUG	Opiates
SAMPLE SIZE	155
SAMPLE TYPE	Treatment (inpatient)
AGE	Adults
SEX	98 Male; 57 Female
ETHNICITY	Black
GEOGRAPHICAL AREA	Lexington, Kentucky
METHODOLOGY	Case Study
DATA COLLECTION INSTRUMENT	Interviews; Laboratory/Clinic Statistics
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	17

PURPOSE

Interviews were conducted at Lexington Hospital to ascertain any significant differences between the known Negro addict-patient and the Negro in the general population, and to detect differences between new Negro admissions and Negro readmissions. Personal history, drug use history, and criminal history were the major areas investigated.

METHODOLOGY

Individual interviews were conducted with 98 consecutive male Negro admissions and 57 consecutive female Negro admissions to a U.S. Public Health Service hospital at Lexington, Kentucky. All of the males and 82.4% of the females came from New York City or Chicago. An analysis of the results was made in categories of male versus female, and first hospital admissions versus recidivists.

RESULTS

Of the 155 Negro opiate addicts interviewed, 67.7% had experienced a broken home situation. The education levels of the male addicts were slightly higher than those of the females--40.8% and 33.3%, respectively, having finished high school. The majority (84.5%) had experienced a marital situation, but only 48% of the male, versus 90.4% of the female, addict marriages were intact at the time of hospital admission. Only 25.2% of the sample had been legally employed, while 61.3% had been supporting themselves by illegal means, and 13.5% were dependent.

In most cases (89%), the subjects had been initiated to opiates by a peer. Heroin was overwhelmingly the drug of abuse, was generally obtained from a pusher, and was taken intravenously. Marihuana was associated with opiate use; 84% of the addict-patients had used the drug. Males

were more likely to have used marihuana than females (93% to 68%), though continued use after opiate use was low (14%). Extensive marihuana use was correlated with early termination of education, early opiate use, arrest histories, and barbiturate experimentation. Sixty and six-tenths percent of the subjects reported a history of barbiturate use.

Of the 155 addict-patients, 94.8% reported arrest histories and this group had a mean of 3.9 arrests. Of those with arrest histories, 74.8% had a mean of 1.9 arrests for specific narcotic offenses and 83.7% had been incarcerated. Of those arrested, 31.3% reported arrest prior to age 18. A comparison of mean ages suggests, at least within the limitations of this comparative technique, that first arrest preceded the first use of opiates.

Within the male cohort, 96.9% of the subjects reported histories of arrest, 38.9% reported arrests prior to age 18, and 81.6% had been incarcerated. First arrest appeared to precede first use of opiates and, of those with arrest histories, 78.9% had been arrested for narcotic offenses. Among the prisoner admissions, 67.5% were to serve sentences for violations of the narcotic laws, primarily the sale of narcotics.

Within the female cohort, 91.2% of the addict-patients reported histories of arrest, 17.3% reported arrests prior to age 18, and 75.4% had incarceration histories. First arrest also preceded opiate use, and of the female subjects with arrest histories, 67.3% had been arrested for narcotic offenses. Among the prisoner patients, 44.4% were to serve sentences for narcotic offenses and, as was the finding with the male cohort, the sale of narcotics was a prevalent offense.

None of the prisoner admissions, either male or female, was currently incarcerated for a crime of violence.

CONCLUSIONS

This research demonstrates the homogeneity of a Negro opiate addict cohort. Compared to normal Negro groups, the addicts were more likely to have come from broken homes, to have been school dropouts, to have been married, to have been separated from their spouses, and to have been illegally employed.

The data suggest, at least among Negro subjects, that addicts rarely escape having extensive arrest records and their addictions rarely escape detection by the police. It also suggests that at least among males official detection of criminal deviancy precedes opiate experimentation. Given a sex differential in law enforcement, it was expected that males would be arrested earlier, have more arrests, be incarcerated more frequently, and would have longer sentences imposed than their female counterparts. This expected sex differential was found.

The extent of marihuana use by an addict may prove to be a valuable independent variable, as many addiction characteristics correlate with marihuana use. The data indicate also that optimum intervention into the addiction process would have to occur during the early school years and should focus on the liabilities attendant upon marihuana use.

ushman, Paul, Jr. Relationship between narcotic addiction and crime. In: Federal Probation, 38(3):38-43, 1974.

DRUG	Heroin
SAMPLE SIZE	200+
SAMPLE TYPE	Addicts on Methadone Maintenance
AGE	18 - 77 (average 33.4)
SEX	Male; Female
ETHNICITY	White; Black; Hispanic
GEOGRAPHICAL AREA	New York City, New York
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Arrest Records
DATE(S) CONDUCTED	1972-1973
NO. OF REFERENCES	10

PURPOSE

The widely held assumption that there is a close connection between narcotics addiction and some types of crime was investigated at the St. Luke's Hospital methadone clinic, New York. Using arrest data on over 269 addicts obtained from the New York City Police Criminal Records Division, a longitudinal record of the addicts' criminal histories was used to compare criminal activity in three stages of their lives: before narcotic addiction, during narcotic addiction, and during methadone treatment. Brief comparisons were also made between arrest rates in the 1940's and 1960's, and with arrest records of participants in two other New York-based methadone treatment programs.

METHODOLOGY

Subjects were the 277 patients admitted to the St. Luke's Hospital methadone clinic from its inception in March 1966 to January 1, 1972. Eighty-one percent were still on methadone maintenance as of January 1, 1973.

Subjects were 30.3% White; 41.1% Black; 28.8% Hispanic; 21.9% female; primarily lower class socioeconomically; unemployed (25 percent had legitimate employment on admission); and resided predominantly in the upper West Side of Manhattan. On admission their average age was 33.4 years (range 18-77). Daily narcotic use had started at around 20.5 years (range 2-50), an average of 13.3 years (range 2-44) before admission into treatment.

The record search was performed in November 1972, after about 2.1 years of treatment (range 1-74 months) and after 562 total patient years of methadone treatment (423 of which had been completed). The number of years of narcotic addiction was calculated by subtracting the date daily narcotic use was started from the date of admission into methadone treatment. Arrest

records were obtained for 210 (78% of the sample). For comparison, total population arrest data were obtained from two neighboring police precincts in which most of the patients resided.

For each arrest, the calendar year, the age of each patient and the patient's addiction status (i.e., before daily narcotic use, during heroin use, methadone maintenance, after discharge from treatment) were recorded. The individual charges in each arrest were identified, and classified into eight groups:

- (1) Violations of the dangerous drug laws in effect at the time.
- (2) Money crimes (burglary, robbery, possession of stolen property, forgery, jostling, etc.).
- (3) Violence (assault, possession of a weapon, resisting arrest, and homicide).
- (4) Prostitution.
- (5) Sex crimes (sodomy, incest, rape, etc.).
- (6) Violations of the gambling laws.
- (7) Misconduct.
- (8) Minor.

RESULTS

Before addiction, the recorded arrests were relatively few and involved only 11% of the patients. The arrest rate rose precipitously during heroin use, from 76 arrests prior to addiction to 1,308 following. It fell sharply during methadone maintenance treatment (26 during treatment and 3 after discharge), and rose again in the small group of patients who had been discharged from treatment (who had presumably resumed daily narcotic use). The longer the duration of addiction, the higher the frequency of arrest in any given year.

The relationship between arrest rates and the decade when daily narcotic use started was also examined. It was noted that the chances of having an arrest were significantly higher in the 1950's and 1960's than in the 1940's ($p < 0.05$ for all comparisons).

The data showed a direct relationship between illicit narcotic use and violations of the dangerous drug laws, prostitution, money crimes, and violence. Calculated in terms of 100 person years at risk in the preaddiction years, charges for money crimes were preponderant (1.3), whereas charges of infractions of the dangerous drug laws, prostitution, and violence were negligible (.1, .1, .3, respectively). During heroin addiction there was the expected steep increase in charges against the dangerous drug laws (12.9). Arrests increased notably for money crimes (10.8), and also for violence (2.0) and prostitution (3.3). Minor offences and misconduct also rose significantly, whereas there were little differences after addiction in the incidences of charges of sex offenses and gambling law violations.

The impact of methadone treatment was to reduce sharply the frequency of charges of violations of the dangerous drug laws (3.7). Similarly, the charges of money crimes fell steeply, almost to the preaddiction level (1.2). Prostitution arrests did not appear at all in any of the records after methadone treatment had commenced. Misconduct and violence offenses were less often recorded; however, there was a slight increase in both gambling and minor offense categories.

The overall arrest rate in the control population was comparable to the arrest rates of the patients before the onset of narcotic addiction. It was significantly less than the measured arrest rate in the methadone treated patients and about one-tenth the arrest rate of the patients during heroin addiction.

Results were calculated for both the control and sample population in terms of arrests/100 person years for crimes against property (grand, petit larceny, burglary), crimes against persons (homicide, assault, robbery), dangerous drug offenses, prostitution, disorderly conduct, and other offenses. Compared with total arrest base figures, crimes against property and against persons accounted for the following, respectively: .70, .70 out of 3.35 for the controls; .92, .70 out of 3.30 for the sample before heroin use; 8.90, 3.25 out of 41.40 during use (with 19.50 for drug offenses), and 1.18, 1.66 out of 9.82 during treatment.

There were also some important differences in arrest rates, depending on the decade in which narcotic addiction began. In the 1960's, in contrast to the 1940's, along with the increased costs and lower quality of the heroin itself there were greater efforts by the law enforcement bodies to apprehend drug users. As a result, the chances of arrest in the first year (or five years) after the onset of addiction were significantly higher in the 1960's.

CONCLUSIONS

The present data imply that there is a close association between arrests, crime, and illicit narcotic use, but it is unclear what relationship violent crime has to addiction. Since most of the violence charges were for robbery or possession of dangerous weapons, it is likely that much of the violence charged was directly associated with obtaining money and attributable to narcotic seeking to some extent.

It is clear that the reduced criminal activities while under methadone treatment resulted from the daily methadone administration. The earlier in the natural history of narcotic addiction that intervention with methadone was started, the greater was the reduction of arrests. While a study of a Brooklyn methadone treatment program showed a much smaller decrease in arrest rates during treatment, a variety of dosage schedules differing importantly from the standard Dole-Nyswander procedure was used. Methadone therefore may not have been prescribed in an optimal fashion to prevent continuing heroin use. A sizeable percentage of the Brooklyn patients continued to use heroin even in their second year of treatment. In contrast, given appropriate doses of methadone and backup counseling services, the heroin taking habits of almost all the patients at St. Luke's were extinguished within a few months after the onset of methadone treatment. Beth Israel Medical Center reported similar results.

DeFleur, Lois B.; Ball, John C.; and Snarr, Richard W. The long-term social correlates of opiate addiction. Social Problems, 17(2):225-234, Fall 1969.

DRUG	Heroin; Opiates
SAMPLE SIZE	53
SAMPLE TYPE	Formerly Incarcerated
AGE	Cross-Age
SEX	Male
ETHNICITY	Puerto Rican
GEOGRAPHICAL AREA	U. S. Public Health Service Hospital, Lexington, Kentucky
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Medical Records; Urinalyses; Police Records
DATE(S) CONDUCTED	1962-64
NO. OF REFERENCES	10

PURPOSE

The focus of this study was to describe patterns of criminality, arrest, incarceration, drug use, and legitimate employment, and the relation of these characteristics pre- and post-addiction. Subjects were heroin addicts from the same culture who returned to this culture after serving time in a penal institution. Of particular interest were those aspects which indicated the degree to which a subject had either remained a social problem or had made a reasonable social adjustment. Data concerning arrests, further institutionalization, and involvement in illicit activities indicated the former; while records of legitimate employment and abstinence from continued drug abuse indicated the latter.

METHODOLOGY

Extensive field interviews were given to 53 male Puerto Ricans who had been discharged from the U.S. Public Health Service Hospital in Lexington, Kentucky, between 1935 and 1962. The time lapse since the onset of opiate abuse ranged from 5 to 37 years, and the time from onset to interview averaged 16 years. Voluntary admission patients were not used due to the confidential protection of the cases, and because prisoner patients had supporting data. The background characteristics of the sample showed them to be: above average in educational level, often bilingual, generally quite sophisticated in manner of speech, and tending to regard work as either boring or not worth their time.

For each subject the following data were obtained: (1) medical reports from the time of first admission, (2) a field interview which focused on addiction history, employment and criminality, (3) urinalysis of a specimen obtained at the time of the interview, and (4) a current (to October 31, 1964) FBI record of arrests and incarcerations. Collateral material was obtained through interviews of friends, employees and physicians in Puerto Rico, as well as local hospital

and arrest records. Subsequent admissions to Lexington (or Fort Worth) provided comparable longitudinal information on drug use, employment history, and criminality as well as family stability, psychiatric diagnosis, social mobility, and physical condition at the time of each hospitalization.

For each year from the onset of opiate use, each subject was classified as addicted, incarcerated, or voluntarily abstinent, based on which condition prevailed in that year. In addition, arrests while addicted were recorded. Thus, life patterns of addicts could be traced in two ways. First, each condition was traced separately to gain a broad picture of long-term adjustment. Secondly, configurations of these factors could be examined which would reveal prevailing life patterns. Such configurations bring together pre-addiction and post-addiction characteristics which indicate the presence of several types of career patterns.

FINDINGS

Drug Use

The common sequence for drug use was marihuana smoking, heroin addiction, arrest for narcotics violation, and incarceration. There were patterns for narcotics usage during the years following the onset of addiction (the "risk years"): (1) continuous opiate addiction, or (2), less commonly, abstinence for three or more consecutive years and presumed cured. Of the subjects, more than half had their only drug-free experiences while in prison and can be considered as essentially confirmed addicts, incapable of ending their addiction.

Arrests

Although only about one-third of the sample group had arrests prior to opiate use, all had records after use, with about three arrests per subject as the mean. The extent of incarceration of the group was considerable; the use of opiates was a definite factor in increasing the frequency of arrests.

Occupational Careers

The interviews revealed that nearly one-half the patient population had engaged in illegal activities as its main means of support. The types of permanent criminal careers were most commonly drug traffic and theft. Another group of 18 addicts were sporadic criminals who sometimes took jobs in service, trade and labor, but supplemented their income through illicit activities. Only 9 subjects were steadily employed, including four who were in high status occupations. Finally, three addicts were basically dependent upon relatives for support. That more than three-fourths of the sample group had engaged in criminal activities indicates the consistent involvement of the subjects in a variety of deviant activities, not just drug use.

Life Patterns

In examining the configuration of variables along the longitudinal progression (pre-onset, onset, addiction, post-addiction), those subjects who were steadily employed were ranked above others in socioeconomic status, educational attainment, and employment prior to addiction. None of these patients had been arrested prior to opiate addiction, and the onset of addiction occurred at a relatively later age than the others. However, most often the steadily employed subject was arrested several years after he began his habit. The criminal group had begun addiction at an earlier age and often had arrests before addiction.

Following the onset of opiate use, those who were employed used less drugs (based on cost), and a significant number eventually stopped using drugs. In contrast, the criminal group became increasingly involved in illegal activities; during the three years prior to the interview, all had been arrested or were in jail. Those who were classified as sporadic criminals had careers between the two other groups. Most had been employed before onset, but one-third had been arrested. This group was in a transitional stage with some moving away from drugs while others moved deeper into the drug-crime culture.

CONCLUSIONS

The relationship between criminality and heroin addiction is a complex one, and the understanding of variables which lead to one deviancy may be important in understanding the others. The long-term social adjustments of the Puerto Rican subjects were clearly related to where they

were located in the social structure prior to addiction. Two main hypotheses are advanced. First, there appear to be important differences in the processes of becoming addicted between those who are steadily employed and those who are pursuing criminal careers. The earlier involvement with deviant behavior on the part of the criminal group may be significant. Second, post-addiction adjustment may be handled better by those with previous employment and higher educational achievement. In this study, those with less favorable pre-addiction histories were clearly poor risks for adjustment following their release from incarceration. Because of the clear position of marihuana in the sequence of drugs, this drug may have served either as a facilitating or even a precipitating condition leading towards more serious narcotic abuse for some individuals who had personal or social characteristics which made them susceptible to addiction.

Glaser, Daniel; Lander, Bernard; and Abbott, William. Opiate addicted and non-addicted siblings in a slum area. Social Problems, 18(4):510-521, Spring 1971.

DRUG	Opiates
SAMPLE SIZE	74 (37 pairs)
SAMPLE TYPE	Volunteer; Siblings
AGE	Adults
SEX	68 Male; 6 Female
ETHNICITY	10 Black; 54 Puerto Rican; 6 Other
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Psychological Tests
DATE(S) CONDUCTED	1969-1970
NO. OF REFERENCES	24

PURPOSE

Addicted and non-addicted siblings residing in a slum neighborhood in New York City were interviewed in an attempt to gain awareness of sibling differences in family relations, education, delinquent behavior, employment, and personality.

METHODOLOGY

From an inventory of 138 families in a New York slum block, 40 pairs of addict and non-addict siblings were identified. Ages varied from 18 to 42 years when interviewed. Non-addicts had never used heroin. Interviews with 37 of the pairs were conducted in various neighborhood settings by interviewers who were local residents. Subjects were interviewed individually and asked both about themselves and their siblings, and the amount of agreement between siblings was compared. For 34 of the pairs, A Srole Anomia Scale and an alienation scale were determined.

RESULTS

Addicts were more involved in illegitimate activities as youths and, as a result, less successful in education and employment, turning to opiate use as more gratifying behavior. Only 30% of the addicts, compared to 46% of the non-addicts, had ever left home for 3 months or more. The departure was for a jail or institution for 70% of the addicts and 8% of the non-addicts. Forty-three percent agreed that the addict stayed at home most when he was a teenager; 19% stated the non-addict. No significant differences in the siblings' attitudes toward parents were found. Non-addicts were significantly more successful in school; 62% were high school graduates versus 32% of the addicts.

All the addicts, but only 30% of the non-addicts, had used marihuana; mean age of first heroin use by addicts was 17.8 years. When addicts were compared to non-addicts in delinquent and criminal experience, 49% versus 19% had been gang members, 81% versus 5% had been arrested, and 49% versus 3% had served a prison sentence. Mean age of addict gang entrance was 14.5, with a range from 10 to 17. In 9 cases marihuana use started before gang entrance, in 6 cases afterwards, and in 2 cases during the same year.

The median age of the addicts at first arrest was 18.4, with a range of 13 to 28; the median number of arrests was three. Addicts also tended to start sexual activity younger and 22% reported homosexual experience (compared with none for the non-addicts).

Notable differences were found when teenage occupational expectations and adult work histories were examined. Subjects were asked, "When you were a teenager, what did you think you would be when you grew up?" Of the addicts, 24% responded "skilled tradesman," 30% "artist, athlete, adventurer or criminal," and 14% "professional." Non-addicts responded 43% "skilled craft," 14% "artist, athlete, etc." and 24% "professional." Non-addicts were 95% employed at the time of interview, addicts 19%.

In attempting to explain the sibling difference in addiction, addicts tended to cite their own stupidity or ignorance, while non-addicts tended to cite peer associates as the major factor.

On the Anomia Scale, the mean score for addicts was 2.9, and for non-addicts 1.5. The mean score on the alienation scale was 4.1 for addicts and 3.0 for non-addicts. The authors point out that these differences may well reflect consequences rather than causes of addiction.

CONCLUSIONS

Results support the "relative deprivation-differential anticipation" theory since the typical addict differed most from his non-addict sibling in the extent of his involvement in delinquency and marihuana use at an early age, and in consequent arrest, incarceration, deficiencies of schooling, and limited employment. Most clearly indicated is a difference in reference group orientation. The addicts were involved in activities that would be long-run barriers to mobility in legitimate careers.

Findings suggest the validity of a deviance polarization paradigm that motivational stress from ambivalence about norms is relieved by either compulsive conformity or compulsive alienation. Social consequences of early deviance make later efforts for conformity less gratifying, and further deviance more immediately reinforced by peers.

The data highlight dramatically the errors in conceptions of slum life as monolithic and uniform; it is diverse and mixed, with sharp contrasts within single households.

Hughes, Patrick H.; Crawford, Gail A.; Barker, Noel W.; Schumann, Suzanne; and Jaffe, Jerome H.
 The social structure of a heroin coping community. American Journal of Psychiatry, 128(5):551-558, 1971.

DRUG	Heroin
SAMPLE SIZE	127 (125 Addicts)
SAMPLE TYPE	General Community
AGE	Adults
SEX	Both Male and Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	South Side Chicago, Illinois
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Observations; Questionnaires
DATE(S) CONDUCTED	1969
NO. OF REFERENCES	5

PURPOSE

As part of a continuing effort to understand the factors contributing to the spread and maintenance of addiction, the role structure elaborated by 127 members of a heroin coping community in a Chicago neighborhood was studied for one year. The distribution of the membership in the various roles and the social and treatability characteristics of the occupants of the roles were ascertained, including their criminal characteristics.

METHODOLOGY

Four coping areas were examined by ex-addict field workers on methadone maintenance who were known and trusted in those communities. One particular area was chosen for intensive study because of the unusual competence of the field worker. He administered a card to obtain demographic and drug use data on 127 subjects, i.e., heroin distributors or consumers who frequented the coping area for at least four weeks of the study period. A weekly log was kept on the current addiction status of all subjects for a 12-month period. The professional staff further verified his findings through visits to the area and personal interviews.

Fifty-two members active during the months of April, May, and June 1969 were offered a 50% chance of immediate treatment if they participated in a home-visit; 34 (65%) cooperated. The interviewing clinician prepared a psychiatric history of each subject on the basis of questionnaire responses, interview material, and the field worker's report of how the addict's peers in the coping community viewed his social functioning. Each subject was further rated on the Addict Psychosocial Functioning Scale by the consensus of a psychiatrist and two psychologists, one of whom conducted the home interview.

RESULTS

Two nonusers and 125 heroin addicts were judged to be members of this coping community, with the majority assigned to one of the following primary roles: (1) big dealer (6%), (2) street dealer (6%), (3) part-time dealer (15%), (4) bag follower (2%), (5) tout (4%), (6) hustler (38%), and (7) worker (28%).

Big dealers were defined as local wholesalers primarily supplying street dealers or part-time dealers. Both street dealers and part-time dealers sold directly to consumers, with the latter supplementing their income by hustling or working. Bag followers (in this case, three attractive women) attached themselves to a dealer to enhance his prestige or conceal heroin in return for support for their habits. Touts carried out liaisons between dealers and consumers, and were low-status members of the community. These five segments, 45% of the total, were primarily engaged in drug distribution. The majority (38%) of the members of the community were hustlers who engaged in various illegal activities other than drug distribution to support their habits. Most commonly they engaged in shoplifting. Workers, the second largest group (28%), maintained at least a part-time legitimate job.

Although age at first use of heroin did not differentiate the roles, touts had been heroin users longer than the others, and bag followers had shorter addiction histories. High level dealers reported more frequent use and bigger habits. However, the cost of their drugs might be considered an auxiliary expense of maintaining the distribution system and not a personal expenditure. It is thus erroneous to equate the huge habits of dealers with direct economic loss to the innocent public. Workers, reporting less frequent use and less expensive habits, paid for their drugs largely through their own legitimate income. The true economic loss to the public would more appropriately be based upon the cost of the average daily habit of hustlers, who bring into this illicit marketing system real dollars or goods obtained from illegal activities. However, when rated on standard of living (condition of housing, condition of neighborhood, monthly expenses), hustlers were found to rank lowest. Even the big dealers were ranked only as average, in contrast to the stereotype of living in luxury. Further, 25 of the intensive study sample lived with others, which usually meant they were being supported and were spending their entire income on drugs.

Big dealers had high ratings on the Addict Psychosocial Functioning Scale, but, along with street dealers, bag followers and touts, did poorly in treatment. Part-time dealers had poor functioning rates but were most likely of all to enter treatment; they were the second highest percentage to remain in treatment after six months. Workers rated relatively well on all sub-scales, suggesting that they might be good treatment prospects. The workers were found to be the most successful in the treatment program--44% entered and 81% remained after six months.

CONCLUSIONS

Neighborhood heroin distribution systems are possibly amenable to study and manipulation by treatment programs. Several different operational models are suggested for the strategy of further study and treatment involving the roles within a distribution network. The findings on the Addict Psychosocial Functioning Scale suggest that all occupants of a role in the community share characteristics that may relate to their choice of role and their ability to maintain their roles.

Inciardi, James A., and Chambers, Carl D. Unreported criminal involvement of narcotic addicts. Journal of Drug Issues, 2(2):57-64, Spring 1972.

DRUG	Multi-Drug; Heroin
SAMPLE SIZE	90
SAMPLE TYPE	Addicts Under Treatment
AGE	Young Adults (Median age 20)
SEX	38 Male; 52 Female
ETHNICITY	Predominantly Black or Puerto Rican
GEOGRAPHICAL AREA	New York State
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews; Case Files; Official Arrest Histories
DATE(S) CONDUCTED	Summer and Fall of 1970
NO. OF REFERENCES	7

PURPOSE

Official statistics fail as adequate measures of the magnitude and trends of crime; "true" crime rates may even exceed twice the totals apparent in Uniform Crime Reports. Such gaps in empirical data preclude the valid interpretation of research findings. In 1970, the New York State Narcotic Addiction Control Commission (NACC) initiated a series of special projects to accumulate more comprehensive data on drug-using and drug-seeking behaviors. A methodological strategy was developed for obtaining self-reported amounts of addict crime in order to refine the collection of hidden offense data, to assess the extent of addict-crime, and to construct and analyze criminal career patterns.

METHODOLOGY

A NACC research staffer interviewed 38 males and 52 females who had been certified to NACC for treatment. The investigator was an ex-addict and ex-offender, skilled in field techniques; to avoid exaggerated self-reports, the major portion of the 2-4 hour interview was devoted to establishing rapport. The interview collected complete drug, criminal, and treatment histories. Case files provided personal and social data. Official arrest histories were acquired from the New York State Identification and Intelligence System.

RESULTS

Subjects were young adults (median age 20 years); 84% of males and 77% of females were Black or Puerto Rican. Initial drug experience occurred at median age 13 (males) and 15 (females); subsequent involvement included simultaneous use of at least 9 varieties of drugs. For the majority, marihuana was the onset drug. Heroin was the first narcotic drug used by 79% of males and all females, and became the primary drug of addiction for all.

Of the 38 males, all had performed criminal acts to support their habit. Only 79% had arrest records. First criminal offense and first arrest occurred at age 16; first drug arrest at 18. Of 6,766 offenses committed during 4 years, less than 1% were cleared by arrest.

Ranking offenses by frequency, 93% were for direct acquisitive property crime (6,290); only 7% were for violent personal crime (476). Of all categories reported, those which required physical contact with the victim (assault and robbery, armed robbery, purse-snatching, and picking pockets) seemed less preferable to more impersonal types of theft. Burglary was the most frequent crime, accounting for 37% of property offenses and 35% of all offenses. Three-fourths of the sample participated in burglary, double that of any other crime.

The unauthorized possession of drugs was, of course, constant. Nine respondents were admitted sellers, and 39% had been arrested for possession and sale.

The commission of 6,766 crimes in four years suggests a per capita mean of 31 offenses annually. This is clearly an underestimate, since it assumes no incarceration or hospitalization. To construct a more accurate estimate of addict-crime, the proportionate amount of criminality engaged in by those subjects during 1970 was calculated. Twenty-six of the 38 males had been free a mean of three months that year, i.e., 1,831 offenses were committed during 90 days, a per capita of 23 monthly or 6 weekly. Collectively, the 26 were daily responsible for 22 major crimes (2 robberies, 7 burglaries, 4 car thefts, 4 cases of shoplifting, 4 miscellaneous thefts).

Fewer females were criminally involved. Seven denied any criminal involvement other than purchase and possession of drugs. Almost two-thirds had never been arrested. Fifty percent admitted to selling drugs, 40% to shoplifting, 29% to prostitution, 23% to burglary, and 21% to forgery. Excepting prostitution, 6,415 offenses were committed during 3 years, less than 1% cleared by arrest. Violent crime was committed by only 43% of the sample and represented only 5% of total offenses. Prostitution was the most frequent offense.

CONCLUSIONS

Findings are tentative, yet data dramatize the poor quality of reporting mechanisms of criminal statistics. Using FBI ratios of "crimes known to police" and "crimes cleared by arrest," it seems that only 4% of the property crimes and 5% of the personal crimes reported here eventually appear in national statistics. Crime rates among specific populations may be many hundred-fold higher than realized.

Kozel, Nicholas J.; DuPont, Robert L.; and Brown, Barry S. Narcotics and crime: A study of narcotic involvement in an offender population. The International Journal of the Addictions, 7(3):443-450, 1972.

DRUG	Heroin
SAMPLE SIZE	225
SAMPLE TYPE	Incarcerated
AGE	Not Specified
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Washington, D.C.
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	August - September 1969
NO. OF REFERENCES	4

PURPOSE

In exploring the relation of drug addiction to urban crime, previous studies have suggested rates of addiction among prison populations ranging from 8% to 80%. This study sought to determine the actual rate of addiction among offenders in the Washington, D.C. Jail, and to compare addict and non-addict offenders in terms of background characteristics and current functioning.

METHODOLOGY

During August and September 1969, interviews were administered to an accidental sample of 225 from among the approximately 1,000 offenders in the D.C. jail. Urine specimens were collected from 129 of the 225 inmates interviewed.

RESULTS

Forty-five percent of the inmates were heroin addicts; an additional 2% were classified as occasional users and were grouped with the non-addicts. Socially and personally, non-addicts differed from addicts: they came from larger families, were more likely to be attending religious services, were employed with greater frequency, and came from smaller cities.

Fifty-nine percent of the addicts admitted some past criminal activity in support of their habit; 75% reported some form of "hustling," which some addicts perceived as a legitimate means of adapting to the "system." Nearly half the addicts, however, reported working to support their habit.

Addicts and non-addicts did not differ significantly in commission of property versus person offenses. If robbery was excluded from the person category, a significant difference did emerge. Addicts, therefore, were less likely to commit crimes against others unless the crime involved obtaining money.

CONCLUSIONS

Although it is well known that addicts commit crimes, the extent of addiction among criminals is striking. Almost half the offenders in the D.C. Jail are heroin addicts, implying a relationship between drug treatment and crime prevention programs. Social and personal differences between addicts and non-addicts suggest that the addict, with weaker ties to the conventional community, may experience greater difficulty in making a pro-social adjustment. Finally, the view that addicts are less likely to engage in crimes against the person is not supported. The addict's constant need for money leads him to commit street robberies, thus constituting a real threat to people and property.

Messinger, Emanuel, and Zitrin, Arthur. A statistical study of criminal drug addicts. Crime and Delinquency, 11:283-292, July 1965.

DRUG	Opiates
SAMPLE SIZE	4,500
SAMPLE TYPE	Addicted Felons
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Psychological Examinations
DATE(S) CONDUCTED	1954-1960
NO. OF REFERENCES	18

PURPOSE

Since 1932, the Psychiatric Clinic of the Criminal Division of the Supreme Court (New York County) has given psychiatric examinations to virtually all persons convicted of major (felonious) crimes in the jurisdiction; of these, 25% to 30% have been chronically addicted to opiates, usually heroin. In a previous study, it was found that the incidence of every category of significant psychiatric abnormality was smaller for the drug addict criminal group than it is for the general criminal group. In light of this evidence, the Psychiatric Clinic studied the incidence of psychosis, psychoneurosis, mental deficiency, and diverse personality types in a group of 4,500 criminal drug addicts arraigned for felonious crimes in New York City between 1954 and 1960. This group was then compared to a group of nonaddict criminals.

METHODOLOGY

The 4,500 addicts formed 27% of the offenders passing through the clinic. Six thousand thirty-nine examinations were given to the addicts; 16,236 examinations to the nonaddicts. The addicts and nonaddicts were classified according to different personality types: those with major character and behavior disorders (Antisocial, Inadequate and Socially Unstable, Schizoid); and those with lesser character and behavior disorders (Aggressive, Inadequate, Emotionally Unstable, Immature and Maladjusted Adolescent, Immature Adult, Unethical, Suggestible Passive, and Adynamic Dull). These were described as follows:

The Antisocial Type: morally and ethically blunted and lacking sympathy or concern for their fellow men. Their offenses may run the whole gamut of crime: theft, embezzlement, forgery, robbery, brutal sex attacks, and other acts of violence.

The Inadequate and Socially Unstable Type: individuals of inadequate personality who fail in emotional, economic, occupational, and social adjustments. Persons in this group often have flagrant defects of conscience or lack inhibitory controls over emotional excesses of anger, irritability, hostility and recklessness. A frustrating experience, usually fostered by an alcoholic binge, can trigger a series of repetitive violent criminal acts.

Schizoid Type: excessively withdrawn from social contacts, introverted, and given to daydreaming. They are prone to be "lone wolves" in their criminal activity; their susceptibility to criminal activity is not so much due to lack of superego as to a distorted superego.

Aggressive Type: mostly the common "tough guy" consciously committed to the belief that if he is weak and passive he will always be "stepped on"; therefore, to avoid being taken at a disadvantage, he strikes the first blow. He tends to react violently to frustrations, deprivation, or disappointment, and readily commits robberies, burglaries, or assault when he feels slighted or insulted or if his masculinity is impugned. Although usually an industrious worker, he loses jobs readily because he resents discipline. When unemployed, he turns easily to crime, justifying it as a suitable reaction to a hostile, treacherous society.

Inadequate Type: generally weak-willed, not overly aggressive, and with his nebulous ethical standards, rather irresponsible. He lacks fortitude, persistence, and ambition. He often commits non-aggressive types of crimes: going along as a chauffeur, "fingerman," or "lookout" for more aggressive criminals, characteristically accepting a lesser part of the loot.

Immature and Maladjusted Adolescents: a conglomerate group of youths and adolescents between 16 and 21 who have not yet settled into any habitual behavior pattern and whose criminal behavior is likely to be of an adventurous nature. They are rebellious and show a particular delight in flouting authority or figuratively thumbing their noses at parent surrogates.

Immature Adult Type: individuals unable to think and act for themselves and excessively dependent on or submissive to a dominating parent or parent surrogate.

Unethical Type: persons who have given themselves completely to a professional criminal career. They are men who carefully plan their criminal activities and who would probably do well in any other business organization. Crime is their business; they are adjusted to it and prefer it with all its inconveniences and dangers.

Suggestible Passive Type: readily dominated by aggressive companions and represented very frequently in crimes committed by co-defendants. They are followers rather than leaders.

Adynamic Dull Type: anergic, show a lack of drive, especially industrially, are narrow and inadequate in their personality structure. They are not aggressively criminal, but they avail themselves of any tempting opportunity to get something for nothing.

RESULTS

Out of the total of 6,039 examinations, not a single case of overt psychosis was found. (The incidence of psychosis among clinic material in general runs between 1% and 2%.) This suggests that the pre-existence of a psychosis is at best a minimal factor in the development of drug addiction. Previous studies by other authors on different, much smaller groups, confirm this impression. Only 2 cases of clinical psychoneurosis were found. The percentage of psychopaths, however, was triple (45% to 14.4%). Evidence of mental deficiency was found to be only 1/14 as high as in the nonaddicted group.

When addicts were typed in comparison to nonaddicts, 26.6% were found to be Antisocial Types (vs. 6.1%), 16% were Inadequate and Emotionally Unstable (vs. 4.1%), and 1.6% were Schizoid (vs. 2.8%). Only 10.4% were Aggressive (vs. 26.4%) and 2.5% Unethical (vs. 3.5%), while 30.2% were Inadequate (vs. 10%).

CONCLUSIONS

The figures demonstrate that the problems of the drug-addicted criminal belong primarily in the realm of sociology rather than psychology or psychiatry--a conclusion that accounts for the consistent failure of corrective measures developed from psychiatric premises. If it is fatuous to hope to "reform" the nonaddicted psychopath by psychiatric means, it is doubly fatuous to expect psychiatry to achieve any substantial result with the drug-addicted psychopathic criminal.

The management of the great mass of adult criminal offenders rightly is, and should remain, in the hands of penologists, judicial and correctional authorities, parole boards, and probation bureaus. This conclusion will remain valid as long as no effective psychiatric method or regime for the treatment of psychopaths is devised.

Newmeyer, John A. "The Junkie Thief." San Francisco: Haight-Ashbury Free Medical Clinic. 4 pp.

DRUG	Heroin
SAMPLE SIZE	100 of 303
SAMPLE TYPE	Treatment (outpatient)
AGE	Not Specified
SEX	Both Sexes
ETHNICITY	Cross-Cultural
GEOGRAPHICAL AREA	San Francisco, California
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	March-September 1971
NO. OF REFERENCES	2

PURPOSE

The type of heroin addict who is involved in stolen goods as a means of supporting his habit was examined, based on interview data from clients in a detoxification project of the Haight-Ashbury Free Medical Clinic. The findings were related to the "Monterey Park Antiburglary System," an experiment in which it was found that homes in which burglarizable goods had been indelibly marked were much less victimized than homes not so protected.

METHODOLOGY

Subjects were 303 heroin-abusing clients admitted to the project between March and September, 1971. Data were collected through a confidential "intake interview" by inquiring into the demographic background and religious, educational, military, vocational, legal, and drug-abuse history of the client. In response to the question, "By what means do you support your habit," 100 (33%) of the 303 admitted to theft, burglary, or hustling. These 100 were analyzed in relation to the 159 who admitted to other means of support. The 44 who refused to answer this question were excluded from the analysis.

RESULTS

The results of the analysis are presented in a chart showing significance of difference between the two groups in terms of sex, race, father's occupation, father's education, arrests, jail terms, juvenile home terms, year of first use of heroin, number of "cold" withdrawals, and number of withdrawals by use of methadone. One-half of the thieves, versus one-fourth of the nonthieves, were found to have had three or more arrests; four-ninths, versus one-fifth, to have had jail terms of one month or more; and one-fourth, versus one-seventh, to have had juvenile home terms of one month or more.

Generally, the junkie thief was more often male, Black, and lower-class. Twice as many thieves as nonthieves were heavy users of amphetamines before turning to heroin, and clinic counselors noted a prevalence of the "paranoid style" often associated with amphetamine abuse among junkie thieves.

CONCLUSIONS

Since junkie thieves generally lack transportation, are in a "panic" about raising enough money for the next fix, and reside in a few concentrated areas of San Francisco, a blanket implementation of the Monterey Park antiburglary system in these areas would probably drastically inhibit that proportion of theft which is due to heroin addiction. Furthermore, as Winick (1962) hypothesized, when the "hassle" of obtaining money for heroin reaches a certain threshold intensity, a "burnout" or failure to maintain addiction occurs. This may persuade at least some junkie thieves to opt for a detoxification or methadone maintenance program. The City and County of San Francisco should therefore take the suitable steps to help more junkies over this threshold.

Nurco, David N. An ecological analysis of narcotic addicts in Baltimore. The International Journal of the Addictions, 7(2):341-353, 1972.

DRUG	Not Specified
SAMPLE SIZE	833
SAMPLE TYPE	Narcotics Addicts
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Baltimore City, Maryland
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Government Statistics; Police Records
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	0

PURPOSE

The question examined was whether or not narcotic addiction is related to certain other forms of social pathology: financial dependency, juvenile delinquency, and adult arrests. Comparisons were made between narcotic addiction rates and rates for each of the forms of social pathology by census tracts in four quartiles.

METHODOLOGY

Records of 833 persons classified as narcotic addicts by the Baltimore City Police Department's Narcotic Unit, from December 1, 1966, to November 30, 1968 were collected. Rates per 100,000 for the current narcotic addict population by census tract in Baltimore City were modified with 1965 population estimates (tabulated by the Baltimore City Health Department). The rate of addiction was then compared to rates computed in the same manner for financial dependency, adult arrests and juvenile delinquency for Baltimore City.

The analysis of the ecological data was carried out by three tests: (Test I) the Pearson r correlation between census tract rates for narcotic addiction and rates for each of the three additional measures of social pathology; (Test II) rank ordering of all census tracts by rates on each of the four social pathology variables, and calculation of rank-order overlap within quartiles based on narcotic addiction, and (Test III) computing correlation coefficients within each quartile taking account of the exact ordering of the tract within quartiles.

RESULTS

Test I. The correlation coefficients relating narcotic addiction to each of the other three forms of social pathology were: financial dependency (0.59); adult arrest (0.44); and juvenile delinquency (0.52).

Test II. The percentage of overlap for those census tracts within each of the four quartiles was computed on a percentage basis, in order to make comparisons between narcotic addiction rates and the rates for each of the other forms of social pathology. The relationship was fairly high in the first and fourth quartiles; however, it was comparatively low for quartiles 2 and 3. When the social problems of financial dependency were compared with adult arrests, the percentage "overlap" was quite high. Thus, financial dependency and adult arrests were more closely associated within given geographic areas than were either of those with narcotic addiction. Juvenile delinquency was likewise more closely related to financial dependency and adult arrests than to narcotic addiction, though these relations were weaker than those between financial dependency and adult arrests.

Test III. Computing correlation coefficients within each quartile was the most rigorous of the three tests of relationship among the variables (all four forms of social pathology). For the highest quartile the correlation of narcotic addiction was .45 (financial dependency), .20 (adult arrests), and .41 (juvenile delinquency). For the lowest, they were .11, .16, and .02 respectively.

CONCLUSIONS

Narcotic addiction as it is known to the police in Baltimore City is more often found in those areas where there is extreme deprivation, crime, and juvenile delinquency; it is found less often in those areas where these three social problems appear less often. However, the same three problems, when compared with narcotic addiction, were more often found in the same degree of intensity in their respective quartiles (i.e., they were more highly correlated with each other than they were with narcotic addiction). Therefore, narcotic addiction did not follow as closely the same pattern of "residence" as did the other forms of social deprivation--being a poor person, a criminal, or a juvenile delinquent.

This implies that addicts are not to be found in precisely the same census tracts as persons with other forms of social pathology, although the overlap is substantial. Those agencies which currently provide services to addicts will have to provide services from among the populations which they do not now serve, as well as those they do serve. This will be particularly important for early case-finding and other preventive activities.

DRUG	Heroin
SAMPLE SIZE	266
SAMPLE TYPE	Treatment (Inpatient)
AGE	Not Specified
SEX	212 Males; 54 Females
ETHNICITY	White
GEOGRAPHICAL AREA	Lexington, Kentucky
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Arrest Records
DATE(S) CONDUCTED	1961-1963
NO. OF REFERENCES	28

PURPOSE

As part of a larger study of 266 addicts at the Public Health Service Hospital in Lexington, Kentucky, data were collected and compared with findings of other studies in relation to three questions: 1. What proportion of addicts were criminals prior to their addiction, 2. Was addiction followed by more crimes than the addicts would have been expected to commit, 3. If there is an apparent increase in crimes after addiction, with what aspects of addiction is it associated?

There are two problems in testing pre-and post-addiction crime. First, data available include number of arrests and sentences of addicts after the onset of addiction, but it is evident that these three figures do not represent a full count of all criminal acts. It is necessary to estimate the discrepancy between offenses which were officially recorded and offenses which were actually committed. Second, the recorded offenses must be compared against the number of expected offenses, and attention must be given to the type of offense.

METHODOLOGY

Subjects were White addicts (212 male, 54 female) who were admitted to the Public Health Service Hospital in Lexington, Kentucky from 1935 to 1959. Follow-up results were collected from 1961 to 1963. The sampling procedure was designed to overrepresent the more rural counties and those which had sent only one or a few patients to the hospital. Such overrepresentation was needed to provide enough cases for the study of urban-rural and subcultural differences.

Subjects were located, interviewed, and urine-tested. Data were obtained and tabulated to show: (1) number of arrests and sentences prior to addiction; (2) pre-addiction criminal records related to year of addiction and age at addiction; (3) post-addiction sentences related to year of addiction,

age at addiction, and pre-addiction crime; and (5) sources from which addicts obtained their narcotics.

RESULTS

Prior to addiction this sample was not composed of known criminals: 63% of the men had no arrests, and 85% served no sentences. Percentages for the women were 74% and 93%, respectively. Addiction was followed by an increase in arrests and sentences for both sexes.

Post-addiction, only 38% of men had no arrests, and those arrested tended to have a large rather than a small number of arrests. The proportion of men with recorded offenses increased from 33% to 60%, in the areas of robbery and other income-producing crimes, burglary, and other theft. Drug offenses also increased (33% after addiction, none before). Crimes against the person, other than robbery, did not increase. There was no significant decrease in any group of offenses.

The results for the women were similar, though less marked. There was no significant decrease in any group of offenses after addiction. However, even after addiction most of the women and over half of the men had no sentence. Men were more likely to have some criminal sentences after addiction and a greater number of sentences: (1) the earlier the year of addiction; (2) the younger the age of addiction; and (3) the greater the pre-addiction record.

Those who obtained drugs illegally showed the greatest incidence of sentencing. Regardless of source (one doctor, several doctors, own supply, and combination of medical and illegal) an increase in income-producing offenses after addiction was found.

CONCLUSIONS

Only half of the men, and less than 10% of the women, had been arrested prior to addiction; but the proportion of addicts with prior records increased steadily with recency of addiction, which is consistent with previous studies. The inference is that most new addicts of the past fifteen years have had prior criminal records.

The increase in the number of arrests and sentences after addiction exceeded normal expectation. Drug offenses and money-producing crimes showed the greatest increase, indicating that the increase was caused by addiction. Further crime would have been expected to decrease after age 30, which was the approximate median age of addiction, rather than show the increase it did. This study does not support the findings of previous studies that crimes against the person decrease after addiction.

The conclusion is supported that addiction is followed by more crime than would be expected; it is not established, however, that addiction causes crime. Addiction does not necessarily lead to crime; more than half of the men in the sample had no sentences after addiction. Results show that addicts with a stable legal source of narcotics were unlikely to acquire a criminal record, while those who acquired their drugs illegally were likely to acquire a record. This suggests that drug use per se does not cause crime and implies the subjects would have committed fewer crimes if they had had a legal source of drugs. This inference, however, cannot be applied to the general population because the sample is not representative of all users.

* This study's findings were also printed in: O'Donnell, John A. Narcotic addiction and crime. Social Problems 13:374-385, Spring 1966.

Plair, Wendell, and Jackson, Lorraine. Narcotic Use and Crime. A Report on Interviews with 50 Addicts under Treatment. Research Report No. 33. Washington, D.C.: District of Columbia, Department of Corrections, November 1970. 128 pp.

DRUG	Heroin; Methadone; Multi-Drug
SAMPLE SIZE	50
SAMPLE TYPE	Treatment
AGE	Adolescents; Adults
SEX	Not Specified
ETHNICITY	Black
GEOGRAPHICAL AREA	Washington, D.C.
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires
DATE(S) CONDUCTED	1970
NO. OF REFERENCES	7

PURPOSE

It has been assumed that use of drugs leads to crime. Studies are now appearing, however, that show many addicts begin their criminal activities before the start of drug usage. This report was designed to provide a broad perspective of the drug-intake activity of the addict as well as the criminal activity related to that intake.

METHODOLOGY

Data were gathered through interviews with 50 narcotic addicts at two residential treatment centers (halfway houses) of the Narcotic Treatment Administration of the District of Columbia, one for 25 adults, one for 25 youthful addicts. An attempt was made to achieve a balance between long-term residents (2 months or more) and short-term residents (less than two months). The interview schedule was constructed around 47 questions dealing with drug history, crime history, drug usage, extent and cost, pattern of criminal activity, and perception of treatment programs. Data were summarized and tabulated separately for the youth and adult groups.

RESULTS

Twenty-five of the subjects were older addicts (age 23-54 years, median 30.2) and 25 were younger (age 15-22 years, median 17.3). All the respondents were Black; most were originally residents of the inner city of the District of Columbia, and were referred to N.T.A. by the District of Columbia Department of Corrections.

The median length of addiction was 10 years and 1.6 years for the adult and youth groups, respectively. Heroin was the starting drug for 64% of the adults and 44% of the youths. The

remainder of each group started with marihuana. Estimated Drug Law arrests were 64% for adults and 36% for the youths. Reported arrests for violation of laws prohibiting the sale of drugs were 56% for the adults. The youths reported no arrests for this type of offense.

The median expenditure for drugs was \$68.00 per day for the adults and \$40.00 per day for the youths. The size of the heroin habit for adults and youths was 45 and 30 caps per day, respectively.

Of all crimes reported by the adults, morals crimes (mainly "drug selling" activity) was approximately 40%. The corresponding frequency for the youths was 9.2%. The next most frequent criminal activity occurred in the non-person property category (26.5% for adults and 26.8% for the youths). An estimated 72% of all respondents (± 15 , 95% level of confidence) ceased criminal activity during periods of abstinence. For the youth group, the percentage was 76% and for the adult group, 66%.

Criminal activity appeared to be a part of the life-style of the addicts at the onset of addiction. However, onset was accompanied by a sharp increase in criminal behavior. Decreases occurred in those types of offenses which were time consuming, involved greater risk of apprehension and lacked quick monetary return. These decreases were observed only in the adult group, suggesting that an age factor was operative.

Most of the drugs obtained by the addicts were purchased with money resulting from crime, with a small percentage of the youths obtaining money from family members. Boosting (shoplifting) was the preferred criminal activity for both youth and adult groups. Other types of crime either accompanied the one of preference or alternated with it through expediency or need. After the onset of addiction, motivation for criminal behavior seemed to shift from socio-economic needs to psychophysiological needs which were anticipatory in character.

The youths were not as deeply immersed as the adults in the drug subculture and appeared to have more "readiness" for treatment and escape (half-way house) programs.

Methadone treatment appeared to sharply reduce criminal activity, but did not eliminate it. Neither did methadone completely eliminate the use of heroin, although its use became minimal. Methadone treatment was viewed favorably by most of the respondents. However, they did not consider it a total solution to their drug problem.

CONCLUSIONS

The drug addiction problem is complex. Addiction and its behavioral accompaniments vary from one community to another, making generalizations difficult. The sociological shifts of drug abuse in recent years are reflected in personality factors and also the interaction between socio-cultural and economic factors within whole communities and the individuals which compose them.

Criminal behavior increases sharply after addiction, especially that which results in monetary return. When need for drugs is reduced, so is criminal activity. The total experience of this study suggests that the present thrust toward treatment rather than punishment will show positive results. A community of treatment residences would provide the milieu for reaching the only goal appropriate--that of total abstinence.

Preble, Edward A., and Casey, John J., Jr. Taking care of business--the heroin user's life on the street. The International Journal of the Addictions, 4(1):1-24, March 1969.

DRUG	Heroin
SAMPLE SIZE	150
SAMPLE TYPE	Volunteer
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Irish; Italian; Negro; Puerto Rican
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Descriptive/Exploratory
DATA COLLECTION INSTRUMENT	Interviews; Observations
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	8

PURPOSE

As part of a wider description of the life and activities of lower-class heroin users in New York City in the context of their street environment, the role and importance of crime were investigated.

METHODOLOGY

Data were collected from life-history interviews with patients at the Manhattan State Hospital Drug Addiction Unit and from participant-observation and interviews with individuals and groups in four lower-class communities in New York City--East Harlem, lower East Side, Yorkville, Claremont (Bronx). These communities represented the neighborhoods of approximately 85% of the addict patients at Manhattan State Hospital. Four major ethnic groups were represented among the approximately 150 informants: Irish, Italian, Negro, and Puerto Rican. All interviews with research informants occurred with their voluntary consent and cooperation.

RESULTS

The heroin user is an active, busy person, preoccupied primarily with the economic necessities of maintaining his real income--heroin. Virtually all heroin users in these slum neighborhoods regularly committed crime in order to support their heroin use, for it is impossible to support even a modest habit for less than \$20 a day. To support this habit he has to steal goods and property worth from \$50 to \$100, and it was conservatively estimated that heroin users in New York City steal \$1 million a day in money, goods, and property.

About 70% of the inmates in New York City Department of Correction institutions were heroin users whose crimes were directly or indirectly connected with their heroin use. A 1966 New York City Police Department study showed that 15.1% of narcotic addict arrests were for robbery, compared with a 12.9% figure for all arrests during the same year. Other figures were: murder arrests, 1% among addicts compared to 1.4% overall; burglary arrests, 40.9% versus 19.7%; and felonious assaults, 5.6% versus 27.9%. This does not reflect a tendency among addicts to avoid non-violent crime, but to avoid crimes which do not promise financial gain. Fifty-one percent of burglaries committed by addicts were residential burglaries, which always involve the risk of personal confrontation and violence.

Principal criminal occupations of the subjects were: burglar, 22.7%; flat-footed hustler, (one who will commit almost any kind of crime for money), 12.2%; shoplifter, 12.1%; and robber, 9.0%. Crimes against the person were preferred to crimes against property, as the yield is usually cash, thus avoiding the necessity for carrying stolen goods and looking for a fence. In addition, the addict can only expect to get 10% to 50% of the real value of stolen goods.

The heroin user is an important figure in the economic life of the slums. Most legitimate members of the community welcomed the discounted goods the addict made available. Usually he stole outside his neighborhood, not out of community loyalty but because the opportunities were better in the wealthier neighborhoods. He then brought his merchandise back to the neighborhood for sale at high discounts. A major cause of the higher prices charged by retail stores in slum areas was, however, the high rate of addict pilferage.

The addict's status among his fellows and in the community at large depended on the type of criminal activity he engaged in--and his success at it. A real hustling dope fiend, (a successful burglar, robber, etc.) was the most respected, followed by middle status occupations such as stealing copper (salvaging metal from vacant buildings), with the nonhustling dope fiend, the addict who hangs around the neighborhood begging or doing odd jobs, at the bottom of the status ladder.

CONCLUSIONS

Heroin use today by the lower class, primarily the minorities, does not provide a euphoric escape from the psychological and social problems which derive from ghetto life. On the contrary, it provides a motivation and rationale for the pursuit of a meaningful life, albeit a socially deviant one.

Given the social conditions of the slums and their effects on family and individual development, the odds are strongly against the development of a legitimate, nondeviant career that is challenging and rewarding. If anyone can be called passive in the slums it is not the heroin user, but the one who accepts and submits to the conditions.

The ultimate solution to the problem of heroin addiction lies in the creation of legitimate opportunities for a meaningful life for those who want it. While waiting for the ultimate solution, there are four major recommended approaches to the treatment and rehabilitation of heroin users: (1) drug treatment (opiate substitutes or antagonists), (2) psychotherapy, (3) existentialist-oriented group self-help (Synanon prototype), and (4) educational and vocational training and placement. At the Manhattan State Hospital Drug Addiction Unit an intensive educational and vocational program supported by psychological and social treatment methods has been created in an effort to prepare the patient for a legitimate career which has a future and is rewarding and satisfying.

Roebuck, Julian B. The Negro drug addict as an offender type. Journal of Criminal Law, Criminology, and Police Science, 53:36-43, March 1962.

DRUG	Heroin
SAMPLE SIZE	400
SAMPLE TYPE	Incarcerated
AGE	Adults (18-64)
SEX	Male
ETHNICITY	Black
GEOGRAPHICAL AREA	Washington, D.C.
METHODOLOGY	Exploratory/Descriptive; Longitudinal
DATA COLLECTION INSTRUMENT	Arrest Records
DATE(S) CONDUCTED	January 1954 - November 1955
NO. OF REFERENCES	0

PURPOSE

As a first requirement to a theory of the etiology of drug addiction, the study explored the manner in which narcotic offenders differ from the traditional criminal, both in the nature of criminal behavior and in family and social background.

METHODOLOGY

A sample group of 50 Negro drug addicts in the District of Columbia Reformatory was compared with 350 traditional criminal types. For this comparison, a typology of criminal behavior based on the configuration of the total known arrests for the various offenses of each inmate was devised. In determining criminal patterns a chronological arrest history was derived from the official arrest records. It was assumed that analysis would reveal repetitions that could be associated with certain personal and social background factors. The most frequent charges in the arrest history were used as a basis for classification, and later phases were given greater weight.

RESULTS

The analysis of the 400 arrest histories resulted in a typology of 13 criminal patterns: 8 single patterns of robbery, narcotic drug laws, gambling, burglary, sex offenses, confidence games, auto thefts, check forgery; 2 double patterns of larceny and burglary, assault and drunkenness; 1 triple pattern of drunkenness, assault, and larceny; 1 mixed pattern; and 1 with no pattern.

One-eighth of the sample was classified as narcotic drug laws offenders. All were heroin addicts. They were compared with the rest on many personal and social characteristics: life

history, family, neighborhood, school, marital status, indices of personal disorganization and juvenile delinquency. The drug offenders were younger (medium age 25 vs. 33) and more intelligent (IQ 100 vs. 86). They came less frequently from disorganized family backgrounds and had fewer disciplinary and delinquency problems. However, 86% had adult criminal (often addicted) companions in adolescence, which may be significant in their becoming addicts. In criminal activity, they were more frequently loners.

The most important background factor was the tendency to be reared by dominant mothers who sheltered and overindulged them, causing the development of "passive-dependent-dependent" personality types. They were introduced to heroin by addict companions. Forty-three were not delinquent prior to addiction. Most were cut loose from conjugal group ties; isolation was apparently self-imposed to avoid detection and censure from relatives. Half were jazz musicians, all interested in music and reading rather than sports. They disliked alcohol, and expressed little interest in women save their mothers.

They averaged nine arrests per man, but most were for narcotics violations. The rest were for non-violent property offenses (shop-lifting, petty larceny, and housebreaking) and stemmed from the need to secure a personal supply of drugs. Charges for the sale of narcotics were rarely motivated by gain per se. They abhorred violence. Not one was a racketeer or gangster. They were a group of petty, habitual offenders.

CONCLUSIONS

The study demonstrates the utility of a typology based on criminal careers, as established by arrest history patterns, to delineate clear-cut and homogeneous offender categories. The empirical data show that narcotic drug laws offenders differ from other criminal types in theoretically relevant social and personal background factors.

Stimson, Gerry V. Heroin and Behavior. New York: John Wiley and Sons, 1973. 246 pp.

DRUG	Heroin
SAMPLE SIZE	128
SAMPLE TYPE	Treatment (outpatient)
AGE	Adolescents; Adults (mean age: 25)
SEX	92 Male; 36 Female
ETHNICITY	White
GEOGRAPHICAL AREA	London, England
METHODOLOGY	Case Study; Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires
DATE(S) CONDUCTED	1969-1970
NO. OF REFERENCES	191

PURPOSE

Addicts in 11 London clinics were interviewed as to background, addiction, criminality, and other behaviors, in an effort to establish patterns of heroin use and correlations with other variables. Addicts were classified as Stables, Junkies, Loners, and Two-Worlders, and these classifications were tabulated against specific behaviors to provide information about types of addiction life styles.

METHODOLOGY

The sample consisted of 92 men and 36 women patients at 11 selected private London clinics. All were currently receiving maintenance doses of heroin. Information was obtained by interview according to a standard schedule, following contact with subjects through their clinics, and upon their consent to participate. Subjects were interviewed as to drug use history and criminal convictions for drug-related and non-drug offenses. Other items of information included social contacts with other addicts, sleep and eating patterns, living quarters, treatment experience, family background and employment record.

Using a cluster analysis technique, addicts were grouped according to different profiles of criminality, income, involvement with addicts and employment; then classified as Stables, Junkies, Two-Worlders, and Loners. These four groups were compared in terms of non-cluster variables. A follow-up study one year later measured changes in drug use and general rehabilitation in each of the four groups.

Reliability was checked by comparison with other studies, by reinterviewing respondents and by examining the data for internal consistency. Validity was checked by comparing independently recorded information (police records) and external criteria (urine tests and clinic records).

RESULTS

Most subjects came from high or low rather than middle income groups, and 47% had experienced separation from parents prior to age 16. The majority (62%) left school at age 15 or younger; of the 42% who had additional education, half did not complete programs once undertaken. Thirty-nine percent were unemployed.

The mean age of the sample was 25, ranging from ages 17 to 52; 40% were 21 years old or younger; 69% were age 25 or younger. The mean age reported for the onset of use of any drug was 16.8 years, with a range from 11 to 40 years. Ninety-three percent began drug use before age 21. The mean age for initial use of heroin was 19.4 years, with 91% beginning heroin use before age 25; 72% used heroin before any other drug. All subjects had used marihuana at some time, 97% used opiates other than heroin, 98% used amphetamines, 95% used sedatives, 95% used cocaine, 81% used tranquilizers, and 65% used psychedelics. These figures included both illicit and prescribed use.

Of all subjects, 47% had been convicted of drug law violations, and 79% had been convicted of some type of offense; 56% reported conviction for a non-drug offense prior to heroin use and 36% after use. Twenty-eight percent had been to prison and 39% to some other type of detention center. Thirty-eight percent reported non-violent, drug-related, income-producing crimes in the three months prior to interview, ranging from robbing a vending machine to check forgery. Ten percent reported non-drug related theft or violence during this period. Criminal activities for these three months are tabulated by crime and sex. Sixty-four of the men and 14 of the women engaged in property crimes, and 10 men in crimes of violence, specifically assault, wounding, and attempted murder.

The single most important finding of this investigation was that the population of addicts being prescribed heroin was not homogenous with respect to behavior. Out of the 76 addicts studied, 25 were Stables, 13 Junkies, 22 Loners, and 16 Two-Worlders. The Stables were characterized by high employment, legitimate income, low criminal activity, and low involvement with other addicts. They received large amounts of heroin from their clinics, and were the only group who tended to restrict their drug use to the drugs that were prescribed for them.

The Junkies emerged as the opposite of the Stables in nearly every respect. Nearly all were unemployed and had a high rate of criminal activity related both to their drug use and to stealing. They had a high degree of contact with other addicts, received small quantities of heroin from their clinics (which they found unsatisfactory), and their drug use was catholic. They were labelled "Junkies" because the original examination of their scores on the four key variables showed them to be similar to the Junkie, Hustler or Street Addict described in the literature. They lived up to these expectations in other areas of their lives as well.

The Loners were between the Stables and the Junkies, but nearer the Junkies. They were unemployed but did not support themselves by hustling and stealing, relying instead on Social Security benefits and money from friends and family. They received high doses of heroin, and had possibly the highest drug intake of all groups. They were also relatively uninvolved with other addicts.

The Two-Worlders, like the Stables, had a high degree of employment but, like the Junkies, reported a high degree of criminal activity, high contact with other addicts, and small amounts of prescribed heroin.

The criminal activities scale included drug and non-drug offenses, and excluded violent crimes. Non-scale crimes (assault, attempted murder, housebreaking, public property destruction, forgery, and minor theft) were also reported by 2 Stables, 13 Junkies, 3 Loners, and 5 Two-Worlders.

The follow-up study indicated that among males in each of the four groups, one in each category was in prison, and 2 Stables, 2 Junkies, 3 Loners and 3 Two-Worlders were off drugs. Among the females, 1 Loner was in prison, and 1 Loner and 1 Two-Worlder were off drugs. The implications and projected career patterns for each type of addict are discussed at length.

CONCLUSIONS

The Stables had the lowest rate of criminality and most of their violations were drug-related. The Junkie group showed a high rate of criminality, tending to support themselves by stealing and hustling. Loners resembled Junkies in certain ways but had lower criminality, while Two-

Worlders had a high rate of criminality and also a higher rate of conviction than Junkies. Two-Worlders, however, frequently are placed on probation, while Junkies are imprisoned upon conviction. Junkies and Two-Worlders were highly involved in the drug sub-culture, while Stables and Loners were not, a finding which has implications for treatment modalities specifically designed to suit the needs of each group.

Sutter, Alan G. The world of the righteous dope fiend. Issues in Criminology, 2(2):177-222, Fall 1966.

DRUG	Multi-Drug
SAMPLE SIZE	Over 140
SAMPLE TYPE	Addicts
AGE	Adolescents; Adults (15-60 years)
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	San Francisco, California
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Observations
DATE(S) CONDUCTED	1963-1966
NO. OF REFERENCES	53

PURPOSE

Most research that has been done on "street addicts", especially by those researchers who have viewed the addict subculture as retreatist, does not adequately depict the world of the "righteous dope fiend". This study delineates the essential features of that world. As observed over a three-year period from 1963-1966, the term "righteous dope fiend" was used in social interaction by a special type of addict who wanted to indicate that (1) he preferred heroin to any other drug and ranked himself above other drug users, (2) he had greater knowledge of hustles and rackets, (3) he could be trusted never to disclose information about a colleague, (4) he was a lifelong member of an elite social world of opiate users. The findings as they relate to criminality are summarized below.

METHODOLOGY

For three years, informal conversations were held with over 40 heroin users and over 100 adolescents in a world of nonopiate drugs in the San Francisco Bay area. Heroin users ranged in age from 15 to 60 years; average age was 24. Additional information was gained by participation in an experimental project designed to organize an outpatient self-help program for addicts. A portrait was formed from a careful analysis of language and social patterns of drug use essential to understanding the existence of the self-proclaimed "righteous dope fiend."

RESULTS

Fixing held a fascination for the dope fiend and became integral to the symbolism of his lifestyle. He had an overriding fear of being sick which was associated with the experience of "kicking," and paradoxically desired to be free from drugs when he was using and desired to be using drugs when he was clean.

Prestige in the hierarchy of a dope fiend's world was allocated by the size of his habit and his success as a hustler. Not all addicts, nor all criminal addicts, were "righteous dope fiends," and some noncriminal addicts were. Many dope fiends were arrested for petty crimes, but criminality was not as important to the existence of a "righteous dope fiend" as was a working knowledge of different hustles, and a degree of personal integrity which prevented him from being an informer.

If a person himself made five "stings" each day and had only two or three women who gave him about forty dollars each day, within a month his profit would exceed that gained from a systematic robbery. This type of hustling was considered small-time in the eyes of successful men.

A good hustler knew from experience that "life is a racket" and "everyone has a front." Any man who laboriously worked for a regular salary was not only a "fool" but a legitimate "vick" for a "sting" (victim to be exploited). All hustlers desired a life of conspicuous wealth, luxury, and leisure time.

Hustlers were ranked on a fixed hierarchy of prestige based on their "money-making power," ingenuity, and versatility. People who went after "straight-cash" held the top positions in the hierarchy. Those who dealt heroin and crystal by the ounce, "mackmen" and "fakes" (short con men), ranked highest. A "mackman" was a righteous pimp whose business was dangerous and competitive. Nearly all young "players" aspired to reach this position. Till-tappers and money burglars also demanded respect. Those who stole occupied the second level in the hierarchy. Game artists and gamblers ranked third, while strong-arm robbers and thugs were not respected. Those who burglarized drug stores or operated shooting galleries weren't even discussed.

If the dope fiend got caught, he often used the prison facilities to learn new and better hustles and new methods of mixing drugs, and generally prepared himself to go back on the job when he got out. Counseling programs simply sharpened the person's ability to fake.

Parole supervision and Nalline testing were probably the most agonizing experiences in a dope fiend's life. Relapse was not inevitable for all addicts, but the impulse to relapse was powerful for a righteous dope fiend. Winick has suggested that addiction may be a self-limiting process for perhaps two-thirds of the addicts. Nothing was known about those addicts who actually gave up the use of drugs without relapse.

CONCLUSIONS

Scholars have unwittingly bypassed different patterns of drug involvement by misusing the concept of culture and attributing magical forces to a convenient fiction. Similarly, the image of frustrated lower class youth who select a retreatist role adaptation to their double failure does not represent the "player" as a social type who tries out heroin as a symbol of luxury and "success." The "righteous dope fiend" has mastered the art of "hustling;" his world is fused with the same success symbols prevalent in conventional society. He selects a retreatist role adaptation only if he takes the social role of an "ex-dope fiend," or a "sick addict." The "righteous dope fiend," if he retreats at all, becomes a retreatist when he quits using drugs, not when he starts using drugs.

Crucial problems remain unanswered, centering on the typical experiences which lead young people to experiment with different drugs which others in the same setting do not use, and some relapse while others remain abstinent. The selection process of drug involvement cannot be understood from a clinical setting but must be grasped by illuminating group and individual experiences.

Vaillant, George E. A twelve-year follow-up of New York narcotic addicts: III. Some social and psychiatric characteristics. Archives of General Psychiatry, 15(6):599-609, December 1966.

DRUG	Heroin
SAMPLE SIZE	100
SAMPLE TYPE	Treatment (inpatient) & Treatment (outpatient)
AGE	18-64
SEX	Male
ETHNICITY	50 Black; 50 White
GEOGRAPHICAL AREA	New York Addicts in Lexington, Kentucky
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Questionnaires; Program/Clinic Statistics
DATE(S) CONDUCTED	1952-1964
NO. OF REFERENCES	43

PURPOSE

To illustrate those characteristics that may differentiate addiction from other psychiatric syndromes, a 12-year follow-up was conducted of 100 New York addicts (50 White and 50 Negro men) who were first admitted to the U.S. Public Health Service Hospital, Lexington, Kentucky, between August 1, 1952 and January 31, 1953. The use of longitudinally gathered data permitted the conceptualization of the addict simultaneously as a delinquent and as a psychologically disturbed individual.

METHODOLOGY

The sample consisted of 50 Negro and 50 White men admitted between August 1, 1952, and January 31, 1953. In 1952 a social worker had completed a 55 item questionnaire on 90% of the men in the sample. This questionnaire contained routine demographic data and also elicited information about family history of addiction, early history of delinquency, arrest record, military and occupational history and drug experience. Demographic data, and that concerning criminal history, was in most cases confirmed by official sources and considered complete. Data on childhood delinquency, deprivation, and family psychopathology represented minimal values.

RESULTS

Relation of Ethnic Background to Long-Term Course

Overall, the differences between Negro, White, and Latin subgroups were smaller than might have been supposed from the important cultural differences in their backgrounds. The addiction pattern, the incidence of antisocial behavior, and the overall rates of abstinence were similar, and sustained employment after treatment was equally rare. There were few differences in

family histories of crime, delinquency, addiction, and alcoholism; and no differences in the incidence of negative family patterns, nor in the incidence of psychosomatic illness, psychosis, and schizoid personality.

The Negroes as a group were more frequently apprehended for delinquency; however, the only statistically significant difference was that 66% of the Negroes and only 46% of the Whites were known to be delinquent before drugs.

Familial Influences

At least 31% of the addicts were known to have had a delinquent relative, and 24% to have had an addicted relative. The parental factor that correlated most strongly with addiction was parent-child cultural disparity. The New York-born addicts had either foreign-born parents or Southern-born Negro parents twice as often as would have been expected from the census data.

In at least 34% of the clinical charts, mention was made of maternal overprotection; youngest children predominated, and 52% came from broken homes. Seventy-two percent of the sample still lived with their mothers at 22, and 47% continued with a female relative after 30. Of the 30 eventually abstinent addicts in the study, none felt that his parents helped him achieve abstinence, and virtually all were living independently of their parents at the time that they became abstinent.

The addict's mother often came from a culture alien to the one in which she reared her child, and tended to be either absent or overly involved with, and dependent on, the youngest child. The father also was often absent or from a different culture.

Marriage and Children

Seventy percent of the group either married or achieved fairly stable common-law relationships. Only 11% appeared to have lived alone more than half of their adult lives. Forty-eight percent had children, and there were a total of 93 children among the 100 addicts. In only three percent of the cases was homosexuality known to have been a significant source of community gratification during adult life.

Intelligence

In terms of intellectual endowment, the addict seemed to be superior both to the average resident of urban slums, and to the average delinquent.

Relation of Addiction to Criminality

Fifty-six percent of the addicts studied were delinquent before taking drugs. Ninety-two percent of this group served time in jail after leaving Lexington, and 96% had engaged in illegal activity at some time in their lives. At least 24% had been convicted for crimes against persons, and another 68% for crimes against property. By age 37 the average addict had spent three years in jail and had five convictions, in spite of the fact that 75% voluntarily came to Lexington for withdrawal.

Certain characteristics of the addicts were then compared with the recidivist criminals by West and by the Gluecks. The two groups were similar in a number of ways, including the rate at which they gave up delinquent activity and the low incidence of psychosis. Only in terms of somewhat higher intelligence, inferior employment history, and greater likelihood of remaining dependent upon their family of origin did addicts seem to be clearly different from recidivist criminals.

The Relation of Addiction to Psychiatric Disorder

In contrast to previously accepted theories, the study suggests that except for continued delinquency and abuse of drugs and alcohol, addicts remained remarkably free of psychopathology. Only eight had ever been hospitalized for mental disorder. Only two of those were hospitalized for schizophrenia, and these diagnoses were not born out. On follow-up, only one addict out of the 100 appeared to fulfill the diagnostic criteria of schizophrenia. Most addicts in the study were diagnosed as character disorders, an area of psychiatry where there is little knowledge and less agreement.

CONCLUSIONS

There appears to be less difference between the urban heroin addict and the chronically delinquent nonaddict than has been generally appreciated. An investigation of the roots of urban addiction may serve to aid understanding of the dynamics of repetitive delinquent behavior in general.

It is apparent from the higher rate of alcoholism among criminals and young delinquents, and from the high rate of predrug delinquency in this sample, that misuse of pharmacological agents and delinquency go hand in hand. One is rarely the sole cause of the other. It is apparent that much of the crime associated with addiction is rooted in the illegality and expense of the drug. But, like addicts, delinquent alcoholics whose addiction is cheap commit an unusually large number of their crimes against property. The urban addict's penchant for crime cannot be attributed solely to his addiction.

Voss, Harwin L., and Stephens, Richard C. Criminal history of narcotic addicts. Drug Forum, 2(2):191-202, Winter 1973.

DRUG	Alcohol; Multi-Drug
SAMPLE SIZE	990
SAMPLE TYPE	Treatment (inpatient)
AGE	Not Specified
SEX	773 Male; 217 Female
ETHNICITY	493 Black; 443 White; 52 "Spanish"
GEOGRAPHICAL AREA	Lexington, Kentucky
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	Post-1969
NO. OF REFERENCES	6

PURPOSE

A variety of studies have shown that imprisoned and hospitalized addicts have extensive criminal records. In question, however, are the causal and temporal ordering of this association. To shed light on the causal connections between drug use and income-producing criminal activity, self-reported data on illegal activities and arrests was obtained from addicts hospitalized for treatment. Specifically examined were: (1) the extent of criminality pre-drug use, (2) the extent of lifetime criminality, and (3) the relationship of drug use and criminal arrests.

METHODOLOGY

According to interviews and reliability checks of 1,096 patients committed to the NIMH Clinical Research Center, Lexington, Kentucky, 990 (78%) admitted illegal activities or arrests. The sample included 773 males and 217 females, classified as White, Negro, and Spanish. Age was not specified.

This sample was composed of visible (e.g., publicly known) addicts; consequently, there may be a difference in the drug-crime relationship among addicts who have escaped public identification. On the other hand, the sample was comprised of addicts from many parts of the United States--male addicts from the region east of the Mississippi River and females from the entire country.

This sample of 990 was queried concerning the temporal order of drug use in respect to eight specific illegal activities (armed robbery, burglary, other forms of theft, forgery, sale of drugs, transportation and importation of drugs, prostitution or pimping, and gambling) and the order of drug use and arrest. Unfortunately, it is noted, drug use was broadly defined to include alcohol, marihuana, and all other psychotropic drugs.

RESULTS

Pre-Drug Use Criminal Activity

Respondents reported only minimal involvement in illegal activities prior to first use of drugs, including alcohol. Sixty-seven percent (622) did not engage in any of the eight crimes, and 22% engaged in only one form. No specific prior crimes were reported by 61% of the males and 87% of the females. Prior gambling was the most common form of criminal activity, particularly among Black and minority males, among whom gambling is often viewed as a common recreation. Theft was the most common female offense.

It is possible that the limited prior criminal involvement of these addicts may simply reflect the early age at which they began to use drugs. For this reason alcohol was included in the definition of drugs. Improper inferences concerning the temporal order of drug use and criminality on the basis of these data should not, however, be drawn.

Extent of Criminal Activity

When the frequency with which the respondents had committed each of the eight crimes during their lifetime was obtained, findings indicated subjects had been extensively involved in criminal activities. Three-fourths of the subjects reported some form of theft (other than burglary or armed robbery); three-fifths had sold drugs, one-half had committed burglaries, and two-fifths admitted forgery. Differences were noted for sex and ethnicity.

Almost all this activity was found to follow drug use. Percentages of admitted theft and illegal gambling increased dramatically from 15% and 23% to 74% and 52%, respectively. The greatest increase occurred in the sale of drugs. Burglary increased 6% to 54% and forgery 1% to 51%.

Respondents' criminal versatility, or the range of illegal behavior, was also found to broaden. Before drug use, only 11% of the sample admitted involvement in more than one criminal act. After drug use, only 9% of the addicts were dependent on a single type of crime as a source of income. The median number of types of offense admitted by males was four, and three for females.

Drug Use and Arrest

Respondents were asked about arrests before and after their initial use of drugs, rather than about arrests for criminal acts prior to their first arrest for a narcotics violation, as is often the case. In this section of the interview schedule the term "drugs" again included alcohol.

Approximately 80% of the addicts who admitted arrest or participation in illegal activities were not arrested before they used any drug, including alcohol. The median number of prior arrests was one. The median number of post-drug use arrests was five: 3 for misdemeanors and 2 for felonies. The inclusion of alcohol, however, does not permit an appropriate assessment of the part drug use played.

Respondents were then asked to relate temporally the first arrest to use of various drug classes. Approximately 20% of the addicts who admitted arrest were arrested before they used any drug, including alcohol (33% had admitted illegal activities). The data also indicated that males, particularly Negroes, were more likely to be arrested before drug use than females. When alcohol was excluded, 44% of the sample were found to have been arrested before any other drug use.

When both alcohol and marihuana were excluded, slightly more than one-half of the sample were arrested before the use of other drugs. The exclusion of alcohol from the definition of drugs led to a greater increase in the arrest rate prior to drug use than did the additional exclusion of marihuana. With respect only to hard drugs, including heroin, 57% of the sample were arrested before onset.

CONCLUSIONS

Because respondents acknowledged a higher frequency of illegal activity prior to drug use than is indicated in arrest records, criminal activity appears to precede the use of illegal drugs to an extent not previously recognized. The relationship of drug use and crime is not, however, a

simple or unidirectional one. Some addicts were involved in crime prior to drug use, others apparently turned to crime in order to obtain funds to purchase drugs. A cause-and-effect relationship is not definitively established between drug use and criminal activities, although illegal behavior increases in frequency and scope following initial drug use.

Waldorf, Dan. Life without heroin: Some social adjustments during long-term periods of voluntary abstinence. Social Problems, 18(2):228-242, Fall 1970.*

DRUG	Heroin
SAMPLE SIZE	422
SAMPLE TYPE	Treatment (Inpatient)
AGE	Adults
SEX	Male
ETHNICITY	45% Black; 30% Puerto Rican; 25% White
GEOGRAPHICAL AREA	New York State
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	August and September 1968
NO. OF REFERENCES	11

PURPOSE

To attempt a preliminary and exploratory description of certain kinds of adjustments of heroin users during a period of voluntary abstinence from the drug, a survey of 422 male addicts in six treatment facilities was conducted.

METHODOLOGY

Addicts themselves documented the street life of the heroin addict. Four hundred and twenty-two male heroin users were interviewed in six different treatment facilities in New York State during August and September, 1968. Comparison of findings with other studies were made, such as the Bellevue Hospital study, 1930, and the Lexington Hospital study, 1936-1937, of voluntary patients. The primary focus of the investigation of abstinence was self-reported behavior in four areas--work, substitution of other drugs and alcohol, family relationships and association with addicts, and general adjustment. Questions in these areas were asked of the 163 men who reported that they had at one time abstained from heroin for three months or longer.

Using a list of the most recurrent non-legal activities of addicts, the sample of 163 were asked if they had ever committed any of the following acts: (1) lend your works; (2) sell drugs or act as a courier; (3) cop (buy) for someone else; (4) run numbers; (5) steal; (6) pimp for prostitutes; or (7) have sex with men for money? They were also asked if they committed these acts before heroin use and during the longest period when they were off heroin.

RESULTS

In general, the reporting of criminality was very high for the sample. The majority said they had at some time sold drugs or acted as a courier (81%), stole (57%), lent their works (90%),

and bought drugs for someone else (89%); while a sizable number reported running numbers (26%), pimping (26%), and male prostitution (27%). Such activities fall off markedly during periods of long abstinence--more than two-thirds (68%) of all those with abstentions of three months or longer reported that they had engaged in none of these activities when off heroin.

More than three-quarters (76%) of those with high adjustment scores claimed abstinence from these criminal activities when off heroin, less than one-half (45%) of those with the lowest adjustment scores could say the same. Furthermore, 87% of those persons with low adjustment scores reported criminal acts before heroin use, while only 48% of the persons with high adjustment scores did.

CONCLUSIONS

On the whole, criminality during abstinence falls off sharply, and especially for persons who have made good adjustments. Perhaps criminal acts are, as Lindesmith has indicated, the result of the addict's need for drugs and not part of a larger pattern of criminal behavior. Maybe those persons who cannot adjust during abstinence are more likely to be criminal--certainly many more of them reported committing criminal and hustling activities before heroin use than did either of the two groups reporting better adjustment.

Any treatment or rehabilitation program should recognize that there are different types of addicts who need to be treated in different ways. Age, length of heroin use, psycho-pharmacological functions of drug use, and criminality should be given consideration. Neither of the two largest programs in the United States recognizes these distinctions. More often than not, the availability of bed space becomes the sole criterion for placement of a resident. This failure to recognize types of addicts reduces the effectiveness of the treatment programs.

* The study is abstracted as a whole in Volume VII of the Research Issue Series: Drugs and Addict Lifestyles.

Weissman, James C.; Katsampes, Paul L.; and Giacinti, Thomas A. Opiate use and criminality among a jail population. Addictive Diseases: An International Journal, 1(3):269-281, 1974.

DRUG	Opiates
SAMPLE SIZE	282
SAMPLE TYPE	Incarcerated
AGE	15 Adolescents; 267 Adults
SEX	229 Male; 53 Female
ETHNICITY	1 Amerindian; 85 Hispanic; 117 Black; 79 White
GEOGRAPHICAL AREA	Denver, Colorado
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Arrest Records
DATE(S) CONDUCTED	1972
NO. OF REFERENCES	11

PURPOSE

This study addresses the following questions through an examination of jailed addicts: (1) does total arrest activity increase with onset of addiction, (2) what are the specific offenses involved, and (3) are the patterns of criminal activity associated with differences in age at onset, race, and sex?

METHODOLOGY

A random sample was selected of 282 male and female subjects of various ethnic groupings who entered the Denver City Jail and requested methadone detoxification services during 1972. Their criminal histories were searched, and the data analyzed according to date of first drug arrest (a substitute for age at onset). Each discrete arrest incident was coded according to the most serious offense charged on that occasion. Offenses were grouped under charges for burglary, assault, sexual assault, larceny, public order, prostitution, and other adult crimes. All nondrug charges were combined to form an index of total arrests, and a measure of Impact Crime arrest was formed to compound burglary, robbery, sexual assault, and assault charges. Controlling the variables of age of onset, race, and sex, post-onset arrest rates were then compared to determine changes in arrest patterns following onset of addiction.

RESULTS

A relatively high arrest record was found for crimes associated with drug use: drug offenses, larceny, burglary, prostitution, and robbery. Eighty percent had at least one arrest for Impact Crime (burglary, robbery, assault, and sexual assault); 91.1% had been convicted of at least one crime.

Post-onset rates differed with respect to age at onset. The youngest group (13-20) showed a decrease in non-drug criminal activity, and remained generally constant in serious crimes. The next group (21-25) showed the highest increase in serious crime activity. Larceny nearly doubled, robbery increased 400%, and assault and burglary about 500%. The last group (26+) also showed the lowest post-onset Impact Crime and total nondrug arrest rates, although charge rates were still substantial.

Arrest patterns differed sharply among racial and ethnic groupings. Black subjects (42% of the sample) diversified from a pre-onset emphasis on larceny, showing an increase in all categories except assault. Hispanic subjects (30% of the sample) doubled their assault rate but held other rates constant. Anglo subjects (28% of the sample) showed an increase in the violent crimes of robbery and assault, moving away from a pre-onset emphasis on larceny and burglary.

Female subjects (n=53) substantially increased their rate of Impact Crime and total arrests. In addition to having the highest post-onset larceny score of any group, females showed an unexpected rise in assault crimes.

Crime rates after the first drug arrest remained consistent across groupings, with Hispanic subjects showing the lowest rates, and female subjects the highest.

CONCLUSIONS

The results indicate an apparent intensifying effect of opiate use upon frequency of arrest, even when holding constant the variables of age at onset, race, and sex. Confirming the findings of other researchers, every group in the sample showed an increase in the property-acquisitive crimes of burglary and larceny. Robbery and assault also rose generally, but not in every group.

Age at onset bears a strong relationship to post-onset activity. The group experiencing the earliest age of onset (13-20) remained constant with regard to Impact Crime arrest rate and showed a decrease in its total nondrug arrest rate. This may indicate that members of this group, apparently the most criminally active group before the age of onset, concentrated their activities on the more serious crimes after the onset of addiction. The second group (21-25) became addicts at the peak of their criminal careers, and, therefore, showed a correspondingly high increase in criminal activity. This group should be expected to be difficult in treatment prospects, being the most criminally active. The decrease in activity demonstrated by the 26+ group may be explained by the "maturing out" hypothesis, which postulates a decrease in drug-related criminal activity with increasing age.

Each race exhibits different tendencies with respect to individual offenses. Hispanic subjects were least affected by onset of addiction. Black subjects showed an increase in every crime but assault, including a 100% increase in Impact Crime. Anglo subjects not only increased in every category, but also showed a substantial increase in the violent crimes of robbery and assault.

Sex is an important variable insofar as it identifies peculiar arrest activities of the female subjects. Surprisingly, they showed the highest assault and larceny rates of any group.

There were several methodological deficiencies in the study. Age of first drug arrest, a biased indicator, served as age of onset. Another confounding factor was the impact upon crime rates of time spent by the subjects in institutions. The use of local police files resulted in some minimal exclusion of some out-of-jurisdiction arrests. Finally, the age-of-onset groups spent disparate times in the pre- and post-onset periods, a factor which might bear upon the reliability of the rates. Notwithstanding, the data show that opiate addiction intensifies officially noted criminal activity for most major offenses; and that knowledge of the age of onset, race, and sex of the subject provides insight into expected criminal pattern differences during the post-onset period. These findings have major implications for treatment design.

Winick, Charles. Maturing out of narcotic addiction. Bulletin on Narcotics, 14:1-7, January-March 1962.

DRUG	Opiates
SAMPLE SIZE	7,234
SAMPLE TYPE	Addicts Recorded by the Federal Bureau of Narcotics
AGE	18-76
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	National Statistics
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	N/A
DATE(S) CONDUCTED	1960
NO. OF REFERENCES	12

PURPOSE

A special tabulation of the records of the Federal Bureau of Narcotics was analyzed to discuss the age at which a large sample of known users of narcotic drugs appear to have begun and ceased taking drugs, and as a basis for hypothesizing on the apparent reasons for this process of "maturing out" of addiction.

METHODOLOGY

The Bureau tabulated all the addicts in its files who had originally been reported as addicts during the calendar year 1955, but had not been reported again up to 31 December 1959. It counted as addicts only regular users of opium derivatives such as heroin and of synthetic opiates such as meperidine (Demerol). Inactivity was defined as not being reported as a drug user for five years.

SUMMARY

The data studied indicated that many narcotic addicts seem to cease taking drugs in their thirties, by what may be called a process of maturing out of narcotic addiction. It appears that this may be due to the fact that the problems for which the addict originally began taking drugs, the challenges and problems of early adulthood, become less salient and less urgent. As a result of some process of emotional homeostasis, the stresses and strains of life become sufficiently stabilized for the typical addict in his thirties so that he can face them without the support provided by narcotics. This cycle may be analogous to that of the typical delinquent whose delinquency increases during his teens and remains constant till he reaches his late twenties, when it declines. His delinquencies may be his way of meeting the same needs which the addict meets by taking drugs. Since so many addicts are members of a delinquent sub-culture, the approximate consonance in age between addicts and delinquents may well be more than fortuitous.

The process of maturing out of addiction may be entirely a function of the age at which the addict begins taking drugs; it is possible, however, that maturing out of addiction is at least partially a function of the cycle of the disease of addiction itself. The statistical results reported may be measuring the number of years that the addiction process itself takes, from beginning through middle to end; this variable may possibly be independent of the life cycle of the addict.

There is a large concentration of addicts becoming inactive in the first decade after addiction began; there is also a considerable number becoming inactive after varying periods of years, ranging to over half a century. Whether the process is one of maturing out as a reflection of the addict's life cycle, or is a reflection of the number of years that the addiction process itself continues, it is a tendency or trend that gives some understanding of the behavior of a substantial majority of addicts. If the hypothesis is true, it would appear almost inevitable that the adolescent addict return to drug use.

The results of the study suggest that maturing out of addiction accounts for approximately two-thirds of the sample, whether in accordance with the life cycle or length of addiction hypothesis. It is possible to speculate that addiction may be a self-limiting process for perhaps two-thirds of addicts: a function either of the addict's life cycle or of the number of years that he is addicted, or of some combination of the two processes. Insight, or particular life experiences, or other variables, may be relevant to whether an addict will differ from the norm in terms of maturing out. Geographic and other external factors may affect the extent to which a particular group of addicts either matures out of or reverts to narcotic use.

CONCLUSION

For future study of the phenomenon of maturing out, an attempt should be made to establish whether it is a life-cycle phenomenon, a reflection of the number of years of the addiction process itself, or of some combination of the two. The extent to which the addict's desire to leave addiction is reflected in the process of maturing out, in contrast to it being a relatively passive process, should also be explored.

From the public health and law enforcement points of view, the relative effect of various procedures for coping with the addict in terms of possible acceleration or inhibition of the process of maturing out must be evaluated. What happens to addicts after they mature out, their life span, their susceptibility to disease and their general level of adjustment can be clarified by research.

4. Drugs and Delinquency

Blumer, Herbert. The World of Youthful Drug Use. Berkeley, California: University of California, School of Criminology, 1967. 85 pp.

DRUG	Multi-Drug
SAMPLE SIZE	200
SAMPLE TYPE	Peers; Students
AGE	Adolescents; Adults (age 12-25 years)
SEX	Both Sexes
ETHNICITY	Cross-Cultural
GEOGRAPHICAL AREA	Oakland, California
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Observations
DATE(S) CONDUCTED	1965 to 1966
NO. OF REFERENCES	3

PURPOSE

To develop a realistic picture of drug use in Oakland, California, central figures among the youthful drug population were interviewed. Evidence was compiled as to the characteristics of different types of drug users and the conditions for entrance into the drug world. Included was the criminal involvement and potential of the sample and its relationship to drug use. The findings also shed light on the future career orientation of the sample.

METHODOLOGY

Procedural steps included selecting knowledgeable key informants, chiefly from the Black and Mexican population, and gaining their trust and acceptance of the staff. This information was validated through the collective scrutiny of other youths by means of taped panel discussion sessions. Extensive personal interviews with key informants also provided information; there was some use of thematic apperception tests and psychodrama. All the staff engaged in considerable participant observation through their friendship with key informants.

RESULTS

Youthful drug use in Oakland was found to be extensive and deeply rooted, primarily among the lower strata but moving into middle and upper classes. It was a collective practice with peer sanctions, justifying beliefs, and a body of practical knowledge including protection against discovery. For the user it was a natural way of life, not a pathological phenomenon. It is therefore highly resistant to conventional prevention methods. Drug use was shown to be varied and in flux. Two broad operating styles--the rowdy and the cool--existed, and four major social types were recognized by youthful users: the "rowdy," the "pot head," the "mellow dude," and the "player." Each had different patterns of drug use, ways of viewing drugs, criminal involvement

and status. Drugs used included marihuana (the most frequently used), amphetamines and barbiturates, glue, and crystals. Heroin was disdained.

The "rowdy dude" constituted only a minority segment. He appeared in the lower classes, in pre-adolescence frequently, from a violent social milieu. He used glue and toxic substances of all kinds, and alcohol, which remains a major intoxicant during adolescence. He tried to evoke fear and impress others by displays of violence, delinquency, public drunkenness and drug use, and was likely to be arrested and institutionalized. He moved in a segregated group which often oriented him toward a career of criminal violence.

In contrast, the "cool" style consisted of a deliberate and self-conscious attempt to control oneself in all aspects of one's daily life. It was a model of behavior that attracted and coerced many youngsters in all segments of adolescent society giving rise to groups. "Cool sets" were contrasted to the "rowdy sets" and distinguished from the majority of adolescents who followed conventional lines.

Of the three major social types recognized as belonging to the cool style, the "pot head" was ultra cool. He used marihuana exclusively. He was respected as sensible, calm, and knowledgeable by his peers. He dressed sharply, liked to take things easy, and participated in school functions, athletics and conventional work. He kept in close touch with what was going on in the adolescent world. He was directly involved in the drug market, "scoring" his own drugs and sometimes dealing on a small time basis.

The "mellow dude" was by far the most common type of drug user. He was interested primarily in parties, social gatherings, sexual conquests and pleasurable sensations. He used mainly marihuana but some LSD or pills. He did not deal for profit, but rather would exchange drugs or pass them to a friend. He did not seem high on drugs and they took up only a small portion of his time. He was essentially a sociable person who acted according to the standards of propriety in his circle.

The "player" engaged in drug traffic for the purpose of monetary gain. He was an entrepreneur viewing himself as a "slick operator." He dealt at lower levels of the drug market and in other rackets. As an incipient hustler, he stood in the fringe of professional operations. He used drugs not only for pleasure but also to fortify himself for playing operations. He did not respect heroin addicts but because of his associations was the most likely of any adolescent user to become one.

Drug using circles excluded rowdies and the more conventional youths. They accepted only the "cool," the trustworthy, those who did not panic before police, and the sociable. The basic interest of the adolescent was sociability. Drug use was a part of a larger way of life of a given cool set, to which adolescents sought admission.

The organization, codes, and practices of the drug world determined how youngsters were initiated into drug use. Those who were "cool" and could be trusted not to disrupt the social circle were eagerly initiated; "rowdies" or those with a reputation for violence were rejected. The most typical way of being introduced to marihuana was by emulating an older group.

An exception was seen in the case of family members in ghetto areas. Older marihuana users frequently "turned on" their younger siblings to prevent them from sniffing glue, drinking wine or risking the chance of being arrested.

CONCLUSIONS

The study throws doubt on current notions that drugs are an escape from reality, an inability to live a normal life, or an expression of personal pathology. The findings stress the importance of recognizing the impact of the cool style on the conditions and extent of adolescent drug use. There is already an existing system of built-in controls which acts to prevent the youngsters from becoming addicts or criminals. This affirmative theme could be developed advantageously in future programs.

The differentiation of adolescent drug users also signifies different career lines along which users are likely to move. The largest proportion, the mellow users, are conventionally oriented and likely to become ordinary conforming citizens. This is true also of the pothead, although his dealing activities expose him to the risk of arrest. The player is inclined more to the possibility of a career of crime, while the rowdy is the most likely to become a criminal. This

differential picture is opposed to the conventional idea that youthful users move along a single line from marihuana use to heroin addiction. It suggests the feasibility of a program designed to help adolescents move in a conventional direction and away from a criminal direction. The vulnerable focal points in a career line, at which a user may be turned in one or another direction, invite further study.

Chein, Isidor. Narcotics use among juveniles. In: Cavan, R. Readings in Juvenile Delinquency. New York City: J.B. Lippincott, 1964. pp. 237-252.

DRUG	Multi-Drug; Heroin
SAMPLE SIZE	Over 3,000
SAMPLE TYPE	Juvenile Offenders
AGE	Adolescents
SEX	Male
ETHNICITY	Cross-Cultural
GEOGRAPHICAL AREA	New York City, New York
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires
DATE(S) CONDUCTED	1952-1963
NO. OF REFERENCES	0

PURPOSE

The Research Center for Human Relations at New York University, along with other groups, started investigating juvenile drug use in 1952. The purpose of the five studies reported here was to analyze:

- (1) The characteristics of neighborhoods in Manhattan, Brooklyn, and the Bronx in which heroin use by male adolescents had the widest prevalence;
- (2) The relationship between the rates of drug use in various neighborhoods and the rates of other delinquency;
- (3) The home life and characteristics of 100 heroin users and 100 nonusers;
- (4) The role played by delinquent street gangs in heroin activity;
- (5) The prevailing information and attitudes towards drug use among 1,000 boys, 13 or 14 years old, who lived in three neighborhoods differing in known incidence of heroin use. Inquiry was made about the value systems held by these boys and certain specific attitudes towards police, parents, etc., in order to establish the psychological context of their attitudes towards narcotics.

STUDY 1

METHODOLOGY

Names and addresses were collected of 1,844 boys, age 16 to 21, who had come to the attention of some official agency (principally courts and hospitals) in New York in connection with narcotics between 1949 and 1952. The addresses were distributed by census tract divisions of the 1950 census, and census tract rates of drug use were calculated. The 1950 census also provided socioeconomic information about each tract.

RESULTS

In each of the boroughs, drug use among adolescent males was concentrated in a small number of census tracts. These tracts constituted the most underprivileged, crowded and dilapidated areas of the city. Analyzing the relationship between neighborhood characteristics and drug rate within the area of high incidence of narcotics use supported the findings. Drug use was highest where income and education were lowest and where there was the greatest breakdown of normal family life.

STUDY 2

METHODOLOGY

Examining only Manhattan for the same time period and age group as Study 1, an analysis was made of a sample of court charges other than narcotic violations. Delinquency and drug use rates were compared.

RESULTS

Data showed that all neighborhoods with drug use of "epidemic" proportions were located in very high delinquency areas. There were, however, areas of equally high delinquency rates with much less drug use. Areas high in both drug use and delinquency were economically and socially the most deprived areas. Areas high in delinquency but low in drug use were substantially less deprived.

The rise in total delinquency from 1949 to 1952 was accounted for entirely by lesser violations; there was no change in the number of felonies. This held true in both the high and the lesser drug use neighborhoods. The percentage of delinquencies probably motivated by profit, however, was substantially greater in areas of high drug use. Only some adolescents, even in areas of highest incidence, took drugs. The highest proportion of known users in any census tract was 10%.

STUDY 3

METHODOLOGY

Two hundred boys were interviewed to explore the family characteristics and personal experiences that might distinguish drug users from nonusers who lived in relatively high use areas. They were divided into four roughly equal groups: (1) delinquents before becoming drug users; (2) delinquents who were not drug users; (3) nondelinquents before becoming drug users; and (4) neither delinquents nor drug users. The groups were matched as closely as possible for incidence of drug use in neighborhoods of residence and on a number of other variables (age, ethnic origin, etc.). Rough indices of economic deprivation and of deficient family atmosphere were also obtained.

RESULTS

Delinquents were significantly more deprived than nondelinquents on both indices. This was also true when drug users not previously delinquent were compared with those who were delinquents, and when only nonusers were considered.

Greater deprivation of delinquents was equally true when Negro, Spanish-speaking and Whites were considered separately. There was no difference in deprivation between users and nonusers for Whites and Spanish-speaking, but Negro users (both delinquent and nondelinquent) came from more deprived homes than comparable Negro nonusers. Thus for White and Spanish-speaking youths, environmental

factors that do play a special role in drug use would have to be along lines other than those associated with delinquency. Among Negroes, factors related to economic deprivation may be playing a special role in the etiology of drug use. This supports the findings of the previous two studies that neighborhoods high in both delinquency and drug rates were the most deprived. Neighborhoods high in both tended to be Negro neighborhoods.

From the 100 heroin users in the sample there appeared to be a difference between those who had been delinquent prior to using heroin and those who had not. The delinquent tended to be "social users," for whom drug use was included as part of a delinquency pattern. Those who were not delinquent prior to heroin use came from slightly higher economic levels and appeared more psychologically disturbed.

STUDY 4

METHODOLOGY

This study was conducted in cooperation with the New York City Youth Board. Information about the drug-use patterns of 18 antisocial gangs in the city was collected from the reports of group workers who were in close contact with the gangs.

RESULTS

Drug use was not necessarily tied up with gang activities. In some clubs there was no drug use; in others less than half the members were users. There was no organized drug selling in any of the clubs, and no effort was made to recruit users.

There were differences in life style among users and nonusers in the clubs. Users were more likely to partake in gang-planned robberies and burglaries as well as "line ups" and other forms of sexual delinquency, and they were less likely to participate in club-sponsored social and sports activities or in gang fights.

STUDY 5

METHODOLOGY

With the assistance of the school systems of the city, drug information and attitude questionnaires were administered to 1,000 eighth graders in three selected neighborhoods of low socioeconomic status: one with the highest drug rate in the city; one with a somewhat lower rate; and the third with very little drug activity.

RESULTS

Boys from neighborhoods where drugs were most prevalent held the most tolerant attitudes towards drugs and users, but were least likely to possess correct information about drugs and their consequences. The problem youngster in high delinquency neighborhoods had a very negative attitude toward the police, highly valued "lots of thrills and taking chances," thought of themselves as lucky, and lived for today only. They were pessimistic and distrustful, and had low tolerance of anxiety and frustration.

Psychiatric studies suggest that juvenile addicts are seriously disturbed emotionally, frequently even schizophrenic, and that opiates are effective as anxiety-reducing and tranquility-producing agents. The author's previous study of the family backgrounds of addicts showed that their pathologic personality characteristics are consistent outgrowths of the disturbed pattern of family relationships to which they have been exposed.

CONCLUSIONS

Behaviors like delinquency and drug addiction take place in a physical and social context which plays an important role in determining their likelihood of occurrence and the specific forms they take. The law enforcement approach attempts to make narcotics unavailable; but a reduced supply without a reduction in demand merely raises the market value of narcotics, places additional weight on smuggling, and adds pressure on the addict to increase his own criminal behavior in order to support his habit. Law enforcement is effective in controlling behavior only to the extent that its sanctions are stronger, more certain, and more immediate than the potential rewards of violating the law. Furthermore, if the channel to addiction were irrevocably

closed, into what other channels would the unaltered impelling forces push the individual--and would these alternatives be preferable to addiction?

There are segments of communities in which there is a breakdown in the fabric of human relationships, where the individual has no roots, where he stands essentially alone, unable to see any constructive possibilities. Such an environment breeds delinquency and crime, alcoholism and drug addiction, and a variety of antisocial and socially maladaptive behavior. In New York City, this environment is associated with three neighborhood characteristics: widespread poverty, a low level of education, and a high proportion of broken or deviant families. It is from disrupted families in deteriorated neighborhoods that the bulk of delinquents and drug users comes.

Individuals without strong internalized restraints--with various neurotic needs--tend to act in an antisocial manner. Such individuals may become criminals in the best of environments. An individual whose balance of needs and restraints is not essentially different from the average person, placed in an atmosphere conducive to antisocial behavior is also likely to become a delinquent. With easy access to drugs, a new channel of delinquent activity becomes available. Many, though not all, of the delinquents who experiment with heroin become addicted. Other addicts have not responded to the delinquency-producing vectors of the environment, but nevertheless display personality patterns in close harmony with the social atmosphere of their neighborhoods. These are the unaggressive, withdrawn, dysphoric individuals who gain a sense of well-being and social acceptability from heroin and its subculture.

It is not feasible to conceive of worthwhile community action programs with a narrowly defined goal of preventing drug use. Drug use among juveniles is one symptom among many; personally damaged and environmentally deprived youths need broad programs of social action aimed at helping them grow into healthy adults who are neither users nor delinquents.

Friedman, C. Jack, and Friedman, Alfred S. Drug abuse and delinquency. Part I. Drug abuse and delinquency among lower social class, court-adjudicated adolescent boys. In: National Commission on Marihuana and Drug Abuse. Drug Use in America. Problems in Perspective. Appendix, Volume I: Patterns and Consequences of Drug Use. Washington, D.C.: U.S. Government Printing Office, 1973. pp. 398-436.

DRUG	Multi-Drug
SAMPLE SIZE	498
SAMPLE TYPE	Incarcerated; Students; Other
AGE	Adolescents (12-18)
SEX	Male
ETHNICITY	335 Black; 163 White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Statistical Analysis; Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Police and Court Records; Psychological Tests
DATE(S) CONDUCTED	November 1971-May 1972
NO. OF REFERENCES	27

PURPOSE

Patterns of drug abuse and delinquency in adolescents were examined by researchers at the Philadelphia Psychiatric Center in two series of investigations published as one study. Part I is summarized here. It consisted of six individual studies, analyzing the role of drug abuse and age of initial offense in relation to:

1. A longitudinal follow-up of recidivism of violent and nonviolent criminal behavior.
2. Time sequence patterns in the emergence of drug use in relation to other forms of violent and nonviolent delinquency.
3. Violent and nonviolent delinquency from self-disclosed reports of subjects in comparison with official court and police record information.
4. Demographic variables including race, education of the boy, socioeconomic status of the family and measures of family structure.
5. Selected psychosocial and family measures and family member role functions and traits.
6. Selected individual personality and trait characteristics of the boy, including intelligence, school achievement, emotional adjustment, vocational aspirations and self-image measures.

METHODOLOGY

The sample consisted of 388 adolescent boys, aged 15-18, who were court-committed inmates from two youth facilities: the Youth Development Center and Glen Mills School. Two hundred and twenty-three boys were Black; 65 were White. Drug abuse was defined by self-report questionnaires making use of three items from the Delinquency Check List: whether the respondents smoked marihuana, sniffed glue or took bennies, and sold marihuana or other narcotics. The DCL is a 52-item questionnaire which requires the subject to indicate the extent to which he engaged in each of the behaviors described. The three items utilized here were scored dichotomously for any degree of use or sale, and no use or sale; it was also scored continuously in terms of amount of use or sale. A third measure was the initial age of use or sale. These scores for drug abuse were employed throughout the six studies.

Court and police records were used to relate drug use or sale to recidivism, and to the occurrence of violent, antisocial and criminal offenses. Various offenses were weighted by three clinical psychologists on a 1-6 scale, and 10 outcome recidivism criteria scores were established. Pearson Product Moment correlations and point-biserial correlations were used to analyze the data.

RESULTS

Study I

There was no evidence to support the hypothesis that boys who reported ever using drugs or more extensively using drugs had greater incidences of violent and nonviolent recidivism than boys who reported no drug abuse. Although these findings cannot be generalized to other populations of adolescent boys (for example, those from higher levels of socioeconomic status), they are relevant to boys who represent "hard core," repeat, juvenile offenders from the poorer, mostly Black, inner city areas. The magnitude of the correlations of drug abuse indicators with measures of recidivism was impressively small, and most were close to zero. Thus, drug users and "pushers" appear to be no more or less delinquent or criminal over time than their counterparts who did not report using or selling drugs.

Study II

Boys who reported use or sales of drugs were significantly younger at the time of their first delinquency and first violent act than boys who reported no drug use or sales. Drug use could not have led to violence and nonviolent crimes because these behaviors preceded drug-related offenses and activities. More than half the group did not admit to drugs, but willingly admitted to other kinds of criminal and violent activities. This precludes assuming that delinquency necessarily leads to drug use and sales. These findings are compatible with the interpretation that violence, delinquency and drug use are outgrowths of other possibly psychological, situational or economic factors but are not causally related to one another.

Study III

Boys who reported using drugs were more delinquent and violent than non-users by their own disclosures, but not according to officially documented offenses. Whether this discrepancy is a function of the test-taking response set or a reflection of incomplete court records is unknown.

Study IV

Only two demographic variables achieved statistical significance: drug users more often came from families who had higher annual incomes and who owned cars. Drug use also was greater among Whites.

Study V

Compared to nonusers, drug users reported greater family mobility, parental alcoholism and court appearances, more family dissent, less familial cohesion, and more involvement with peers. Users tended to rate family relationships more negatively than did nonusers.

Study VI

In their personality profiles, users rated themselves more emotionally disturbed than did non-users; however, the standardized objective measurements did not.

CONCLUSIONS

Among the court-adjudicated boys, drug use was preceded by delinquent behavior, and therefore could not have caused it. Family patterns and self-rating indicated an etiology of drug abuse and delinquency which warrants further study. No specific causal relationships were established in this sample group.

Friedman, C. Jack, and Friedman, Alfred S. Drug abuse and delinquency. Part II. Drug use in three groups of lower social class adolescent boys. In: National Commission on Marihuana and Drug Abuse. Drug Use in America. Problems in Perspective. Appendix, volume 1: Patterns and Consequences of Drug Use. Washington, D.C.: U.S. Government Printing Office, 1973. pp. 436-484.

DRUG	Multi-Drug
SAMPLE SIZE	388
SAMPLE TYPE	Incarcerated; Volunteer; Students; Treatment; Other
AGE	Adolescents
SEX	Male
ETHNICITY	223 Black; 65 White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Statistical Analysis; Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires; Police and Court Records; Psychological Tests
DATE(S) CONDUCTED	1966-1969
NO. OF REFERENCES	14

PURPOSE

As part of an examination of drug abuse and delinquency, researchers at the Philadelphia Psychiatric Center sought to determine the incidence, kinds, number and sequence of use of seven classes of drugs (marihuana, hallucinogens, heroin, barbiturates, amphetamines, cocaine and inhalants) among three groups of boys from lower class families. Four separate studies were conducted: (1) drug use patterns were examined for Black and White offenders and nonoffenders, and (2) correlated with crimes and gang activity, (3) violent and nonviolent offenses, and (4) routine nutritional and health practices.

METHODOLOGY

Four hundred and ninety-eight boys, 355 Black and 163 White, were selected from: (1) residential correctional institutions, (2) a community-based job-training program for high school drop-outs, and (3) a local inner city public school. The subjects were divided by program and race, and into offenders and nonoffenders. Subjects answered a comprehensive drug schedule questionnaire, and an extensive battery of psychological tests was administered. The drug questionnaire was scored dichotomously (ever-never), and scaled in terms of amount. An ordinal score was devised based on age of initial use to provide an index of the chronological sequence of use of alcohol and the seven classes of drugs relative to each other.

To compare offenders and nonoffenders, the above drug use scores were correlated with police records and subjected to chi-square analysis. Data on criminal and violent activity and gang involvement were taken from four types of measurement derived from police and court records, and the DCL self-report, amended to include information on gang affiliation. Self-report information was compared with police records of each subject's age at initial arrest for drugs and violent offenses, to yield time-sequence patterns and determine relationships between drug use and

initial arrest. The dichotomous and scaled drug use scores were computed with 210 item questionnaires concerning eating and sleeping habits, and weight fluctuation. Correlation coefficients were converted to t-values.

RESULTS

Incidence of Drug Use Among Offenders and Nonoffenders

The over-all incidence of drug use was found to vary according to the program from which subjects were selected. Boys in correctional institutions had the highest incidence of drugs (70%), and those in public school had the lowest (47%). Although there was no priority sequence, inhalants among Whites and barbiturates among Blacks generally precede hallucinogens, heroin and amphetamines, but alcohol chronologically precede drug use (except inhalants). The greater the overall drug abuse measure, the greater the number of reported antisocial, illegal and violent activities associated with the acquisition or with the use of drugs.

Drug Abuse in Relation to Illegal and Violent Activities, Drug-Related Crimes, and Gang Membership and Gang Violence

Users of all six classes of drugs more often had court and police records and also committed three or more offenses; boys who reported more frequent and extensive use of drugs also more often had court and police records and more often had three or more offenses on record. However, the frequency and extensiveness of drug use and use of the six classes of drugs were not related to whether the boy had a violent offense or more than one violent offense on official court and police records.

The findings concerning drug use and gang affiliation, activities and gang roles were unexpected. The boys who stated that they belonged to gangs, past or presently, reported more extensive drug use and greater use of all kinds of drugs. Their responses indicated that the gang leadership approved of drug use and incorporated use of drugs into other ongoing activities of the gang. Drug use also was found to vary according to the boy's role in the gang. The general picture that emerged was that the highest status members reported less drug use than the lower status members.

Time-Sequence Patterns

From the analysis of time-sequence patterns of drug use in relation to violent and nonviolent offenses from official court and police records, drug offenses occurred on the average significantly later than both the first offense, whether violent or not, and the first violent offense. Drug use, therefore, does not lead to or cause violent and nonviolent criminality, although there was a high degree of association between use of drugs and commission of violent and nonviolent offenses.

CONCLUSIONS

For this sample, there was no indication that use of any one drug leads to use of any others. The relationship between specific drug use and violent, criminal or gang behavior requires further clarification. The evidence indicates that drug use usually follows--and therefore could not lead to--delinquency, criminality and violence.

Glaser, Daniel; Inciardi, James T.; and Babst, Dean V. Later heroin use by marijuana-using, heroin-using, and nondrug-using adolescent offenders in New York City. The International Journal of the Addictions, 4(2):145-155, June 1969.

DRUG	Cannabis; Opiates
SAMPLE SIZE	706
SAMPLE TYPE	Adolescent Offenders
AGE	Adolescents (12-18)
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	Official Records
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	15

PURPOSE

The extent to which marihuana use leads to heroin use, the extent to which adolescent heroin use is continued in adulthood, and the extent to which adolescent nondrug delinquency is followed by heroin addiction in adulthood were examined.

METHODOLOGY

The sample consisted of arrested adolescents selected from the records of the New York City Youth Counsel Bureau. All the subjects were male and were referred to the Bureau in 1957 and 1962. All those alleged to be using marihuana, all those alleged to be using heroin, and a random sample of all those alleged to be delinquent or criminal who were not reported to be using drugs were included in the study.

Research consisted of checking records of these individuals in early 1968 in the New York City Health Department's Narcotics Register, for reports of heroin use after 1963; thus it provided a five-year and ten-year follow-up to determine how many of the 1957 and 1962 adolescents were alleged to be using heroin when more adult. The Register was based on reports received from 97 agencies (police, courts, correctional facilities, hospitals, clinics, etc.).

RESULTS

While half of the male adolescent heroin users had a heroin record five or ten years later, about 40% of the marihuana users also acquired a heroin record in the follow-up period. This tended to confirm the assumption of progression from marihuana to "harder" drugs for this sample.

CONCLUSIONS

It was concluded that among New York City male adolescents apprehended for relatively unadvanced delinquency, marihuana use was almost as portentous of adult heroin use as was actual use of heroin as an adolescent.

The results of this study differed from those of comparable studies (i.e., a follow-up study in Los Angeles reported a much lower percentage of heroin use for those adolescents previously arrested for marihuana use). It was suggested these differences were due to the extremely high concentration of heroin usage in New York City, as compared to other cities.

Most follow-up cases were on slum delinquents, therefore the authors were reluctant to generalize their findings to other social and cultural settings for marihuana use.

Gordon, Alistair M. Patterns of delinquency in drug addiction. British Journal of Psychiatry, 122(567):205-210, February 1973.

DRUG	Multi-Drug
SAMPLE SIZE	60
SAMPLE TYPE	Treatment (inpatient)
AGE	60 Adults
SEX	60 Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	London, England
METHODOLOGY	Cross-Sectional; Statistical Survey
DATA COLLECTION INSTRUMENT	Interviews; Laboratory/Examination; Official Crime Records
DATE(S) CONDUCTED	1970
NO. OF REFERENCES	11

PURPOSE

Patterns of drug use and criminality in users of heroin and other drugs were examined in patients at a London clinic to evaluate the impact of the British prescribing policy in the absence of coercive measures. Criminality was studied prior and subsequent to drug use.

METHODOLOGY

Subjects were 60 male patients who had commenced drug use prior to age 21. The mean age was 21.5, and the mean age of first drug use was 15.9 years. Patients were urine-tested, and interviewed regarding family background, scholastic and occupational history, drug and medical history, and criminal record. Interview data was supplemented by information from the Criminal Records Office and probation reports. Data were coded and subdivided into 29 predrug offenders and 31 postdrug offenders.

The information was used to subdivide the 60 subjects relating to drug history and forensic history. Subjects were also divided into those 30 using heroin as frequently as once per week in the month preceding interview, and the 10 who had not used any narcotic drug (heroin). Correlates were tabulated by number and percentage of the sample or its subdivisions.

RESULTS

Social class (determined by the father's occupation) and family size were not related to temporal patterns. Paternal loss, however, was significantly more frequent in pre-drug offenders (58.6%). Criminal conviction of a sibling, a main indication of family disturbance, was found in 34.5% of the predrug offenders and 32.2% of the postdrug offenders. For all subjects, 13% of the fathers, 13% of the mothers, and 10% of the siblings had a history of psychiatric illness.

Subjects with no convictions prior to drug use tended to have been more successful academically, but there was no difference between users and nonusers of heroin. Predrug and postdrug offenders and users and nonusers of heroin did not differ in employment stability.

All subjects were multiple drug users. All had used amphetamines, 95% had used marihuana, and 70% heroin. Progression did not differ between predrug and postdrug offenders. Of the 45 subjects (70%) who had ever been on methadone, 20 (33%) had maintained daily use for the month prior to this study.

Ninety-two percent had received a court conviction prior to treatment, 48% prior to drug use, and 90% subsequently. Of the predrug offenders, 72% had convictions for larceny (21 offenders, 47 offenses), and 17% for violent behavior (5 offenders, 7 offenses). Offense patterns were similar for users and nonusers of narcotics (heroin).

After drug use, larceny remained the most frequent offense: 72% were convicted of larceny (43 offenders, 92 offenses); 40% were convicted for violence (24 offenders, 35 offenses) and fraud convictions were obtained against 16.7% of the subjects (10 offenders, 16 offenses). After drug use, predrug and postdrug offenders did not differ in frequency; the pattern of offenses differed only with regard to larceny, which occurred in 83% of predrug offenders and 61% of postdrug offenders. The incidence of larceny was also greater among narcotics users.

Violent offenses rose from 17% before drug use to 40% after drug use, and became more serious: they included assault with weapons, bodily harm, robbery with violence, and malicious damage. In the narcotic group, offenders for violence rose from 13.3% to 53.2% after drug use; in the non-narcotic group the incidence of offenders for specific offenses showed no significant increase after drug use.

CONCLUSIONS

The drug use and criminality patterns of the sample emerge from a background of disturbance, characterized by parental (especially paternal) loss, unapprehended theft, and sibling criminality but not socio-economic deprivation.

With the onset of a drug habit, users with no previous convictions became indistinguishable in most aspects of behavior from predrug offenders, except for a lower incidence of larceny. The increase in numbers of violent offenders after drug use was mainly associated with narcotics use, although non-narcotic users also included a high percentage of violent offenders. This finding differs from other British surveys in this regard, and may reflect the sample studied: young male users.

The extent of delinquency in the sample indicates a predilection for illegal sources, and little acceptance of current prescribing policies. Some measure of coercion or external control seems necessary in this impulsive group if the aims of medical policy are to be fulfilled.

James, I. Pierce. Delinquency and heroin addiction in Britain. British Journal of Criminology. 9(2):108-124, 1969.

DRUG	Heroin
SAMPLE SIZE	50
SAMPLE TYPE	Incarcerated-Imprisoned
AGE	Adults (mean age 23.9)
SEX	Male
ETHNICITY	White
GEOGRAPHICAL AREA	London, England
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	1967
NO. OF REFERENCES	22

PURPOSE

Based on interviews, the relationship between delinquency and heroin addiction in a group of addicts in the London area was explored, as well as the reason why the North American experience might not be directly relevant to the British scene. The differences between the British and American approach to heroin addiction and the differences between British and American addict populations are noted.

Since 1960, British addicts have formed a young, London-based, socially unstable drug subculture. They are mainly White and United-Kingdom born, and are drawn from all social classes. They manage to obtain their drugs through medical prescriptions, and are much heavier users of heroin than are Americans--3 to 8 grains per day, usually in combination with other drugs (in contrast to an American average of one grain per day).

METHODOLOGY

Fifty "unselected" addicts in London prisons, none of whom had legal access to heroin, were interviewed in detail about drug habits, family background, health, and previous delinquency.

RESULTS

The mean age of the sample was 23.9 years, and all but one of the subjects were White. Fifty-four percent of the 63 total charges involved drugs, while the remainder principally involved property crimes. All the subjects had been addicted to heroin at some stage. Over three-quarters had also misused cannabis and amphetamines, and 66% admitted to regular or occasional use of barbiturates. Recent regular heroin misuse was reported by 38; 30 also reported recent

regular methedrine misuse.

Their family backgrounds were average. Although they were above average in education potential, their achievements were poor and few established any stable pattern of employment after leaving school. After addiction their social adjustment and job status deteriorated considerably. Marital stability appeared low. There was little evidence they were able to live useful lives on a medical regimen of heroin maintenance.

Twenty-two of the addicts had a history of juvenile court conviction and a further 16 had been convicted by adult courts prior to addiction to heroin. Ten of the subjects had been convicted only after becoming addicted. Only two had no convictions prior to the offense which brought them into the study. Of the 48 subjects with a history of prior adult court convictions, 6 of the addicts had previously been sentenced to imprisonment once, 4 twice and 13 more than twice. The great majority of those cases involved crimes of property.

CONCLUSIONS

There is abundant evidence of sociopathic personality patterns and delinquent conduct prior to addiction to heroin. Forty-four percent of the addicts had appeared before the juvenile courts and 76% had been convicted by a court before narcotic addiction. Most of the offenses committed by the group were of an acquisitive or irresponsible but non-violent nature. After addiction to heroin, there was little change in the type of offense involved except that almost one-third of the convictions were for drug offenses. Much of the larceny was of a petty nature. Although only heroin addicts remanded or sentenced to prison were studied, there are reasons for believing that this sample is not unrepresentative of the London heroin addict population as a whole.

Johnston, Lloyd. Drugs and American Youth. A Report from the Youth in Transition Project. Ann Arbor, Michigan: Institute for Social Research, University of Michigan, 1973. 273 pp.

DRUG	Multi-Drug
SAMPLE SIZE	2,200
SAMPLE TYPE	Students
AGE	Adolescents
SEX	Male
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Cross-Sectional
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires
DATE(S) CONDUCTED	1966 to 1970
NO. OF REFERENCES	53

PURPOSE

As part of a longitudinal study of adolescent males, the relationship of drug use and delinquency was explored through a questionnaire given to high school students. The original purpose of the study was to assess the causes and consequences of dropping out of high school. New research questions were added through the years. By the time of the 1970 data collection, illicit drug use had become a widespread phenomenon which the investigators felt they could help explain because of their unique in-depth information on the personalities, backgrounds and social environments of a large national sample. A short questionnaire on drug use was included in the 1970 data collection.*

METHODOLOGY

The original sample consisted of 2,200 10th grade male students who attended 87 different schools across the country. In 1970 most of the subjects had been out of high school for one year. The investigators were successful in locating and interviewing 71% of the original sample. Subjects were asked to complete a confidential questionnaire on the history of their use of tobacco, marihuana, amphetamines, barbiturates, heroin, hallucinogens, and alcohol.

A 21-item checklist, an adaptation of one developed and validated by Gold (1970), was used to explore general delinquency. The items ranged from fights with parents to crimes against property and other persons. The checklist is included in the report.

RESULTS

There was a strong positive relationship between delinquency and use of drugs in high school. The sample was divided into three groups based on Total Delinquency Score. The fifth of the

sample that reported the highest delinquency in the senior year also reported exceptionally high legal and illegal drug use during high school. The converse was true of the lowest fifth.

The sample was again divided into three groups based on drug use: no illegal drugs in high school; marihuana only; and more serious drugs. Although the groups showed large differences in delinquency during the senior year in high school, these differences could be traced back as far as the ninth grade, prior to onset of drugs.

CONCLUSIONS

The findings indicate that those who are more delinquent are more likely to become involved with drugs, but that the use of drugs does not increase delinquency. Becoming involved with marihuana also does not appear to lead to an increase in criminal behavior. If young people are to be encouraged to seek help with drug-related problems, the general view of drug-taking must be changed so that it is considered unhealthy, rather than immoral, behavior.

* The findings of this study on student's overall drug use and attitudes towards drug use are abstracted in Volume III of the Research Issues Series: Drugs and Attitude Change.

Mauldin, Jennifer; Bunn, Calvin; and Whittemore, Kenneth R. "Drug Abuse in a Delinquent Population: The Results of an Empirical Study." Paper presented at the 1972 annual meeting of the Georgia Sociological and Anthropological Society.

DRUG	Multi-Drug
SAMPLE SIZE	399
SAMPLE TYPE	Arrested Juveniles
AGE	Adolescents (12-18)
SEX	Both Male and Female
ETHNICITY	Black; White
GEOGRAPHICAL AREA	Fulton County, Georgia
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	Interviews; Laboratory/Examination; Official Records
DATE(S) CONDUCTED	1972
NO. OF REFERENCES	0

PURPOSE

The Division of Mental Health of the Fulton County, Georgia Health Department attempted to determine the extent of drug abuse in a juvenile delinquent population.

METHODOLOGY

Urine samples were obtained from 399 arrested juveniles as they were admitted to detention. If the juvenile with a positive urine result had not been released and was still in detention, a drug counselor interviewed him to evaluate his involvement with drugs and his need for medication.

RESULTS

Only 52 (13%) of the 399 urinalyses had positive drug results. Twenty-six (50%) of the 52 juveniles involved with drugs were Black males while only 4 (8%) were Black females, with the number of White males and females being about the same, 12 (23%) and 10(19%) respectively. Forty-six (88%) of those with positive results were 14 years of age or older compared to 254 (72%) of the negative population.

There was no significant difference in number of arrest records between those with positive urine results and those with negative results. However, there was a difference between groups in types of crimes committed. Addicts tended to be more apt to commit crimes for profit, and a larger proportion of drug users were arrested for drug offenses. The non-drug abuser was arrested more often for committing violent crimes, for being a runaway, and for violating traffic laws.

CONCLUSIONS

The study confirms the commonly held belief that the drug user contributes disproportionately to total juvenile arrests, as they relate to "crime for profit." However, drug users have a lower crime rate overall.

Polonsky, Dimitri; Davis, George F.; and Roberts, Chester F., Jr. A Follow-up Study of the Juvenile Drug Offender. Sacramento, Calif.: Institute for the Study of Crime and Delinquency, 1967. 35 pp.

DRUG	Multi-Drug; Marijuana
SAMPLE SIZE	866
SAMPLE TYPE	Juveniles With Drug Arrest Records
AGE	Adolescents (12-18)
SEX	712 Male; 154 Female
ETHNICITY	294 Black; 348 Mexican-American; 204 White; 20 Other
GEOGRAPHICAL AREA	Los Angeles, California
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis; Longitudinal
DATA COLLECTION INSTRUMENT	Questionnaires; Police Records
DATE(S) CONDUCTED	1965
NO. OF REFERENCES	9

PURPOSE

Some commonly held propositions concerning the causes and consequences of drug abuse were tested: (1) there is a relationship between drug involvement and other delinquency; and (2) there is a relationship between drug involvement and socio-economic background. The arrest records of 866 youths who had been arrested for drug involvement were studied for periods of four to six years from the time of their initial drug arrest.

METHODOLOGY

Subjects were 866 youths under the age of 18 who were arrested for the first time on a nonopiate drug charge during the years 1960 and 1961 (as reported by the Los Angeles City Police). The subsequent arrest records for each arrestee were followed up from the date of his initial drug arrest through December 1965.

Data were gathered on sex, ethnic background, age at initial arrest, socio-economic classification of area of residence, and prior arrest record. Data on subsequent arrests were categorized according to nature of offense, type of action taken, and disposition and sentence.

RESULTS

Subsequent Drug Arrests

Of the 866 arrestees, 57.9% had no subsequent recorded arrest for drug involvement. Thirty percent had subsequent marihuana and/or dangerous drug charges, and 12.1% were subsequently arrested for opiate involvement. These findings do not support the idea that a person cannot break involvement with drugs, and appear to contradict the notion that later opiate use is

necessarily a consequence of marihuana or dangerous drug involvement.

Subjects from less-than-standard environments had fewer subsequent arrests on drug charges and appeared less frequently in the three-or-more arrests category. Possible explanations were: (1) those from less-than-standard areas tended to be convicted more often and held in custody longer, diminishing their opportunities for further delinquent behavior; (2) they might be somewhat more clever at avoiding arrest; and (3) those from standard-and-above areas were less likely to be involved in delinquent behavior and thus more likely to be arrested on drug rather than nondrug charges.

Drug Offenses and Delinquency

Of the total arrestees in both cohorts, 41.8% had records of prior arrests; 42.1% were subsequently arrested on drug charges; 77.4% were subsequently arrested on nondrug charges; and 37.3% were subsequently arrested for both types of offense.

Those with prior arrest records were more likely to be subsequently arrested on drug charges, to be arrested more frequently for drug charges, and to be arrested for opiate involvement. They were also more likely to be arrested for nondrug offenses and to be arrested for more serious offenses. The arrestees generally were more likely to be arrested for nondrug than for drug offenses. In the group subsequently arrested on both drug and nondrug charges, no significant relationship was found between the numbers of the two types of arrest.

Overall, the data indicated that the presence of a prior record presaged a more delinquent career generally, incidentally including involvement with drugs. Those delinquent youth with continued drug involvement tended to come into conflict with the law more often for nondrug offenses, and to be arrested for more serious offenses, than those delinquent youth who were less involved with drugs. Of subsequent arrests, Mexican-Americans were more likely to be arrested for both drug and nondrug offenses; Negroes for nondrug charges. Females were less likely to be subsequently arrested on any charge than males, and then less often for nondrug charges. Older members were arrested for more nondrug charges than younger members.

Drug Offenders and the Legal Process

Positive action tended to be taken far more frequently toward those whose initial drug arrest was for a marihuana offense than with those involved with dangerous drugs. In 1960 the proportions were 63.0% and 51% respectively, and 57.7% and 43.6% in 1961. This may be a reflection of strong negative attitudes toward marihuana involvement at the time. Arrestees with a prior record of arrest and conviction were also much more likely to have had positive action taken on their first drug arrest. In this group, 68.3% had positive action taken, compared to 52.2% of those with no prior record, and 50% of those with an arrest and no conviction.

A relationship was further found between initial disposition and the substance involved in subsequent drug arrests. A prior record may therefore be the variable which strongly influences the action taken on the initial drug arrest, as well as tending to identify that individual who is more likely later to be apprehended for opiate involvement. Less than half of those subsequently arrested for opiate involvement received major sentences; this may have been a reflection of the greater difficulty of obtaining a solid conviction on a drug charge.

In general, the likelihood of action on a subsequent drug arrest was not found to be relative either to the number of subsequent drug arrests or the substance involved. For subsequent nondrug arrests, both number and seriousness appeared highly related.

CONCLUSIONS

Instead of saying that drug involvement leads to delinquent behavior, it would be better to say that delinquent youth frequently become involved with drugs as part of their delinquent behavior. The data raise some questions concerning previous suppositions of a relationship between lower socio-economic status and drug-related delinquency. A relationship between subsequent drug arrests and ethnic background, however, is shown. Finally, some evidence suggests differential patterns of official handling for those arrested on drug charges as compared to those persons arrested on nondrug charges.

Robins, Lee N., and Murphy, George E. Drug use in a normal population of young Negro men. American Journal of Public Health, 57(9):1580-1596, September 1967.

DRUG	Multi-Drug
SAMPLE SIZE	235
SAMPLE TYPE	Young Black Men
AGE	Cross-Age
SEX	Male
ETHNICITY	Black
GEOGRAPHICAL AREA	St. Louis, Missouri
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	1961
NO. OF REFERENCES	10

PURPOSE

This study was the first to describe drug use in a normal population, as ascertained by interview and record research. The methods used provided an approximation of the lifetime prevalence of drug use and drug addiction for the sample. Childhood variables that predict drug use and addiction were analyzed.

METHODOLOGY

Records were searched to evaluate adult adjustment of 235 young Negro men whose names had been selected from public elementary school records beginning 26 to 30 years earlier. The men were then interviewed as adults between the ages of 30 and 35. The sample was not selected according to particular drug use. Records were sought for all of the sample, and personal interviews were obtained with 95%. Criteria for eligibility for this study were: being male, born in St. Louis between 1930 and 1934, having attended a Negro St. Louis public elementary school for six years or more, having an IQ score of at least 85 in elementary school, and guardian's name and occupation appearing on the school record. There were 30 men in each of the eight categories created by taking all permutations of three dichotomized variables: father's presence or absence, guardian's occupation at the lowest level versus a higher level, and moderate or severe school problems versus mild problems or none. Interviews were obtained for 95% between June 1965 and August 1966. Most interviews were conducted in St. Louis; 12% were conducted in other towns and cities, and several took place in prison. The findings of this study applied only to the eligible population.

RESULTS

Surprisingly, one out of every ten of the sample had been addicted to heroin. Four percent had been treated in a U.S. Public Health Service Hospital, a higher figure than had been anticipated. No regular heroin user in the present population had escaped official attention; 86% had records as addicts with the Federal Bureau of Narcotics.

Findings substantiated arrest records. Very few men who denied drug use had had narcotics arrests. Cumulative lists of men arrested for drug violations were seen as providing fairly reliable lifetime prevalence figures for heroin addiction. Fourteen percent of the addicts reported having used heroin in the last year. Among men in the sample who had been in a U.S.P.H.S. Hospital, 22% reported current heroin use, and 44% reported use of other drugs only. These figures were similar to results of an earlier study by O'Donnell and Vaillant. In addition to the fact that 10% of the sample had been heroin addicts, 50% had used some drug illegally. Virtually everyone who used any drug used marihuana. Marihuana had served as the introduction to drugs for most of those who went on to other drug use. Half of the marihuana users never used any other drug, and 1/3 did not continue the use of marihuana for more than one year. The younger the person was when first using marihuana, the more likely he was to go on to heroin addiction. Marihuana appeared to be the most widely available and most widely used drug among both Negro men and Negro teenagers.

In regard to delinquency, delinquents were more likely than nondelinquents to start taking drugs, and once started were much more likely to use heroin. At the same time, 36% of the 62 delinquents reported no drug use at all, and 13% of the nondelinquents did use drugs. Exposure to drugs was evidently high in the entire population studied, whether delinquent or not.

Delinquency might be associated with drug use only because drug use itself is grounds for a juvenile arrest or because youths who are using drugs either steal to finance their use or act while under the influence of drugs in a fashion that leads to arrest. To demonstrate that delinquency predicts drugs use, and is not merely its result, the comparison was limited to men who were not yet using drugs at the time they first became delinquents. When men whose drug use began before their first delinquency or in the same year were excluded, there was still a significantly greater rate of heroin use ($p < 0.05$) and heroin addiction ($p < 0.01$) for delinquents than for nondelinquents, although the difference between proportions using any drug was not significant.

High school dropouts were found to be equally likely to try drugs, whether or not they were delinquent. However, the delinquent dropouts who tried drugs were much more likely to continue into heroin addiction. Almost half of the delinquent dropouts who ever used drugs eventually became heroin addicts. Among delinquents, almost the same proportions of dropouts and graduates used drugs, while among nondelinquents graduates were drug users only a little over half as often as were dropouts.

Fifty-six percent of delinquents without fathers at home became addicts, compared with only 14% of those whose fathers were never absent. The findings for high school dropouts alone were not significant. Among 18 drug users who were delinquent, dropouts, and whose fathers were absent, 61% became addicts.

CONCLUSIONS

While socio-economic status and elementary school performance did not prove predictive of drug use, dropping out of high school predicted experimenting with drugs, and delinquency and absent fathers predicted heroin addiction after the use of marihuana. The combination of an absent father, delinquency, and dropping out of high school characterized the group of boys most vulnerable to heroin addiction. This group appears to be a reasonable target for a program to prevent addiction.

Tinklenberg, Jared R., and Woodrow, Kenneth M. Drug use among youthful assaultive and sexual offenders. In: Frazier, Shervert H., ed. Aggression: Proceedings of the 1972 Annual Meeting of the Association for Research in Nervous and Mental Disease. Baltimore, Maryland: Williams and Wilkins Co., 1974. pp. 209-224.

DRUG	Multi-Drug
SAMPLE SIZE	152
SAMPLE TYPE	Incarcerated
AGE	Adolescents; Adults (18-22)
SEX	Male
ETHNICITY	Amerindian; Black; Mexican-American; White
GEOGRAPHICAL AREA	N. California
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews; Program/Clinic Statistics; Police Records
DATE(S) CONDUCTED	January 1971 to October 1972
NO. OF REFERENCES	11

PURPOSE

The intent of this study was to investigate possible correlations of kinds of crimes committed by male adolescent offenders with their patterns of drug preferences and drug use. Three categories of offense were designated: physically assaultive, nonassaultive, and sexual. Specifically, the attempt was made to ascertain whether certain drugs increased or decreased assaultiveness; which drugs were actually associated with a particular type of behavior; what were the drug preference patterns among the three kinds of offenders; and whether drug use patterns differed among the three kinds of offenders.

METHODOLOGY

A total of 152 male adolescents incarcerated at a moderate security facility were studied. These subjects, ranging in age from 15 to 22 years (mean age 18.5 years), represented some of the State's most serious offenders. Random samples were taken from two distinct populations: the clearly physically or sexually assaultive (50 and 22 offenders, respectively) and the non-assaultive who had committed other kinds of crimes and were considered "excessively delinquent" (80 offenders).

Data were obtained by interview and by concurrent analysis of official documents such as police and laboratory reports. Although distortion was possible, in cases where information gathered by interview did not closely correlate with recorded data, it was not used.

RESULTS

Results of the investigation are presented in tabular form. The first table shows use of 12 specific drugs. The highest percentage of all three kinds of offenders used alcohol at least

once, followed by marihuana and secobarbital. The nonassaultive group had the most extensive experience with all 12 drug categories when compared to assaultive and sexual offenders.

Table 2 shows multiple drug use, and Table 3, the median number of episodes of drug use. The nonassaultive group contained the most extensive users of more than one group at a time, followed by the assaultive group and then by sexual offenders. Nonassaultive offenders also had the most extensive experience with all 12 drug categories.

The fourth table is based on subjective interpretation by the offender as to his expectation of the drug which would enhance his assaultiveness. The striking finding is the high percentage of offenders of all three types who selected secobarbital. Almost 80 percent of the 36 secobarbital users of the assaultive group chose this drug as the one most likely to enhance assaultive tendencies. Anecdotal quotations were provided to illustrate the subject's emotional reactions to secobarbital. In the same table are juxtaposed data describing decreased feelings of assaultiveness. Marihuana, hashish, psychedelics and opioids were named in this context. Data on other kinds of drugs were considered less conclusive.

Three tables are presented to show the relationship of drug preference and expected decrease in assaultiveness. The nonassaultive offenders expressed the strongest preference for marihuana and hashish, and the sexual offenders expressed the strongest preference for psychedelics. The assaultive group, in contrast to the nonassaultive and sexual offenders, showed no close correlation of drug preference with expectation of decreased assaultiveness. Similarly, with respect to increased assaultiveness, the assaultive group data indicated no concordance between preference for certain drugs and expectation of increased assaultiveness.

Data on drug involvement at the time of the crime show that despite the variety of drugs available, alcohol was the drug most frequently involved in serious assaultive offenses. Secobarbital, alone or in combination, was second in rank. In 31 of 36 episodes of drug-associated assaultive crimes, alcohol, secobarbital or both were implicated. Marihuana, alone or in combination, was associated with six assaultive offenses and was reported as the most frequently used drug among the assaultive group. The use of amphetamines was reported in only two violent crimes, contrary to reports suggesting close ties between its use and violence. Nevertheless, assaultive subjects reported using amphetamines more frequently than secobarbitals.

Assaultive crimes were more often linked with drug states whereas sexual crimes were more often linked with a non-drug state. Alcohol was the only drug linked with a substantial number of sexual offenses.

CONCLUSIONS

Within the category of assaultive crime, alcohol was the drug most likely to be used, and secobarbital was widely used. The role of secobarbital in violence is less well-known than that of alcohol, but secobarbital was selected by the assaultive and sexual offenders as the drug which would most likely increase aggressiveness. Marihuana was less likely to be represented in assaultive crime and was selected by the assaultive group as the drug which would most likely decrease aggression.

With the assaultive group there were no clear correlations between drug preference and expectation of drug effects on assaultiveness, but with the nonassaultive and sexual offenders preferences were expressed in favor of drugs which were expected to decrease aggressiveness. These users may have preferred such drugs as LSD and marihuana because of a wish to control aggressive responses to their environment.

5. Crime and the Female Drug User

China's
Foreign
Trade

Ball, John C.; Levine, Betsy K.; Demaree, Robert G.; and Neman, Janice F. Pretreatment criminality of male and female drug abuse patients in the United States. Addictive Diseases, 1(40):481-489, 1975.

DRUG	Not Specified
SAMPLE SIZE	42,293
SAMPLE TYPE	Treatment (inpatient)
AGE	3,433 Adolescents; 38,760 Adults
SEX	32,418 Male; 9,875 Female
ETHNICITY	19,840 Black; 3,244 Mexican-American; 3,615 Puerto Rican; 15,037 White; 557 Other
GEOGRAPHICAL AREA	More Than Two Cities
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews; Program/Clinic Statistics
DATE(S) CONDUCTED	1969-1973
NO. OF REFERENCES	9

PURPOSE

Although it has been generally agreed that drug users are involved to a greater extent in criminal offenses than the general population, the etiology of such involvement is inadequately understood. Closely related are unresolved questions regarding the concentration of drug use and crime in metropolitan slums and sex differences in both types of behavior. To investigate this last issue, the difference in criminal behavior among male and female drug abusers within a treatment patient population was examined.

METHODOLOGY

Data obtained from a patient population were used because it was felt that it provided the most comprehensive information directly related to the issue of sex differences in criminality. The researchers also wished to focus on persistent drug users, rather than on occasional users, through the use of patient data.

Data on the patient population were obtained through the use of the Drug Abuse Reporting Program (DARP), a national treatment data base, available at the Institute of Behavioral Research in Fort Worth, Texas. DARP contains over 200,000 records on 42,293 drug abuse patients who entered treatment programs throughout the United States between 1968 and 1973. The records were obtained from each patient by personal interview upon admission to one of 50 treatment programs. A standard form, consisting of 94 questions pertaining to the patient's drug abuse history, family background, employment experience, and criminal history was used.

For this study, the entire cohort of 42,293 drug abuse patients was examined. The patient population consisted of approximately two-thirds minority group members--Black, Puerto Rican, or Mexican-American. Eighty percent of the patients were 30 years of age or younger, and 26% were under 21. Approximately 23% were female.

RESULTS

Out of a population of 41,530 drug abuse patients, it was found that 81.7% had been arrested prior to treatment. The East and West Coasts had higher prior arrest rates than the Midwest and South. The regional differences were statistically significant; 88% had prior arrests on the Pacific Coast, but only 71% in the Southeast. Of the 50 treatment programs, a majority reported that 80 to 89% of their patients had been arrested.

Marked differences in prior criminality between male and female drug abuse patients were noted. Of the 31,850 males, 86% were arrested prior to treatment, and most of those had been arrested more than four times. Of the 9,746 females, 77% had been arrested, but only 27% of these had been arrested more than four times.

Regarding length of incarceration, females were less likely than males to be involved in criminal behavior leading to extended jail terms. Only 30% of the female patients had been in jail or prison for a month or longer, and only 6% had been incarcerated for three years or longer. Statistics for males indicated that sizable numbers are deeply involved in a criminal life style. Of the male patients, 54% had been in jail or prison for more than a month, and 20% of these had been incarcerated for three years or longer.

CONCLUSIONS

The research findings indicate that a majority of the drug abuse patients were consistently involved in criminal behavior prior to treatment. Furthermore, these findings actually underestimate the extent of criminality, since a rather small proportion of criminal behavior results in arrest. The treatment of persistent drug abusers therefore requires considerable attention to penal rehabilitation as well as to the illicit consumption of drugs.

This study does not support the hypothesis that the smaller population of female drug abuse patients exhibits a greater deviance of "pathology" than the male patients. Male patients formed the predominant population, and their proportionate involvement in criminality also was greater.

File, Karen N.; McCahill, Thomas W.; and Savitz, Leonard D. Narcotics involvement and female criminality. Addictive Diseases, 1(2):177-188, 1974.

DRUG	Heroin; Morphine
SAMPLE SIZE	227
SAMPLE TYPE	Incarcerated
AGE	Adults
SEX	Female
ETHNICITY	163 Black; 64 White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis
DATA COLLECTION INSTRUMENT	Interviews; Laboratory/Examination; Criminal Records
DATE(S) CONDUCTED	1973
NO. OF REFERENCES	8

PURPOSE

As part of a larger study on narcotics and crime, the following questions were investigated in regard to female addicts and crime:

- Are there discrete patterns of criminality among female addicts?
- To what degree does the female addict engage in prostitution to meet her financial needs?
- What are the general criminal patterns among female addicts who do not engage in prostitution?

The hypothesis was examined that a female addict will either engage exclusively in prostitution or in a variety of other criminal activities; further, that the female addict will tend to choose prostitution because of the high financial rewards and low penal sanctions associated with it.

METHODOLOGY

The sample was drawn from all persons arrested during a ninety-day period in 1973 in Philadelphia. Of these, 1087 were females and 227 were female addicts. Demographic data were drawn from the pre-arraignment interviews given all arrestees, and police records were examined to obtain the legal category for all charges for each arrestee. Urine specimens were obtained from 70% of the sample.

Data were analyzed to yield information on addiction and prostitution, race and prostitution, race and type of offense, mean number and types of arrests, specific offenses for prostitutes and nonprostitutes, typology of criminal behavior, and number and types of arrests for prostitutes and nonprostitutes.

RESULTS

Prostitution accounted for 20% of all arrests for females. Twenty-one percent of these arrests involved narcotics, and forty percent of all arrested prostitutes were addicts, compared with 15% of the nonprostitutes. Prostitution involved 41% of all female addicts, but only 14% of female nonaddicts. Of all arrested females, 93 were prostitutes and addicts, 134 were addicts but not prostitutes, 119 were prostitutes, and 741 were neither addicts nor prostitutes.

In general, Black addicts were more frequently arrested than White, not only for prostitution but also for larceny, forgery, robbery, assault, weapons offense, homicide, and gambling. Prostitution was significantly associated with addiction among Black females. Of the 227 female addicts, 80 were Black prostitutes, 83 were Black nonprostitutes, 13 were White prostitutes, and 51 were White nonprostitutes. The 163 Blacks constituted 71.8% of the addicts, 86% of all prostitutes, but only 61.9% of all nonprostitutes.

Prostitute addicts were more frequently arrested than nonprostitute addicts for all categories of offense, engaging in a wide range of personal and property crimes. The female addict prostitutes were not less likely to commit nonsex crimes than the nonprostitutes.

CONCLUSIONS

Based on data analysis, a fourfold typology is suggested in place of current simplistic explanations of female addiction and crime:

1. Prostitute/Criminals--Prostitutes who have the highest overall arrest rate for prostitution and serious crime (one-third of sample, predominantly Black).
2. Prostitutes--Prostitutes with no history of serious crimes whose nonsexual charges are usually for possession of drugs (smallest group of sample, predominantly Black).
3. Criminals--Nonprostitutes who have been arrested for serious crimes (similar to Group 1 in arrest record, but predominantly White; the largest group).
4. Bag followers--Those who hold drug supplies for pushers and need not engage in prostitution or serious crime, and are not frequently arrested (generally White).

d'Orbán, P.T. Heroin dependence and delinquency in women--A study of heroin addicts in Holloway Prison. British Journal of the Addictions, 65:67-68, 1970.

DRUG	Heroin
SAMPLE SIZE	66
SAMPLE TYPE	Incarcerated
AGE	Adults
SEX	66 Females
ETHNICITY	64 White; 2 Black
GEOGRAPHICAL AREA	London, England
METHODOLOGY	Exploratory/Descriptive; Case Study; Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Court Records
DATE(S) CONDUCTED	Jan. '67 - June '68; Follow-up: Sept. '68
NO. OF REFERENCES	8

PURPOSE

Sociological, psychological, criminal, and drug use patterns of female heroin addicts in London's Holloway Prison were examined to explore the relationship between heroin dependency and delinquency in women.

METHODOLOGY

The sample group comprised all heroin addicts admitted to Holloway, a women's prison, from January 1967 to June 1968. Subjects ranged from 16 to 30 years old, with a median age of 20. Of the 66 women in the sample, 64 were born in the British Isles, one in the U.S., and one in New Zealand. Data obtained at interview were verified or supplemented by official records. Routine psychological tests were administered to most subjects. All were daily users of heroin and physically dependent upon it. A follow-up study was carried out in September 1968, with a view to a future long-term study.

Demographic data, psychiatric history and family pathology, patterns of drug use, patterns of delinquency, and disposal by the courts were examined. Although the sample was incarcerated, researchers regarded it as representative of the female London heroin addict population.

RESULTS

Subjects were found to be slightly above average in intelligence and predominately from professional and middle-class homes, or from the two lowest socio-economic classes. Ninety-one percent were unemployed upon arrest, and 82% had unstable employment histories. Seventeen percent had histories of psychiatric inpatient treatment prior to addiction and 50% after addiction, 30% having more than one admission to a psychiatric hospital. None was psychotic, and the usual

hospital diagnosis was personality disorder. In 62% of the sample, there was no family history of mental illness, alcoholism, drug dependency, or criminality, but 39% came from broken homes. The overall incidence of homosexuality was 48%, generally predating drug use.

All but one subject were multiple drug users; 29 used one other drug in addition to heroin, 23 used two other drugs, and 9 used 3 additional drugs. The peak ages for beginning use of drugs other than heroin were 16-17. Eighteen-nineteen were the peak ages for initial use of heroin. Seventy-nine percent procured heroin illegally. Prior to heroin use, 64% used marihuana and 65% used amphetamines. Eighty-eight percent used methylamphetamine injections along with heroin. Eight had a history of excessive alcohol consumption prior to heroin dependence, but stopped drinking after commencing heroin. In changing drug patterns, cocaine was replaced by methylamphetamine, and the use of LSD was diminished.

Seventy-seven percent had conviction prior to entering the study, and 86% by the end of the study. Seventy-eight percent of the first convictions and 61% of the last convictions were for nondrug offenses. Of the 51 subjects with court appearances prior to entering the study, 40% were convicted of larceny prior to addiction, and 37% afterward; assault increased from 9% to 13% following addiction. Of the current offenses, 55% were not drug-related, and included 32 accounts of larceny, and one robbery with violence. There was no alteration in the proportion of convictions for prostitution before and after addiction.

The follow-up study carried out in September 1968 indicated that 41% remained users of heroin and methylamphetamine, and 27% were in institutions of some sort. Two subjects died as a result of physical complications of drug dependence.

CONCLUSIONS

There was no evidence to suggest that heroin dependence formed an alternative path to other types of delinquent behavior; a delinquency preceded addiction and continued unchanged afterwards. No evidence suggested a causal connection between prostitution and drug use. Offenses involving aggression were uncommon, and usually involved minor violence in the course of arrest while intoxicated with methylamphetamine. The overall picture is one of petty delinquency, usually minor offenses against property, including shoplifting done impulsively.

The sample group showed more severe psychiatric abnormality than male heroin addicts, and came from disturbed backgrounds, but did not conform to any uniform social patterns. Three striking findings were the high incidence of broken homes, delinquency prior to addiction, and homosexual orientation. Severe personality disorders predated addiction which could be regarded as a symptomatic development in a long history of maladjustment.

d'Orbán, P.T. Female narcotic addicts: A follow-up study of criminal and addiction careers. British Medical Journal, 19(4):345-347, November 10, 1973.

DRUG	Heroin; Methadone
SAMPLE SIZE	66
SAMPLE TYPE	Post-Incarcerated Addicts
AGE	Not Specified
SEX	Female
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	England
METHODOLOGY	Exploratory/Descriptive; Longitudinal
DATA COLLECTION INSTRUMENT	Criminal Records; Drug History
DATE(S) CONDUCTED	1972
NO. OF REFERENCES	12

PURPOSE

A four-year follow-up study was conducted of female narcotic addicts in Britain who had first been examined in Holloway Prison during 1967 and 1968. Long-term follow-up studies of delinquent addicts were felt to be particularly important in elucidating the relationship between criminal and addiction careers, since there is much evidence of the association of these two factors in Britain and the United States.

METHODOLOGY

The sample comprised all women admitted to Holloway Prison from January 1967 to June 1968 who were found to be narcotic addicts. Social characteristics, history of drug use, and patterns of delinquency were described in the original study. A baseline follow-up was carried out in September 1968. In September 1972, data were obtained from the Drugs Branch of the Home Office on addiction status, deaths, and hospital admissions. Mean length of follow-up was four years eleven months. Data were analyzed to yield information on addiction careers, criminal careers, and the association of both.

RESULTS

Of the 63 subjects alive and still in Britain at the time of the baseline follow-up, 39 (62%) committed a total of 137 offenses during the subsequent four years of follow-up. Drug and property offenses accounted for over two-thirds of the offenses. There was some increase in violent crime, but this was not significant.

Addiction and crime ran a parallel course for over three quarters of the sample in the four years of follow-up. Thirty-three subjects committed further crimes and 30 remained addicted for at least two years, and the two types of behavior coincided in 25 cases (46%). For 30% of the sample, both delinquency and addiction ceased. Whether addiction or crime occurred first had no significant influence on the outcome.

CONCLUSIONS

The follow-up study confirms the original finding that prostitution is not causally related to addiction in British female addicts: none of the subjects who was not previously involved in prostitution engaged in it during the follow-up period. The parallel association between addiction and criminal careers is in keeping with the maturation hypothesis; less than a quarter of the sample continued one form of deviancy without the other. The only significant predictor of outcome was the number of previous convictions for the subject.

The findings do not support the view that addiction causes crime. The close association of addiction and crime found in this study is more in keeping with the hypothesis that the two are parallel effects of personality traits and environmental factors which lead to socially deviant behavior.

Winick, Charles, and Kinsie, Paul M. The Lively Commerce: Prostitution in the United States.
Chicago: Quadrangle Books, 1971. 320 pp. (238 References)

PURPOSE

Over a ten year period more than 2,000 people were interviewed to analyze every level in the network of prostitution and the communities affected. Only sections dealing with drugs and prostitution are abstracted here.

RESULTS

It has been mainly since 1939 that drugs have been associated with prostitution. This situation appears to be an outgrowth of the change in controls in the business of prostitution. The disappearance of the protective atmosphere of the brothel and the madame could be a reason for the prostitute's move toward drug addiction.

Females: Characteristics of Addict Prostitutes

Certain large cities were centers for addict prostitutes because of the availability of drugs. Nearly 50% of the prostitutes in big cities were addicted to drugs, and few reported that their work was in any way hampered by the use of drugs. Most clients were not aware that the prostitute was on drugs.

Many women reported that onset of addiction occurred simultaneously with entry into prostitution. Based on the evidence, the usual order of occurrence could not be stated with any accuracy. However, a New York study showed that drug addicted prostitutes made up 8.5% of those arrested as first offenders, 25.5% of those with five arrests, 52% of those arrested from 11 to 15 times, and 70.8% of those charged more than 20 times as evidence of the possibility that drug use precedes prostitution.

The addict prostitute appeared to follow a pattern which involved periods of abstinence followed by drug use and prostitution and back again to abstinence. Many prostitutes left prostitution when they reached their thirties, a cycle which coincided with the tendency of drug addicts to move away from addiction around the age of 35. Prostitutes may be leaving the field when they no longer have a habit to support.

Males

Many male prostitutes were addicts attempting to support their habits. Adolescent males frequently used this method to buy drugs. Use of amphetamines and marihuana was found among male prostitutes. Over the past 40 years, pimps have been known to be drug addicts using the prostitutes to pay for their own habits. Pimps interviewed for this study frequently sold drugs to the women they employed.

Use of Heroin

The addicted prostitutes preferred heroin, but they offset the resulting emotional apathy by combining heroin with cocaine for an added boost. Heroin has been found to impede psychotic symptoms and allow users to function nearly normally. This would allow prostitutes with severe psychological problems to perform their jobs with minimal pressure and strain.

By relaxing anal sphincter muscles, heroin has also been reported to aid in anal intercourse. Male prostitutes reported that shooting up with heroin before having sexual relations helped prolong the erection.

Zahn, Margaret A., and Ball, John C. Patterns and causes of drug addiction among Puerto Rican females. Addictive Diseases, 1(2):203-213, 1974.

DRUG	Heroin; Multi-Drug
SAMPLE SIZE	12
SAMPLE TYPE	Treatment (inpatient); Post-Incarceration
AGE	Adults (range: 27-59)
SEX	Female
ETHNICITY	Puerto Rican
GEOGRAPHICAL AREA	San Juan, Puerto Rico
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Program/Clinic Statistics; Urine Specimen; Criminal Records
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	14

PURPOSE

A host of variables are interwoven into varying drug patterns, with socio-economic status and attendant differences in lifestyle being especially important in explaining such patterns. Two types of drug use, medical and nonmedical, were examined among females with the two variables of race and place of residence controlled. Data were analyzed for medical and nonmedical addiction patterns, including employment and criminal history, patterns of addiction among relapsed subjects, and drug use associated with prostitution and crime.

METHODOLOGY

The sample was drawn from an original follow-up study of 242 former patients from Puerto Rico who were admitted to Lexington Hospital between 1935 and 1962. Of these, 12 female addicts living in Puerto Rico were interviewed after leaving Lexington Hospital. Other data were obtained from hospital medical records, criminal records both in Puerto Rico and the United States, interviews with relatives and friends, and a urine specimen obtained at the time of the life history interview. Medical addicts were those whose addiction was characterized by use of legal drugs obtained from medical sources (nembatal, demerol, and morphine).

RESULTS

The median age of the sample at the time of interview was 31 years. Eight of the 12 were married or living in common law relationships. Two were employed; the rest classified themselves as unemployed or as prostitutes. Seven were considered lower class, the rest middle or upper class. Average level of education was 9.3 years. Four were medical addicts; eight were non-medical addicts.

None of the four medical addicts had a criminal history, had used heroin, or even marihuana. Demerol was used by three of the four. Furthermore, all were from the middle class.

The eight nonmedical addicts, characterized by use of illegal drugs and association with criminal activities, started using drugs at an earlier age than did the medical addicts, and came from the lower class. None were legally employed at the time of the follow-up, and seven out of the eight were prostitutes. In four cases, prostitution preceded onset of drug use by an average of five years, and apparently served to introduce them to drugs.

All the nonmedical addicts had some criminal record; the number of recorded offenses was 84, with the median number of offenses being six. Many of the offenses were drug-related, and a drug-related offense was also the most serious offense for most. Most first arrests were for possession of drugs. In two cases the first arrest was for breach of peace, which preceded drug use. In two cases, onset of drug use and first offense occurred in the same year. In four others, drug use preceded a criminal record, and these four were all cured of their addiction following Lexington admission. The four cases (33% of the entire sample) in which crime preceded or was coterminous with start of drug use all relapsed subsequent to hospitalization. Average number of years incarcerated post-addiction was 3.75, including time spent at Lexington; all entered Lexington as prisoners.


All four relapsed subjects were using an average of 2-3 bags of heroin daily (at a cost of \$20 to \$100), and the major source of income was prostitution. Three of the four had begun prostitution before starting drugs.

CONCLUSIONS

Examination of the medical and nonmedical patterns of addiction suggests that certain variables, especially social class, affect the adoption of varying drug use patterns. For some addicts, drug use is an accompaniment to an already criminal way of life or an otherwise deviant career. For others it may represent conformity to sex role expectations, i.e., acting in deference to husbands who are addicted or wish to help their wives with health problems, or acting the general female patient or health-seeking role.

The problem of relapse may be partially explained by the accessibility of drugs, but is probably accompanied by other reasons, such as lack or disruption of meaningful human ties.



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**The Impact of
Treatment
Modalities**

The World Bank
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Alexander, Michael, and McCaslin, Catherine. Criminality in heroin addicts before, during, and after methadone treatment. American Journal of Public Health, 64(Suppl):51-56, December 1974.

DRUG	Methadone; Heroin
SAMPLE SIZE	118 of 160
SAMPLE TYPE	Treatment (inpatient)
AGE	Mean age 23.9
SEX	65% Male, 35% Female
ETHNICITY	59% Black, 41% White
GEOGRAPHICAL AREA	Atlanta, Georgia
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	Interviews, Arrest Records, Experimental Tests
DATE(S) CONDUCTED	(1972)
NO. OF REFERENCES	28

PURPOSE

The criminal activity of 118 addicts enrolled in a methadone treatment program in Atlanta, Georgia, was studied to evaluate: (1) changes in criminal activity related to the onset of addiction; (2) kinds of crimes committed by addicts; (3) the effect of treatment on criminal activity; and (4) criminality in addicts who have left the treatment program, including comparisons of readdicted and non-readdicted persons.

METHODOLOGY

The source of the study population was 230 heroin addicts who entered the methadone treatment program in Atlanta, Georgia, in December 1971. The program used both maintenance and detoxification, based on length of addiction. One year later, 68 (30%) remained in treatment, 23 (10%) had completed methadone detoxification, and 139 (60%) had left without completing treatment. Of these, 160 patients were selected for intensive study, including all those who remained in treatment or had completed detoxification (91) and a random sample of 69 (to match in number those remaining in treatment) of the 139 who had left treatment.

In the base study population of 160, mean age was 23.9 years and mean duration of addiction prior to entering treatment was 12.9 months. This group was 65% male, and 59% Black, 41% White. Criminal records were obtained for 118 from the Atlanta Police Department and the Georgia Crime Information Center. Only these 118 were included in the analysis.

Self-reported date of onset of addiction was recorded for 101 of the 118 addicts for whom criminal records were found. Crimes were classified in relation to the onset of addiction, if known, and in relation to the time of entering, being in, or leaving treatment.

Arrest charges were grouped as: (1) minor crimes; (2) drug misdemeanors; (3) property felonies (burglary, auto theft); (4) violent felonies (murder, rape, robbery, aggravated assault); (5) drug felonies; and (6) thefts (other than burglary and robbery). Rates of arrests, convictions, and the specific charge groupings were tabulated as number of events per hundred man years.

Statistical methods included Chi-square, Fisher's exact test, Student's t-test, and analysis of variance. Two-tailed tests were employed to compensate for clustering bias introduced by using a stratified sampling technique. Criminal rates were compared by using a variation of the binomial distribution testing the likelihood that a given rate for a given length of time in a group of given size would occur by chance. Findings were considered significant if p values were <0.05 .

RESULTS

Criminality Prior to Treatment

Significantly more addicts remaining in treatment (84%) had criminal records than did addicts leaving treatment (67%) or completing detoxification (61%).

Comparing pre- and post-addiction criminality before treatment, minor crimes were significantly less frequent and drug felonies significantly more frequent after onset of addiction. No other differences were significant.

When criminal rates in the one- to two-year period prior to entering treatment were compared with the year prior, significant increases were found for minor crimes, misdemeanors, property felonies, drug felonies, arrests, and convictions. There were no significant increases in violent crimes or thefts.

During the year prior to entering treatment, those persons destined to leave treatment and become readdicted had higher rates of minor crimes and arrests than those not readdicted. None of the intreatment rates were significantly different, and after leaving treatment, readdicted persons had significantly higher rates of minor crime charges, property felony charges, arrests, and convictions.

Effects of Treatment

During the year immediately preceding entrance into treatment--probably the best reflection of the kinds of crimes committed by addicts--50% of the criminal charges were for drug law violations, 2% for violent crimes, 22% for property crimes. A total of 76% of the total charges were for victimless crimes or misdemeanors. When the effect of treatment was analyzed by comparing the year prior to entering treatment with the time in treatment, no changes were apparent, except for nonsignificant increases in arrests and convictions. For those who had left treatment or completed detoxification, a significant change occurred in an increase in minor crimes after leaving treatment.

CONCLUSIONS

None of the findings provide unreserved support for the notion that addiction causes crime. However, the findings concerning the kinds of criminal charges before treatment are similar to those of previous studies: the vast majority were comprised of misdemeanors and property crimes.

Admission and short-term retention in a methadone program did not guarantee criminal rehabilitation, a finding that contrasts sharply with the results of most other studies. There is little evidence of reduction in criminal activity of addicts while in treatment. After treatment, non-drug misdemeanor charges significantly increased over intreatment levels. The reason for the disparity is unclear, and measures of pretreatment criminality do not suggest that the differences in findings between this and other studies are attributable to differences in amount of criminality between the populations studied.

Berecochea, John E., and Sing, George E. The effectiveness of a half-way house for civilly committed narcotics addicts. The International Journal of the Addictions, 7(1):123-132, 1972.

DRUG	Opiates
SAMPLE SIZE	405
SAMPLE TYPE	Treatment
AGE	Not Specified
SEX	Male
ETHNICITY	Black; White; Other
GEOGRAPHICAL AREA	Los Angeles, California
METHODOLOGY	Exploratory/Descriptive; Longitudinal
DATA COLLECTION INSTRUMENT	Not Specified
DATE(S) CONDUCTED	1967
NO. OF REFERENCES	13

PURPOSE

Halfway houses are perceived by correctional planners and administrators as a basic correctional modality. The effectiveness of a California halfway house (Parkway Correctional Center) was tested in regard to its two major goals: (1) continued abstention from drugs, and (2) control of readdiction and return to criminal activities.

The Parkway Halfway House, Los Angeles, had 405 admissions in the 1968-69 fiscal year. Eighty-five percent were from the institutional stage and 15% from the outpatient stage. The daily average population was 44, and the average length of stay 22 days.

METHODOLOGY

A number of addicts from the institutional phase could not be placed in the center due to overcrowding. This part of the sample was composed of 44 men who were eligible for, and in need of, halfway house placement, but who were rejected only because of overcrowding. These rejectees were compared with 44 men who were accepted into the program over a period of a year following release from the California Rehabilitation Center. The major criterion was "satisfactory" completion of one year on outpatient status. Patients who were suspended from the program for drug use, arrest or new convictions, were placed in an "unsatisfactory" category.

RESULTS

The differences between the two groups on detected drug use and criminal convictions were small and not statistically significant, though more of those placed in the house had been convicted of a misdemeanor crime and more had been detected as having used drugs. An unsatisfactory outpatient status was found for 91% of the placements and 84% of the rejectees. Of the placements,

25% had new convictions for misdemeanors and 11% for felonies, as opposed to 16% and 11%, respectively, for the rejectees.

CONCLUSIONS

Experiences at other halfway houses suggest that environments may not be conducive to addict rehabilitation. Strict supervision and surveillance apparently were among the factors responsible for the failure of the patients to improve at any significantly higher rate than parolees who could not make use of the halfway house. It is not known whether the same situation existed at the Parkway Halfway House, but regardless of the situation, its overall measured effectiveness in terms of drug use and new crimes was nil.

Bloom, William A., and Capel, William C. An exploratory study of the relation of heroin addiction to crime in New Orleans. In: Proceedings of the Fifth National Conference on Methadone Treatment. Washington, D.C., March 17-19, 1973. Vol. I. New York: National Association for the Prevention of Addiction to Narcotics (NAPAN), 1973. pp. 123-132.

DRUG	Heroin; Methadone
SAMPLE SIZE	519
SAMPLE TYPE	Treatment (inpatient); Private Clinics; Other
AGE	Adults
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New Orleans, Louisiana
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Questionnaires; Program/Clinic Statistics
DATE(S) CONDUCTED	1969-1970
NO. OF REFERENCES	5

PURPOSE

Criminal records of patients in methadone therapy, program dropouts, and nontreated street addicts in New Orleans were compared to determine the impact of therapy upon criminal patterns. Three aspects of the addict-crime relationship were examined: (1) the amount of overall crime committed; (2) predictions of criminal behavior; and (3) limitations on success of crime control that must be anticipated.

METHODOLOGY

A total of 519 addicts were surveyed in various studies. Of these, 89 were street addicts under no treatment program, and 430 were in methadone treatment at two private clinics. Of these, the median age was 31.7 years, and 112 had no police record.

Data were analyzed in relation to the amount of crime committed prior and subsequent to entering methadone programs, and arrest prior to first use of heroin. Crimes were categorized according to FBI designations as serious and nonserious. Self-report was checked against police records. Behavior patterns were analyzed between patients still on clinic rolls and dropouts, and all methadone subjects were compared with nonprogram street addicts.

RESULTS

Before and After Studies

Fifty-four percent of the persons continuing in the program at the time of the study, and 69% of the dropouts and street addicts, had an arrest record prior to their first use of heroin.

Prior to beginning methadone treatment, a rate of 1.7 arrests for serious crimes was recorded for the continuing subjects who had arrest records prior to use, versus a rate of 1.04 crimes for those with no criminal record prior to use. The dropout group committed 1.49 and 1.54 serious crimes prior to and following heroin use respectively. The street group figures were 1.62 and 1.68.

Following methadone therapy, a significant reduction in serious crimes occurred. Those continuing in the program showed a drop from 1.13 to .11 crimes per person.

Predictive Variables: Age

The curve for crime rises after age 15, with nonserious crime peaks at ages 18-20. The 24-25 age group committed the highest number of serious crimes (nearly 45%). If heroin use began at this age, the first arrest was most likely to be for a serious crime than at any other age.

Persistence of Sub-Culture Deviance Patterns

For a group of individual subjects, selected at random from one clinic, arrest histories were checked as far back as 1962. Deviancy patterns of traffic violations, assault, and disturbing the peace were found. These patterns persisted following treatment. A considerable amount of crime committed by treatment patients was committed by a relatively small group of addicts who persisted in the behavior patterns followed prior to beginning the program.

CONCLUSIONS

While addiction may drive some persons to criminal acts, in this study persons already in a deviant subculture displayed old acquaintance with crime. Methadone therapy does not seriously retard previously established antisocial behavior in these groups. It is also possible to make these certain observations:

1. When large numbers of heroin addicts are transferred to methadone in controlled clinics, the overall crime rate (by arrest and self-report) decreases, particularly with regard to serious crimes.
2. Age is a predictive factor in criminality.
3. Methadone maintenance will affect very little the life styles of persons in a deviant subculture as long as it is possible for the subculture to maintain its system of social rewards and punishments within the clinic setting.
4. The original causal forces that led to addiction are not appreciably touched by simple administration of this particular drug.

Attrition patterns further suggest that clinics may select for nondeviant patients for whom prognosis is favorable.

Brill, Leon, and Lieberman, Louis. Authority and Addiction. Boston: Little, Brown and Company, 1969. 318pp.

DRUG	Heroin
SAMPLE SIZE	200
SAMPLE TYPE	Probationaries; Treatment
AGE	Adults (18-64)
SEX	Male
ETHNICITY	White; Non-White
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Exploratory/Descriptive; Longitudinal
DATA COLLECTION INSTRUMENT	Criminal Records; Program/Clinic Statistics; Questionnaires
DATE(S) CONDUCTED	c. 1966
NO. OF REFERENCES	140

PURPOSE

Probationary addicts at the Washington Heights Rehabilitation Center were studied to evaluate the success of the program in achieving "true rehabilitation" or permanent change. The Center exemplified the idea of judicious application of "rational authority" through coercive techniques and the effect of reaching-out or "aggressive" social casework. Whereas other treatment approaches tend to be either punitive or medical-psychiatric, the Center stressed joint management by probation officers (coercive) and caseworkers (permissive), demonstrating how a private agency can borrow authority from the court.

The Center also did not insist on immediate abstinence from drug abuse as a condition for participation.

METHODOLOGY

The sample was composed of two groups of 100 males who were put on probation for narcotics convictions between 1964 and 1965: the Joint Management Group (Group I), supervised by the Center and Office of Probation; and the Specialized Probation Group (Group II), supervised entirely by the Special Narcotic Unit of the Office of Probation. Group II served as a control group for Group I. It received traditional probationary attention but was grouped in smaller caseloads. All patients began in a drug-free state, and a one-year period was designated for followup.

In terms of demography, Group II was somewhat older than Group I (median age of about 21 years vs. 19 years), and was more predominantly White than non-White (52% vs. 11% White). No significant educational background difference was ascertained.

It was acknowledged that the goals of rehabilitation encompass middle class values. This was justified on the basis of the similarity of these goals to most rehabilitation programs.

Multiple criteria were used to evaluate patients' progress rather than the frequently used single criteria of abstinence alone. Among these, four evaluation indices (work, drug use, criminality, and social conventionality) were measured at different times in order to determine whether a successful change had occurred.

Work Index. Two variables studied to indicate change in employment were: (1) amount of work over a 12 month period prior to treatment during which the patient was available to work in the community; (2) stability--the patient's ability to hold a job and adapt to the work situation.

Drug Use Index. This index was necessarily limited to use of heroin as the drug which is most illegal to obtain. Other drugs were included under secondary drug use and not used as criteria for evaluation.

Criminality. Information for this index was gained from official documents and interviews. Number of arrests (for one year prior to admission to the program and for one year during the program) was selected as a variable for the index of criminal involvement. Invalid reasons for arrest (i.e., police harassment) were acknowledged. (More than one-half of all arrests of drug addicts in New York in 1965 did not result in conviction.) The number of convictions, number of types of illegal methods used to obtain drugs to support a habit, and number of criminal activities unrelated to drugs were additional variables.

Social Conventionality. Based on the notion that boredom plays a role in causing an addict's return to drugs after detoxification, it was decided that an important area of rehabilitation is the area of conventional leisure-time activities. Participation in designated activities was rated. A second area on conventionality was based on the idea of growing financial responsibility on the part of the addict toward his household. A third part of this index was the importance for the addict of making nonaddict friends.

RESULTS

Work. In this area Group I appeared somewhat more successful than Group II. In Group I, 38% improved while only 23% improved in Group II, possibly because of more intensive efforts of trained caseworkers.

Drug Use. For both groups there was considerable success in moving the addict toward abstinence, although the addition of caseworkers and public health nurses appeared to have made no apparent difference in affecting a greater success rate. The success rates for Groups I and II, respectively, were 61% and 58%; the failure rates were 39% and 41%. These figures, as well as those for an "improved" category, indicate that joint management appeared slightly more successful than traditional probation control, although the difference was not necessarily significant.

Criminality. As in the area of drug use, there appeared to be little difference between Groups I and II. In Group I, 67% improved, while in Group II, 63% improved. When a "stayed well" category was combined with an "improved" category, Group I could be considered successful in 77% of the cases and Group II in 78% of the cases. In both groups a considerable number improved. Success was attributed in part to the desire of the probationer not to lose his probationary status by being rearrested or reconvicted and also because smaller caseloads permitted closer supervision of both groups.

Conventionality. There appeared to be very little difference here between the two groups, although in Group I a higher percentage continued to stay well than in Group II. Successes in Group I were 71% compared with 60% in Group II.

CONCLUSIONS

Within the four designated areas of movement for Groups I and II, the greatest improvement was in the area of criminality, attributed in part to the patients' greater incentive. In all four areas, the differences were not great enough to indicate that either Group I or Group II had been much more successful than the other; however, a good deal of success was achieved. The directions of the movement, especially with respect to diminished heroin use, are positive signs that if similar programs were able to offer longer treatment, there could be further steps toward abstinence.

Of greatest import was the finding that desired behavior changes may take place either before or independently of abstinence. This confirms the belief that the process of moving an addict from addiction to complete abstinence entails a lengthy procedure which requires tolerance on the part of the rehabilitative agency for repeated relapses to drug abuse. Continued reinforcement appears necessary, primarily through the patient's continued affiliation with the facility.

The consistent and conscientious use of "rational authority" was the main factor which produced the changes for both groups within the context of the officer-probationer relationship. The high failure rate for prisons and their costly expense to society should be examined in comparison with the greater effectiveness rate of alternative programs such as that of the Washington Heights Rehabilitation Center.

Brotman, Richard, and Freedman, Alfred. A Community Mental Health Approach to Drug Addiction. Washington, D.C.: U.S. Government Printing Office, 1968. 137 pp.

DRUG	Multi-Drug
SAMPLE SIZE	253
SAMPLE TYPE	Treatment (inpatient)
AGE	Adults (age 14 to 74)
SEX	Male
ETHNICITY	36% Black; 39% Puerto Rican; 24% White
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	Summer 1962 to Spring 1965
NO. OF REFERENCES	50

PURPOSE

The life styles and criminality of addicts before and after admission to a hospital therapeutic treatment program were examined to determine specific behavioral changes. Four fundamental adaptive life style orientations were analyzed in terms of conventionality and criminality, ethnic and sociological distributions, treatment expectations, and other variables to determine the relationship of adaptive type to rehabilitation prognosis. Hospital staff attitudes shaping the treatment milieu were included in the evaluation of the program's effectiveness as a detoxification, decriminalization, and rehabilitation facility.

METHODOLOGY

The research design included a longitudinal study of a sample of drug users as they went into, through, and out of the Metropolitan Hospital program. A 50% sample of all admissions to the narcotics addiction wards at Metropolitan Hospital, New York City, was used. This sample was stratified on the basis of order of admission (even admissions one day, odd the next) and by season, approximately one-quarter of the sample being drawn from each season from the summer of 1962 through the spring of 1963. A sample of 253 male voluntary patients was selected for the patient sample, and, in addition, 33 staff members, 61% of the total, were studied. Patients and staff were interviewed using one or more of six instruments.

On the basis of the interviews covering demographic variables (employment, family relationships, leisure activities, recent criminal acts, and criminal-social relationships) subjects were indexed according to four types of adaptations: (1) conformist, highly involved in conventional life and not significantly involved in criminal life, (2) hustler, highly involved in criminal life and not significantly involved in conventional life, (3) two-worlder, highly involved in both types of life, and (4) uninvolved. Findings are presented by adaptive type. Subjects were

also ranked high or low in terms of conventionality and criminality, categories related to adaptive type. High and low criminality were dichotomously scored by no criminal behavior, or one or more criminal acts.

Indexes of criminal involvement included incidence of criminal-type acts recently engaged in to support the habit, weighted according to the required degree of involvement in a criminal network. Drug use and possession were not included, being common to the sample population. Criminal-social relationships were scored according to the number of friends or associates in criminal occupations or with whom subjects engaged in joint criminal activity. These scores were combined in a composite index of criminality, ranging from zero to 19, and divided into high and low dichotomous scores on the basis of a median split. Conventionality indexes were devised similarly.

Subjects were also asked about their primary goals and expectations regarding treatment, including psychiatric change, alteration in life style, and/or controlled drug use. Following discharge, subjects were evaluated for changes in life patterns including criminality.

Staff members were interviewed and their responses analyzed in terms of attitudes toward drugs, addicts, and addiction, moral and social judgments, and therapeutic goals. This information formed the basis for analysis of the treatment milieu. The therapeutic program was tentatively evaluated in terms of its rehabilitative goals, including decreased criminal behavior, cessation of violent or dangerous crimes, and reduction of recruitment of others into addiction and criminality.

RESULTS

The age of the sample ranged from 14 to 74: Fifty-six percent were between the ages of 21 and 30; 20% were under 21. Thirty-nine were Puerto Rican, 36% Black, and 24% White. Seventy percent reported that their fathers were blue collar workers. The median school grade completed was the 9th grade; however, 61% had some high school. Eighty-three percent were diagnosed as having personality disorders, and 13% as schizophrenic.

The median length of addiction was slightly over five years, ranging from several months to 48 years, with onset of addiction occurring at age 18. The median number of previous detoxifications was five. Approximately three-quarters of the addicts had been in jail or reform school; both drug and nondrug violations were assumed.

When the most stringent criteria for adaptation types was employed, 47% of the sample deviated in some way. However, Whites were least likely to be conformists, and most likely to be uninvolved, or hustlers, while Blacks were most likely to be conformists, and least likely to be hustlers.

When stringent cutting points were used to divide high and low values, 3% were conformists, 12% were uninvolved, 4% were two-worlders, and 81% were hustlers. Using median splits between high and low values, 23% were conformists, 21% were uninvolved, 25% were two-worlders, and 30% were hustlers.

Using the median split distinction, 55% of the sample scored high in criminality, indicating at least one criminal activity depending upon a network, or else two or more nonnetwork crimes. Fifty-five percent of the sample scored high in criminal-social relationships, and had at least one friend with a criminal occupation or one criminal partner.

Of all four adaptation types, conformists were lowest in criminal behavior: sixty-three percent had no police records since becoming addicted, 46% had never been in jail or reform school, and 80% denied that fear of arrest influenced hospitalization. For two-worlders, these figures were 29%, 28%, and 50%; for the uninvolved, 24%, 20%, and 62%; for hustlers, 14%, 12%, and 50%.

Conformists were primarily younger or older addicts; of these, 26% were ashamed of using drugs, and 64% claimed that their neighbors did not know of their habit. By contrast, less than 10% of the total sample were ashamed of their habit, and 71% of the hustlers' neighbors knew of their habit.

While diagnosis was not related to adaptative type, the evidence suggested that addicts involved in activities and social relationships (conventional or deviant) were less severely disturbed.

The uninvolved were the most likely to have a heavy heroin habit combined with other drug use, while two-worlders tended simply to have a very heavy heroin habit (\$35 or more daily). Hustlers ranked close in each regard; conformists were least likely to use drugs of any sort heavily. Thirty-nine percent of the two-worlders became addicted before age 21; 40% of the conformists became addicted at age 22 or older.

Most of the subjects in all groups were motivated to enter treatment by an urge to control or end drug addiction, rather than by an urge to alter their life style. Similarly, 75% of the staff considered staying off drugs to be the primary goal of therapy.

After discharge, 75% of the subjects indicated that treatment had done them good. Follow-up interviews indicated a much stronger negative relationship between conventionality and criminality than that obtained at the time of admission. When subjects were reclassified as to adaptive type, 32% were classed as conformists and as hustlers, 26% two-worlders and uninvolved, and 18% mixed. High conventionality was more likely to be associated with low criminality after discharge than just prior to admission. Upon admission, 18% of the sample reported no recent criminal activity, but 45% reported no criminal activity at the time of the follow-up interview. Criminality was related to drug use at the time of follow-up: 69% of those not using drugs reported decreased criminality; 42% of the former patients who relapsed into drug use reported decreased criminality, but 27% reported increased criminality. Hospitalization was also correlated with a decrease in conventionality, from 28% to 36%, as well as a decrease in criminality from 44% to 16%.

CONCLUSIONS

Although most of the discharged patients saw themselves as successfully helped by the hospital, they felt they had post-hospital problems, including those involving drug use. Evidence indicates that addicts do tend to become less criminal for a while, even if they are not cured; however, this may be a temporary side-effect of abstinence from drugs for a time following treatment.

If rehabilitation is considered a fundamental goal, then the decrease in conventionality following hospitalization suggests that the hospital program does not accomplish this aim in long range terms. However, the goals of habit reduction and detoxification--goals characteristic of both patients and staff members--can lead to an improved social adaptation for addicts in terms of lowered criminal involvement. They can reduce, at least temporarily, the number of crimes committed to support large habits. It would appear that the hospital program serves as more of a detoxification and decriminalization agency than as a rehabilitative or conventionalizing facility.

Chambers, Carl D.; Taylor, W.J. Russell; and Moffett, Arthur D. The incidence of cocaine abuse among methadone maintenance patients. The International Journal of the Addictions, 7(3):427-441, 1972.

DRUG	Cocaine, Heroin, Methadone
SAMPLE SIZE	173
SAMPLE TYPE	Treatment (outpatient)
AGE	Cross-Age
SEX	Both Sexes
ETHNICITY	Black; White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Case Studies
DATA COLLECTION INSTRUMENT	Laboratory/Examination
DATE(S) CONDUCTED	December 1969
NO. OF REFERENCES	23

PURPOSE

This paper reports on the development of a simple and reliable urine screening method to detect the presence of cocaine in the urine of methadone maintenance patients, and the results of the surveillance that was made possible by the procedure. "Cocaine cheaters" were compared with "noncheaters" on various demographic, personal adjustment, and deviant behavior dimensions, including criminality.

METHODOLOGY

A urine screening method, involving the separation of cocaine from methadone during the thin-layer chromatographic process using cation exchange paper, was developed at the Clinical Pharmacology-Toxicology Center at the Philadelphia General Hospital. It permitted an assessment of the abuse of cocaine among the 173 heroin addicts participating in an outpatient methadone maintenance program located at the Philadelphia General Hospital during December 1969. The 32 methadone maintenance patients who were detected as cocaine "cheaters" and the 141 patients who were not abusing cocaine were compared statistically.

RESULTS

A rather high incidence of cocaine abuse appeared among methadone maintenance patients in general--18.5% had abused cocaine at least once during a 30-day study period. The statistical comparison of the cocaine "cheaters" and "noncheaters" produced a number of significant differences, as well as some which were not statistically significant.

Cocaine abuse was significantly related to the age of the addict-patients. While a majority of the 173 maintained addict-patients were under the age of 35, among the 32 cocaine abusers,

62.5% were over 35; 60.3% of the nonabusers were under age 35. Only 12.4% of those addict-patients under age 25 were abusing cocaine while 26.3% of those age 35 or older were detected as "cheaters."

Cocaine abuse was found to be significantly related to the continuation of criminal activity while undergoing treatment. These analyses revealed that 39.1% of all those addict-patients who continued a criminal involvement, e.g., theft, gambling, etc., were also abusing cocaine. Only 9.9% of the "noncheaters" were criminally involved, but 28.1% of the cocaine "cheaters" had remained involved in illegal activities.

There were no significant differences in arrest histories. However, those addict-patients with the most extensive arrest histories more frequently were among the cocaine abusers. Only 10.0% of the addict-patients with no arrests were detected cocaine abusers while 19.6% of those with arrest histories were abusers. This difference may be an artifact from the age difference between cocaine abusers and nonabusers.

Cocaine abuse was significantly related to the employment status of the addict-patient at the time of admission into treatment, to length of drug taking career, race and marital status. Those addict-patients who were maintaining a legal work role at the time they sought treatment were cocaine "cheaters" significantly less often. Only 18.8% of the cocaine abusers had been working at the time of admission, compared to 44.7% of the nonabusers. Of all addict-patients who were working at the time of admission, only 8.7% were found to be "cheating" with cocaine during the study period, while 25.0% of those who had not been working were detected as cocaine "cheaters."

In regard to the length of the addict-patients' drug-taking careers, 81.3% of all the cocaine "cheaters" had been abusing drugs for a minimum of 10 years before entering this methadone maintenance program. This compares with 53.2% of all "noncheaters." Only 8.3% of all the addict-patients with abuse histories of less than 10 years were cocaine "cheaters," but 25.7% of those with more than 10 years were detected abusers of cocaine.

While the total maintained population was 54.4% White and 41.6% Black, the cocaine cheating subpopulation was only 34.4% White and 65.6% Black; only 10.9% of the White addict-patients were found to be abusing cocaine, but 29.2% of the Blacks were.

Addict-patients who were abusing cocaine were more likely to be divorced or separated than the nonabusers. Over 40% of all the cocaine abusers were found to be either divorced or separated, as compared to 10.8% of the single addict-patients and 16.0% of the addict-patients with intact marriages.

Characteristics and attributes which did not produce differences that were statistically significant included: sex differences, differences in prior treatment histories, and differences in treatment and adjustment characteristics.

A composite of the addict-patient with the highest incidence of cocaine abuse would be: a Black male over 35 years of age who had been a heroin addict more than 10 years and who had continued to abuse other drugs and engage in criminal activities after being stabilized.

During the subsequent 30-day period, when the addict-patients first became aware their urine was being analyzed for detection of cocaine, the incidence of detected cocaine decreased to 10.4%, a statistically significant decrease which appeared to be a permanent decline.

CONCLUSIONS

The decline in cocaine "cheating" has been attributed to the confrontation of the addict-patients with their urine test results. If it is an accurate interpretation that such a confrontation can produce a decline in drug abuse behavior among methadone maintenance patients, it would be the most significant result of this research.

An adequate surveillance of methadone substitution programs must include tests for cocaine as well as for barbiturates, amphetamines and opiates. Future analyses must focus upon different patterns of use in the various programs and attempt to relate these differences to programmatic, client population, subcultural, or other differences.

Collins, William P., and Kelly, William P., Jr. Methadone treatment and crime reduction--Differential impact: An analysis and a case study. In: Senay, Edward; Shorty, Vernon; and Alksne, Harold, eds. Developments in the Field of Drug Abuse. Cambridge, Mass.: Schenkman Publishing Company, 1975. pp. 144-147 (No References)

PURPOSE

In this abstract of a conference presentation, the literature on the effect of methadone maintenance treatment on criminal behavior is briefly reviewed and the weaknesses of present research analyzed. Summarized below are the authors' conclusions and recommendations.

SUMMARY

The literature on methadone's relation to crime has been generally enthusiastic. It has been asserted that methadone is an all but near panacea in reducing the criminal behavior of addicts undergoing treatment. More importantly, however, the literature appears with rare exceptions to assert further that methadone has a generally equal impact on all patients regardless of demographic characteristics, socio-economic status or prior criminal behavior patterns.

Several papers prepared for various drug abuse conferences have highlighted a number of methodological problems in these reports. One of the points raised is the great discrepancy between self-reported and officially reported arrests. Another notes that self-reported arrests and officially reported arrests are not nearly identical. Such findings do not reflect favorably upon that portion of methadone research which relies heavily upon subjective interview data to report criminal behavior.

A second source of consternation in previous research has been the difficulty in comparing crime rates across incomparable time periods. The problem arises when it is observed that the period before treatment may equal at the minimum fourteen to eighteen years, while the period after treatment is not likely to exceed four years for most treatment programs. This temporal incomparability makes it impossible to draw adequate conclusions attesting to methadone's direct relation to crime reduction. From this observation one can only argue that methadone may or may not have a direct impact on criminal behavior rather than being able to argue it has a direct effectiveness in reducing or increasing total crimes or certain types of crimes.

A final problem has consistently escaped the domain of previous research. The previous literature concerning methadone's therapeutic value as an agent of crime reduction has been prone to attribute the reduction of arrest rates of heroin addicts under treatment solely to the programmatic inputs of methadone treatment. No consistent consideration has been given in these studies to the intervening effects of demographic characteristics or prior criminal behavior. Intervening variables such as race, age, sex, income, education and job status have been characteristically ignored by all but a small number of studies. Such a research strategy has made possible the general view found in the literature that methadone directly and solely leads to a decrease in criminal behavior, and that its effects are in the main constant across differing types and classes of individuals.

Methadone programs should shed their cloaks with regard to crime control claims and admit that treatment inputs are not solely responsible for controlling crime, and further admit that methadone's impact on criminal behavior is quite limited among those addicts who possess criminal behavior patterns which predate heroin usage. The bulk of the overall problem, however, is the general impression held by most of the relation between heroin and crime, i.e., all addicts who engage in crimes do so because they use heroin and must finance their expensive habits. This perception is unwarranted. Many addicts' orientation to and continuation of criminality may be associated with entities other than heroin addiction. Thus, despite the fact that methadone allegedly removes the "crime to get money for dope" syndrome, it does not follow that the crime of all patients is reduced.

Cuskey, Walter R.; Ipsen, Johannes; and Premkumar, T. An inquiry into the nature of changes in behavior among drug users in treatment. In: National Commission of Marihuana and Drug Abuse. Drug Abuse in America. Problems in Perspective. Appendix, vol. 4: Patterns and Consequences of Drug Use. Washington, D.C.: U.S. Government Printing Office, March 1973. pp. 198-357.

DRUG	Multi-Drug
SAMPLE SIZE	103
SAMPLE TYPE	Treatment (inpatient); Treatment (outpatient)
AGE	Not Specified
SEX	Male
ETHNICITY	Black, White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania; Eagleville, Pennsylvania
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	1970-1972
NO. OF REFERENCES	27

PURPOSE

It is difficult to remain objective about the problems of drug addiction in the present atmosphere of hysteria. Little has been done to solve the problem, and lack of knowledge as to what programs work and why, is compounded by a welter of conflicting data and claims. This study measured the impact of different treatment modalities on various aspects of behavior in sample populations, including criminal behavior.

Currently, there are four main modalities employed in treating heroin addicts. These include: abstinence and detoxification, therapeutic community, methadone maintenance, and antagonists. All claim some degree of success, but the lack of clearly defined criteria and goals, gaps in information, and a high attrition rate make these claims difficult to substantiate. Three types of treatment centers that have several common premises were examined: a methadone maintenance program (St. Luke's), a group therapy program (Eagleville), and a non-medication, community self-help project (Gaudenzia House). They all provided some form of therapy, and tried to redeem the addicts at least socially; to break their dependence on heroin; and to treat the root problems of which they saw drug abuse as a symptom.

METHODOLOGY

The sample was composed of a cross-section of 103 male subjects: (1) 30 patients (admitted between 1970 and 1972) at Gaudenzia, Inc., (2) 32 patients (admitted in October 1972) at St. Luke's Outpatient Clinic, and (3) 41 patients (admitted between 1970 and 1972) at Eagleville Hospital.

Each sample was divided into three groups representing length of participation: Period I (0-2 months); Period II (3-9 months); and Period III (more than 9 months). All were interviewed to collect data on some 120 attributes antecedent to entry, e.g., family background, work history, arrest history, etc. These results were related to two periods: before and after start of drugs.

They were also associated with length of stay in program. Variables that occurred after treatment, called change variables, were similarly studied and tabulated, e.g., extent of drug use, employment status, arrest record, etc.

Since almost all information was collected in personal interviews, and cross-validation was not possible, there was the possibility of a subjective bias on the part of both subject and interviewer. Treatment program officials were also interviewed to gain information about program structure.

FINDINGS

Gaudenzia

A community-based, self-help therapeutic community founded in 1968 in Philadelphia, Gaudenzia asserts that the addict is inadequately prepared "emotionally" to deal with the world, and must build a new self from the inside out. The program emphasizes the goal of eventual re-entry. While in the residency phase, the addict participates in therapy sessions and work training programs.

The sample had high criminal and police records even before starting drugs. Ninety-three percent had been arrested previously, at an average age of 16.4, with an average of 6.2 arrests apiece. Sixty-seven percent had been convicted, at an average age of 18.2, spending an average of 1.9 years in prison. The start of drug abuse led to greater criminal involvement, though prior delinquency was already high. Arrests per person jumped from 2.6 to 6.3, and first convictions went from 13% to 53% after. Convictions rose from 2 to 2.1 apiece. Changes in criminal behavior as a result of treatment reflect the fact that people in a residency center are not out on the street. The Period III group showed zero offenses; Period II had only one arrest, and 10 people in Period I admitted to offenses in the previous three months, for which three were arrested.

St. Luke's

A methadone clinic for ambulatory addicts, which began operation in 1970, St. Luke's program is based on the belief that methadone can reduce the harmful social effects of heroin abuse, but, as an addictive drug, should only be used with long-term addicts. In addition to dispensing methadone, the program provides group therapy and a variety of counseling services.

Criminal history for this sample was also high (44% had their first arrest before drugs), but criminal activity increased with onset of drugs: average arrests rose from 5.3 to 6.6; and first convictions rose from 28% to 46%. Average convictions rose slightly, from 2.2 to 2.5. Except for a possible decrease in drug-related arrests, there was little change in criminal behavior during treatment, perhaps because of the fact that the addicts returned to the street. Subjects admitting to offenses in the prior three months actually increased from 18% in Period I to 33% in Period III.

Eagleville

Eagleville is a hospital-based therapeutic community that began treating alcoholics in 1964, and added drug addicts in 1969. Its philosophy is similar to Gaudenzia's, though it does not require the same degree of motivation on the part of the addict. Inpatient treatment is the heart of the program, which moves from detoxification to half-work, half-therapy, outpatient or halfway house, and several more steps. The program provides a broad range of medical and psychiatric services in addition to the therapeutic environment.

Criminal records for this sample were also high. Eighty-eight percent had previous arrests, first occurring at 15.6 years, with an average of 5.6 per patient. Seventy-nine percent had previous convictions, beginning at 15.6 years, for an average of 3.1. The average number of both arrests and convictions went up after starting drug use, and while only 34% were convicted before drug use, a larger proportion had their first conviction after they started drug use. Changes during treatment again showed Periods II and III completely crime free, while there was considerable criminal activity in Period I--12.1 offenses per person who admitted to them, of which 14% were drug-related.

Combined Analysis

The differences in criminal history between the groups were not spectacular. The Period III group, however, had its first arrest later than the other two groups, although it was a more delinquent group based on age at first conviction. A quarter of all subjects received first convictions for drug related crime, but Period I was higher in first convictions for violent crime.

The effect of drug use on criminal history showed that 52% of addicts had their first arrest before drugs, and 40% after. A better test, however, was average number of arrests, and these jumped from 4.8 before to 7.6 after. There was a similar upward trend in convictions, demonstrating an upward trend in criminal involvement following onset of drugs.

Changes in criminal behavior during treatment showed a general decline, reflected best in the drop in arrest figures (dropping from 26% in Period I to 13% in Period II, to 5% in Period III). Drug-related arrests were 17% for Period I, but only one person was arrested in Period III.

Multivariate Analysis

The arrest rate increased dramatically for White subjects compared to Black subjects after starting drug use, although the number of arrests clearly increased after starting drug use for both races. This suggests that either Blacks have perfected a system for eluding arrest in spite of their use of drugs or possibly also get arrested at an unusually high rate even before they start using drugs.

An analysis of the type of crime for which subjects were arrested showed a considerably higher proportion of subjects arrested for possession of drugs at their first arrest after they had started using drugs. What was, however, noteworthy and probably contrary to existing notions, was the observation that a lesser proportion of subjects was arrested for theft, burglary, armed conflict, assault and battery after starting drug use. This was true for both races. Thus, there was a clear change in the composition of crimes for which the subjects were arrested, if their first arrest took place after they had started using drugs. There was also a tendency noted among both races to be arrested more often for crimes of a less violent nature after the onset of drug use.

CONCLUSIONS

The sample indicated a pre-disposition for criminal behavior, which existed prior to the onset of drug use. The two drug-free therapeutic communities showed a drastic reduction in arrest rates, while the methadone maintenance center showed little change in criminal behavior except for a decrease in drug-related offenses. The increase of offenses in the last period of treatment reflects frustration over the job situation, and the need for job training.

The treatment programs demonstrate a clear improvement in the addicts' lives. They recommend: (1) allocation of funds to establish more drug-free therapeutic communities, rather than the present emphasis on methadone programs, (2) modification of methadone programs to include an initial residency phase when temptation is highest, (3) greater emphasis on preparing the addict for re-entry into the outside world, especially with job training and equivalency educational programs, and (4) attrition, follow-up, and longitudinal studies to study the problems of re-entry and relapse.

DeLeon, George; Holland, Sherry; and Rosenthal, Mitchell S. Phoenix House: Criminal activity of dropouts. Journal of the American Medical Association, 222(6):686-689, November 6, 1972.

DRUG	Heroin
SAMPLE SIZE	358
SAMPLE TYPE	Inpatient addicts; Treatment program dropouts
AGE	Adolescents, Adults (range 14-52)
SEX	85.2% Male; 14.8% Female
ETHNICITY	White, Black, Spanish
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Arrest Records
DATE(S) CONDUCTED	1970
NO. OF REFERENCES	3

PURPOSE

The relationship between criminal activity and residency in a Phoenix House therapeutic community for heroin addicts was explored. Arrest rates were determined one year prior to and one year following residence for a sample of addicts who failed to complete the program. Comparisons were made with data on a sample of addicts who remained and were in the last stages of the program.

METHODOLOGY

The subjects were 358 of about 1,000 residents of Phoenix House. One group, referred to as dropouts, was composed of addicts who had left the program against clinical advice between January 1, 1968 and March 31, 1969, and for whom reliable arrest data could be obtained one year prior to and following their residence. The dropouts were further subdivided into voluntary and nonvoluntary participants. A second group, referred to as the remained, consisted of 104 residents who were in the last stages of the program as of August 1969. Their mean length of stay in residence was 22 months; more than one-third of this group lived and worked off-premises, while the remaining two-thirds were still in residence.

Average age at admission for both groups was 27.0 (range 14-52). The total sample was 85.2% male, 14.8% female, and multiracial, with a lower percentage of Spanish to White and Black in the remained (18.3% vs. 43.3% and 38.4%) as compared to the dropout group (30.7% vs. 30.3% and 39.0%).

The sample of 254 dropouts was drawn from the files of the clinical data unit for the central statistical unit of the Addiction Services Agency, New York City, the parent organization of the Phoenix Program. (All names in the study were checked against the files of the Narcotics Register, Department of Health, New York City.) Arrest rates were compared for the period one

year prior to the individual's date of entry into the program, and one year following his dropout date. For the remaining group, the observation period was from entrance data to January 1970. This was compared to the same number of months before entrance into the program.

RESULTS

Arrests During Residence

For the full dropout group of 254, the arrest rate prior to the program was 49.2%, but only 2.8% during residence. For the remaining group, the decrease was from 45.2% before the program to 4.8% during residence.

The crime rates during residence were artifactually high. The few arrests reported as during residence occurred while the addict was temporarily out of the program against clinical advice. Over a 4½ year period, only two individuals were arrested while actually in residence.

Arrests Following Residence

For the entire dropout sample of 254, the arrest rate after residence was 31.1%, well under the before-program level of 49.2%. Among dropouts who had voluntarily entered the Phoenix program, the largest decrease in arrests was seen for subjects who remained more than 12 months. Even greater and more consistent decreases in arrest rates after the program occurred across all subgroups of nonvolunteers irrespective of their time in the program.

For the entire dropout group, disregarding voluntary or nonvoluntary status, the percentage decrease in arrests following residency was: less than 3 months, 17%; 3-11 months, 40 to 50%; more than 12 months, 70%, as long as one year after leaving the program. For comparison, the remaining group showed an overall reduction of 90% after 22 months in the program.

CONCLUSIONS

The present data are impressive in demonstrating that criminal activity, at least as reflected in police arrests, is profoundly modified in addicts who are, or were, residents in a Phoenix Program therapeutic community. The data from the nonvolunteer subjects seem to suggest that dramatic decreases occur in the more incorrigible addicts, i.e., those who display the highest before-program arrest rates and were referred to the program by the state.

The modification of the criminal behavior of the addicts observed in the present study may be attributed to their being socialized while in the Phoenix Program. The older repeating offender, typically the nonvolunteer subject, would be more amenable to the demands for change pressured by the program. The lesser degree of modification of the post-program arrest rates of the Spanish residents may suggest that the Spanish drug addict is furthest removed from the cultural middle and less accessible to change.

Dole, Vincent P.; Nyswander, Marie E.; and Warner, Alan. Successful treatment of 750 criminal addicts. Journal of the American Medical Association, 206(12):2708-2711, December 16, 1968.

DRUG	Heroin; Methadone Hydrochloride
SAMPLE SIZE	863
SAMPLE TYPE	Volunteer; Treatment (inpatient); Treatment (outpatient)
AGE	Adults (20-50)
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Program/Clinic Statistics; Arrest and Conviction Records
DATE(S) CONDUCTED	Jan. 1964-June 1968
NO. OF REFERENCES	6

PURPOSE

The success of the expanded Dole-Nyswander methadone maintenance treatment program as carried out at Rockefeller University Hospital and the Beth Israel Medical Center, New York, was examined by studying all patients admitted between January 1964 and June 1968. The goal of the program was to end the criminal activity of heroin addicts and assist them in becoming productive members of society by establishing (in a well-supervised program) tolerance to methadone to blockade the action of heroin.

Treatment consisted of three phases. Phase 1 was a six-week in-hospital period of bringing the patient to a blockading dose of 80 to 120 mg methadone. In Phase 2 patients were discharged to the outpatient clinic, and initially required to receive daily doses at the clinic except on weekends. Progressively less frequent clinic visits were permitted as justified by good conduct. Urine specimens were required at each clinic visit. This phase continued for at least one year. Phase 3 was reached when the patient had become a stable and socially productive member of the community as proven by one year of normal life in the community, including acceptable employment, school attendance, or homemaking, and no further problems with drugs or alcohol. Subjects were then treated as ordinary medical patients, with treatment continuing as in Phase 2. Since discharged patients experienced a return of narcotic drug hunger and most reverted to heroin usage, patients remaining in the program were not withdrawn from methadone medication.

Supportive services were provided according to the needs of the patients, most frequently to the slum-born, minority group criminal addict, who often came to the program out of jail with no vocational skills, no family, no financial resources, and the handicaps of racial discrimination and police records.

METHODOLOGY

Subjects were 863 addicts ranging in age from 20 to 50 with at least a four year history of mainline heroin use and repeated failures of withdrawal treatment. Further requirements were that they entered the program without legal compulsion, had no major medical complication, and were New York City residents. Prior arrest and conviction records were obtained, and measures of the addicts' criminality and social productivity recorded from admission.

RESULTS

A majority of patients stopped heroin use completely after starting treatment. In a group of 174, urine analysis three times weekly during the first year of treatment showed 55% without a single positive for self-administered narcotics. About 15% of the patients continued to use heroin intermittently. They tended to be isolated, schizoid individuals.

Prior to treatment, 91% of the patients had been in jail, with at least 4,500 convictions (for felonies, misdemeanors, and offenses). This was a rate of 52 convictions per 100 man-years of addiction. Of the patients in the treatment program, 88% showed arrest-free records, and the majority were productively employed, living as responsible citizens and supporting families. Of the remaining 12%, 5.6% were convicted of criminal offenses, making a total of 51 convictions or 5.8 convictions per 100 man-years. While the statistics for the treatment period were considered to be essentially complete, the pre-treatment arrest/conviction record was not, and the overall reduction in crime was therefore estimated to be at least 90%.

All patients removed from treatment by imprisonment were discharged from the program, subject to reinstatement upon release from jail. Twelve percent of the original admissions were reported as failures, and most were discharged for antisocial behavior or nonnarcotic drug abuse (including alcoholism).

CONCLUSIONS

The overall success in making addicts into citizens shows that an apparently hopeless criminal addict may have ambition and intelligence that can work for--rather than against--society when his pathological drug hunger is relieved by medical treatment. The high rate of social productivity cannot be attributed to the medication alone, which merely blocks drug hunger and narcotic drug effects; it also testifies to the devotion of the staff of the methadone program and the ambition of the ex-addicts.

Possibly for the individuals reported as failures, more elaborate programs which combine blockage treatment with psychotherapy and sheltered environment might have succeeded. For patients who remain drug-oriented in their thinking in spite of the blockade of euphoric effects, the staff, while not encouraging such behavior, recognizes the possibility that self-experimentation with continued sporadic heroin use may be a necessary self-educational step in the extinction of conditioned reflexes that underlie drug-seeking behavior and should not be regarded as a failure of treatment.

Dole, Vincent P.; Robinson, J. Waymond; Orraca, John; Towns, Edward; Searcy, Paul; and Caine, Eric. Methadone treatment of randomly selected criminal addicts. The New England Journal of Medicine, 280(25):1372-1375, June 19, 1969.

DRUG	Heroin; Methadone
SAMPLE SIZE	165 Total; 18 Subsamples
SAMPLE TYPE	Incarcerated; Imprisoned Addicts
AGE	Adults (18-64)
SEX	Male
ETHNICITY	Cross-Cultural
GEOGRAPHICAL AREA	New York, N. Y.
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Interviews; Observations; Program/Clinic Statistics
DATE(S) CONDUCTED	1968
NO. OF REFERENCES	5

PURPOSE

In a test with inmates from the New York City Correctional Institute for Men (Rikers Island), an attempt was made to: (1) distinguish the preliminary and subsequent steps toward an effective motivation of criminal addicts for methadone treatment, and (2) determine how such a motivation could be induced in a sample of convicts without prior interest. The test also questioned whether the treatment initiated under such conditions would be effective in rehabilitation and elimination of criminal behavior

METHODOLOGY

Motivational Study

Subjects were inmates who had been heroin addicts for five or more years, had records of five or more previous convictions, and were not already committed to the custody of the Addiction Services Agency. Notices were posted in the cell blocks stating that representatives of a post-release methadone treatment program would explain the procedure to groups of inmates who met the above criteria. Inmates were then brought to interviews during the first month by the assignment officer of the prison. The program was explained and it was emphasized that application would bring no social privileges. The inmates were permitted to refuse without penalty. After the first month, requests came from the prisoners, but no one who had previously applied for methadone treatment or corresponded with the office of the methadone program was included in the study.

No effort was made to reach any who did not apply for a personal interview, and they were classified as completely unmotivated. Everyone who did apply (116 out of 165 seen) was accepted, on the condition that he reaffirm his interest by reporting to the intake office of the methadone

program at Beth Israel Medical Center within six weeks after release.

Treatment Categories

Eighteen inmates with release dates between January 1 and April 30, 1968, were chosen by lottery to begin treatment the last 10 days of their prison stay. The first 12 of these were designated the early treatment group, with the other 6 as alternates. Untreated controls were those not selected in the lottery whose release dates fell in the same period, and who showed continued motivation by reporting to the intake office after release. Four applicants who were selected for the early treatment group, but declined to accept, were designated refused treatment, and replaced by four of the alternates. Finally, the reference group consisted of those who were not included in the lottery or who failed to report to the intake office after release.

Treatment and Follow-Up Observation

The early treatment group was divided into three groups of four each and given methadone in the hospital infirmary, beginning with 10 mg. per day and increasing to 35 mg., a nonblockading dose. While in the infirmary, they were seen by physicians from the methadone program, and incorporated into the general treatment program after leaving prison, with data gathered by the standard procedures of the methadone program.

Data on the control group were less complete, including in most cases fingerprint sheets from the New York City Department of Corrections, and records from the intake office of the methadone program. Fingerprint sheets were also obtained for the reference group, but statistics were not calculated since many of this group had remained in jail.

RESULTS

The addicted prisoners came to the initial interviews with suspicion and negative motivation. Most had heard rumors that methadone was damaging, e.g., "it gets into the bones," perhaps accounting for the initial low acceptance rate. During the first month, 15 of 38 inmates (40%) applied for treatment. As word of the program spread, 80% (101 of 127) applied for treatment. The overall acceptance for seven months was 70%, and about 25 applications a month were still being received seven months later.

No significant difference was found in any of the numerical measures (mean ages at time of first use of heroin, number of previous prison sentences, educational level, ethnic distribution) between any portion of the study and reference groups. The four who declined early treatment had, however, a significantly lower age than the mean of the total study group.

On December 1, 1968, 7-10 months after release, half of the treated group were employed or in school, a fourth were unemployed and poorly motivated, and a fourth had been rearrested for crimes committed while in treatment. One of the latter group reapplied for treatment after his three-month sentence. Three of the four who declined early treatment, and 15 of the 16 untreated controls, were reincarcerated after release from prison, and the other of each group was lost.

All of the untreated men became readdicted to heroin shortly after release, whereas none of the treated group became regular daily users. This illustrates the protective effect of the methadone, since 10 of the 12 used heroin at least once after release from prison. The three whose treatment was least successful continued to use heroin intermittently and to associate with addict friends. The six with most successful results were living as responsible members of the community and supporting families. The overall success in motivating and rehabilitating criminal addicts appeared to be at least 50%.

CONCLUSIONS

On the basis of the rate of applications and the testimony of many addict prisoners who were ineligible for the study, it is believed that at least half of the addicts now in prison would apply for methadone blockade treatment if it were available to them. Assuming that the prisoners seen in this study were typical recidivist, criminal addicts, it can be said that the methadone program provides a way to stop criminal behavior in a large proportion of these addicts. The overall success rate implies that at least 5,000 dangerously antisocial addicts in New York City could be transformed into acceptable citizens by a treatment program combining methadone blockade with rehabilitation.

DuPont, Robert L. Heroin addiction treatment and crime reduction. American Journal of Psychiatry, 128(7):856-860, January 1972.

DRUG	Heroin; Methadone
SAMPLE SIZE	2,700 Total; Subsample 475
SAMPLE TYPE	In-Treatment Addict Offenders
AGE	Adolescents; Adults (over half below 26)
SEX	80% Male
ETHNICITY	95% Black
GEOGRAPHICAL AREA	Washington, D. C.
METHODOLOGY	Statistical Analyses
DATA COLLECTION INSTRUMENT	Counselor's Reports; Arrest and Clinical Records
DATE(S) CONDUCTED	1970, 1971
NO. OF REFERENCES	10

PURPOSE

In 1969, Washington D.C. began a major experiment in urban administration designed to counteract its increasing crime rate. The main focus was on the development of the criminal justice system, emphasizing increased police manpower, court reorganization, new correctional programs, and the treatment of heroin addiction. This report describes the development and early results of the Narcotic Treatment Administration (NTA), a major multimodality treatment program for heroin addicts aimed at reducing the spiraling rate of heroin addiction and the related rate of crime. A follow-up study of its effect on heroin use and the criminal behavior of 475 patients is then detailed.

SUMMARY

In 1970, the estimated number of addicts in Washington, D.C. was 10,400. Accordingly, the Narcotics Addiction Rehabilitation Center was opened by the D.C. Department of Corrections to treat chronic heroin addicts released from prison. Forming the model for subsequent programs, it had three purposes: to stop illegal drug use; to stop crime; and to promote full-time employment or training.

Previous studies showed an exponential rate of increase in offenders involved with narcotics from 1967 to 1969. In 1969, 45% of men admitted to the D.C. jail were heroin addicts. However, the pattern of crimes committed by addicts and nonaddicts was similar. Property crimes exceeded violent crimes against people, but addicts committed many of the violent crimes, including criminal homicide, armed robbery, and assault.

The primary counselors used in the treatment program were former heroin addicts, specially trained and supervised. Methadone maintenance treatment was strongly encouraged, but patients

were able to choose abstinence and short-term, low-dose methadone treatment.

The program's initial apparent success resulted in the creation of the Narcotics Treatment Administration (NTA) whose drive was to retain in continuing treatment all the addicts in the city. The major elements of the NTA program design were: (1) Use of methadone maintenance; (2) use of ex-addict counselors; (3) use of hospital beds, halfway houses, and outpatient facilities that emphasized outpatient programs; (4) clear and limited goals; (5) voluntary self-referrals and referrals through work-release, probation and parole; (6) a citywide network of programs by means of "purchase of services" contracts, especially community-supported self-help organizations; and (7) evaluation of all programs through a central computer system.

NTA's program was far superior to the city's only prior treatment facility, which had operated on \$300,000 a year. By early 1971, NTA was spending four million dollars annually, a figure predicted to rise to 5-10 million by fall 1971. This increase was supported by the immense savings incurred by such an effective community-based treatment. Outpatient treatment costs \$2,000 per patient year, while the average addict's criminal activity costs the public between \$25,000 - \$50,000 yearly. It costs \$5,000 annually to keep the addict in jail, and even more to keep him in a rehabilitation hospital.

Early Program Results

By early 1971, the NTA was treating 2,700 addicts in 14 facilities (three half-way houses, one detoxification unit and ten outpatient clinics). Ninety-five percent of addicts were Black, 80% were men, 60% were under 26 years old, and 31% were under 21. These demographic characteristics show that NTA was treating typical D.C. heroin addicts.

Patients reported an average of 4.7 arrests and 1.7 convictions. Age at first heroin use was 19. The average patient was a tenth grade dropout. Voluntary self-referrals numbered 76%, while 24% were agency referrals. The police had picked up 50 individuals under the civil commitment law, all of whom chose to become voluntary patients. Fifty-five percent of all patients received methadone maintenance, 20% were in outpatient detoxification, 25% were abstinent.

Follow-Up Study

A six month follow-up study of 475 randomly selected patients showed 55% still actively participating. Eighty-six percent of methadone maintenance patients stayed with the program, as opposed to 15% of those in abstinence programs.

Arrest rates, like retention rates, were related to treatment modality. The arrest rate for the entire sample of 475 was 19%. During the six month follow-up, rates were: methadone (>60 mg daily dose) 12%; methadone (<60 mg daily dose) 21%; methadone detoxification 21%; abstinence 31%. Those in the program for six months had an arrest rate of 2.8% per patient month, versus 5.7% for drop-outs. Addicts released without supervision prior to NTA had an arrest rate of 45% in six months; those in the earlier programs had a rate of 28%. Regardless of treatment modality, those remaining with the program did well: 46% were employed full-time, 9% were employed part-time or in training. Fifty-five percent showed no evidence of continued drug use, 7% showed continuous use, and 38% occasional use.

CONCLUSIONS

By 1971, NTA was the nation's largest and fastest growing city-operated treatment program for heroin addicts. It resulted in a pronounced and progressive reduction in crime in Washington beginning December 1969. While some of this reduction may be due to a doubling of Washington's police force between 1967 and 1971, a major share can be credited to the treatment program. The NTA developed in response to a frightening rise in heroin addiction and related crime, yet crime reduction was only one important result of the program. Another was the release of thousands from the devastating slavery of addiction. Treatment was thus an important component in the effort to end poverty, racism, and other "root causes" of crime.

DuPont, Robert L., and Greene, Mark H. The dynamics of a heroin addiction epidemic. Science, 181(4101):716-722, August 24, 1973.

DRUG	Heroin; Methadone
SAMPLE SIZE	Nearly 13,000 Total
SAMPLE TYPE	Addicts in Treatment
AGE	Young
SEX	Male (mostly)
ETHNICITY	Black (mostly)
GEOGRAPHICAL AREA	Washington, D. C.
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Arrest & Court Records; Police Reports; Clinic Records; Questionnaires
DATE(S) CONDUCTED	1969-1973
NO. OF REFERENCES	11

PURPOSE

In 1969 the District of Columbia made a dual manpower and monetary commitment to solve its heroin addiction problem. Intervention strategy combined a comprehensive, multimodal treatment program for addicts, relying substantially on methadone, with a major law enforcement commitment to reduce the supply of heroin. Observations made during the following three years form the basis of this report, describing and documenting the decline of heroin addiction in Washington, D.C. Measures of the incidence and prevalence of addiction, and of the availability, cost, and quality of street heroin were used. These findings were then compared with rate of crime statistics over the same period to determine if any cause and effect relationship between heroin use and crime existed.

METHODOLOGY

Data were systematically collected and analyzed from a number of sources. Year and age of first heroin use were tabulated for all patients entering the Narcotics Treatment Administration (NTA) program. Monthly totals were subdivided according to type of referral (voluntary or criminal justice) and whether the patient was new or reentering. Questionnaire information regarding street availability and quality of heroin was gathered. All patients were required to submit urine samples for drug testing twice a week. Also tested was the urine of prisoners entering the D.C. Jail, and of arrestees in a pre-arraignment holding facility. Beginning in 1971, deaths in the district were tabulated monthly and classified as heroin, methadone, or combination deaths. Data on opiate overdose deaths were complete and reliable. Age trends among entering patients and among drug abusers identified in the Superior Court system were recorded. Finally, charges involving opiate drugs were abstracted from the D.C. Metropolitan Police annual tabulation of all drug charges since 1969. Opiate seizures and undercover buys also were tabulated on a monthly basis since January, 1972. Amounts paid and laboratory analyses

of contents permitted the calculation of cost, purity, and amount of heroin in street packages.

Since the validity of data collected by police has been questioned, the attempt was made to be specific, and, whenever feasible, to personally analyze the raw data. T- and Chi-square tests were used. Trends were demonstrated by estimating the linear regression line by the method of least squares.

RESULTS

Measures of Heroin Addiction Incidence

New heroin use rose sharply from 1965 through 1968, peaked in 1969, and fell in 1970, 1971 and 1972. Changes in source of patients over time (voluntary or criminal justice referrals) did not explain this curve, nor did tests show it to be related to delay in seeking treatment. The shape of the incidence curve suggests contact as the mode of transmission. Data on the ages of the NTA treatment population and of arrestees showed that mean age rose $2\frac{1}{2}$ years over a $1\frac{1}{2}$ year period. This suggests not only that fewer new users were being created, but that a substantial number of young users were becoming nonusers at the same time.

Measures of Heroin Addiction Prevalence

The rate of death from heroin overdose peaked in the summer of 1971 and then progressively declined. The number of opiate charges made by the D.C. Metropolitan Police peaked at 3,144 in 1971 and remained high in early 1972, although the total number of charges made dropped. The 1973 projected, estimated total (1,300 charges) tends to a continuing decline. The most likely explanation is either a decline in total number of addicts, a decline in amount of heroin related criminal activity, or both.

NTA intake figures further suggest sharply reduced numbers of untreated addicts in the street by early 1973. NTA has never had unused treatment capacity. In April 1972, intake was actually restricted to 25 because treatment capacity had been exhausted. By summer 1972, there was a decline in demand. Intake restrictions were removed in September, and until March 1973 an average of 10 entered daily. Finally, the number of new admissions decreased until there were fewer new than re-admissions. Analyses of urine testing data also revealed a clearly downward trend.

Measures of Heroin Availability

Heroin seizures by police and purchases by undercover agents both declined by March 1973. Since June 1969, there was also a progressive decline in the purity of heroin on Washington streets, and the cost of heroin increased. Prior to March 1972, 20% of the urine sampled showed evidence of heroin use, which dropped to 7% by November. This drop may reflect, in part, improvements in the NTA counseling program, but also, of course, the decreased heroin availability.

Methadone Abuse

As heroin use and availability declined, there was an increase in methadone overdose deaths, and during 1972 there was an epidemic of intravenous methamphetamine abuse. This was brought under control by October 1972.

Serious Crime Rate

It is difficult to prove a cause and effect relationship between observed changes in the prevalence of heroin addiction and observed changes in the crime rate. The best available evidence reveals a sharp progressive decline in D.C.'s serious crime rate. Three observations suggest a relationship: (1) there was a temporal association between the two trends; (2) changes in the rates of property-related crime, traditionally associated with addicts, accounted for both the rise and the decline of crime in the last decade; and (3) as more addicts entered treatment, fewer property crimes were committed. These data, however, do not prove any relationship.

CONCLUSIONS

Two factors were critical in curbing the heroin epidemic: (1) the availability of treatment, which reduced the addicts' dependence; and (2) vigorous law enforcement, which reduced the supply. It is this combination that is important. Both must be maintained if heroin abuse is to be kept low. A contributing factor may have been the development of an anti-heroin attitude in the community. Heroin is now "out." As its consequences become apparent, teenagers are no longer willing to risk experimenting with heroin. Data which accurately depict drug abuse trends are critically needed to facilitate rational policy-making. New detection and intervention techniques offer promise in this regard.

Duvall, Henrietta J.; Locke, Ben Z.; and Brill, Leon. Follow-up study of narcotic drug addicts five years after hospitalization. Public Health Reports, 783:185-193, March, 1963.

DRUG	Not Specified
SAMPLE SIZE	453
SAMPLE TYPE	Discharged Patients
AGE	Adults
SEX	Both Sexes
ETHNICITY	Black; White; Puerto Rican
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Observations
DATE(S) CONDUCTED	July 1952-1956
NO. OF REFERENCES	5

PURPOSE

To ascertain what happened to treated narcotic addicts after a number of years, 453 patients who were discharged from the Public Health Service Hospital in Lexington, Kentucky, between July 1952 and December 1955 were followed for five years. Records were kept on relapse, unemployment, and arrests.

METHODOLOGY

The sample of 453 was chosen from a larger group of 1,359 who had undergone follow-up procedures after their discharge from the Public Health Service Hospital. These patients all lived in the New York City area at the time of admission to Lexington. Discharged during the period from July 1952 to December 1955, they were followed until their readdiction to narcotics or until December 31, 1956. Previous studies had discontinued follow-up after readdiction. Addiction status was determined by the use of habit-forming narcotic drugs as specified under the Federal Narcotic Act.

RESULTS

There were 52 deaths among the 453 patients in the sample. Although more than 97% became readmitted during the five years after treatment at Lexington, by the fifth year after discharge only an estimated 46% of the study population were readmitted, and 49% were abstinent, either voluntarily or involuntarily. An estimated 40% of the study population had been voluntarily abstinent at some time during the follow-up period. Forty-one percent returned to the Public Health Service Hospitals at Lexington, Kentucky, or Fort Worth, Texas, during the five-year period.

An important factor in voluntary abstinence was age. Discharges over 30 years of age showed a significantly higher rate than their younger counterparts. They also showed a significantly greater ability to remain drug-free. Abstinence increased with the passage of time, while re-addiction rates decreased.

Approximately 70% of the study population had one or more arrests. Higher arrest rates were reported for the under 30 age group than for those over 30. Two-thirds of all the arrests reported were for narcotics violations, and the overwhelming majority of remaining violations concerned illegal means resorted to by addicts to support their habits. Almost all instances of arrests in the voluntarily abstinent group occurred at times of addiction.

It was estimated that 41% of the male addicts were unemployed five years after discharge. Fifty-nine percent were employed full-time. Constantly addicted discharges showed a full-time employment rate of only 13%. During the five-year follow-up period, few of the patients received psychiatric aftercare.

CONCLUSIONS

After treatment the drug addict is generally an antisocial individual who has difficulty readjusting to the community. The findings of this study, such as high relapse, arrest, and unemployment rates plus minimal use of psychiatric aftercare services, lend support to the view that there should be systematic community aftercare for such persons.

Gearing, Frances R. Methadone maintenance treatment five years later--Where are they now?
American Journal of Public Health, 64(Suppl.):44-50, December 1974.

DRUG	Heroin
SAMPLE SIZE	1,230
SAMPLE TYPE	Volunteer Treatment (inpatient); Treatment (outpatient)
AGE	Cross-Age; Average 33.7 (range 20-83)
SEX	85% Male 15% Female
ETHNICITY	40% Black; 40% White; Spanish Origin 20%
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Case Study; Longitudinal; Statistical Survey
DATA COLLECTION INSTRUMENT	Observations; Laboratory/Examination; Official Records; Interviews; Program/Clinic Statistics
DATE(S) CONDUCTED	Feb. 1964-Dec. 31, 1973
NO. OF REFERENCES	9

PURPOSE

Changes in social productivity and antisocial behavior were evaluated over a ten-year period for the first 1,230 patients admitted since January 1964 to the Dole-Nyswander program of Methadone Maintenance Treatment at the Morris Bernstein Institute, New York. Drs. Dole and Nyswander conceived the notion that, given the oral effectiveness and length of duration of effectiveness of methadone, a gradually increasing oral dose might produce a "blockade" against substantial amounts of heroin and thus permit a change in the life style of the addict, with major emphasis on assisting patients to complete their formal education, or learn a vocational skill, or both.

METHODOLOGY

The study was conducted from February 1964 to December 31, 1973, among 1,230 volunteer patients at the Morris Bernstein Institute, New York (admitted between January 1964 and December 1968). Original criteria for admission to treatment, applying to 960 of the cohort, were: (1) residence in New York City; (2) at least 20 years of age; (3) no overt evidence of psychopathology; (4) at least five years of addiction to heroin; (5) previous record of arrests/incarceration; (6) evidence of previous treatment failures including detoxification; (7) acceptance of five-six weeks in-hospital induction phase; and (8) signed consent to accept daily doses of methadone for an unspecified period of time. The other 270 were selected patients stabilized on an ambulatory basis, eliminating the expensive in-hospital phase.

The cohort was 85% men, 15% women; 40% White, 40% Black, 20% of Spanish extraction; and with an average age of 33.7 years (range 20-83). Average length of recorded addiction was eight years, and arrests (in the three years prior to admission) averaged 3.5 per patient, with jail terms averaging six months. The patients were thus "hard core" or "criminal addicts."

Measurement of success of treatment was conducted through an Evaluation Unit established at The Columbia University School of Public Health. Criteria for measurement of success included: (1) increase in social productivity as measured by employment, schooling, or vocational training; (2) decrease in antisocial behavior as measured by reported arrest and/or incarcerations; and (3) recognition of and willingness to accept help for excessive use of alcohol and other drugs, or for psychiatric problems.

The entire cohort was under continuous observation during the entire length of the study period. Of these, 640 were in continuous treatment for an average of 6½ years (range 60-119 months), while 130 left the program for varying lengths of time but returned and remained until the end of the study period. The average observation time was 4 1/3 years (range 17-106 months). For these 770 patients, the discharge rate decreased from 11% in the first year to 4% in the sixth year. Three hundred ninety-three patients left the program permanently, and 67 died while in treatment.

Data sources were intake interview forms and reports from the New York City Narcotics Register, Police Department records, and Welfare Department records. Follow-up data included employment status, schooling or training, criminal problems, involvement with self-administered drugs of abuse, and urine analyses, with validation by a "spot-check" on a 10 percent sample. Patients' reports were 82% accurate. Data were analyzed using a Life Table method.

RESULTS

Unemployment was cut by 36 percent with a concomitant increase in employment from 36% to 72% for the entire cohort. For the 770 patients who had started in treatment a minimum of five years previously, the percentage remaining unemployed had been reduced to 18%. For the same 770, 92% of those classified as socially productive on admission remained in that category, while 75% of those originally classified as unemployed had become socially productive. There was only slight variation between men and women and among ethnic groups.

Evidence of upward mobility included a decrease of 25% in those originally classified as unskilled workers after five years in treatment. There was a 15% increase in the skilled and a 5% increase in the semi-skilled categories. The proportions of patients completing college and becoming employed in the professional and managerial categories increased. Contrary to rumors, less than 2% of employed patients worked within the program, and most had first been successfully employed elsewhere.

Antisocial Behavior--Arrests and Drug Abuse

Of the 770 patients who continued in treatment, 85% (654) had no record of arrests after admission, with 116 persons arrested. Total arrests in the cohort were 187, 1.24 arrests per 100 person years of observation in contrast to 201 arrests per 100 person years in the three years prior to admission. Overall arrest rate for ten patients while in treatment decreased from 6.5% in the first year to 1.4% in the fourth year, and less than 1% in subsequent years. Of the 187 reported arrests, 78 were among the 770 patients who continued in treatment, and 54 of these were among those who left and returned. Measured criminal activity was confined to approximately 15% of the total patients.

Fifteen percent of patients were found to be involved with chronic use of alcohol and another 10% with continued use of drugs other than heroin or alcohol. These problems were responsible for the majority of discharges from the program, as well as for a substantial proportion of the deaths.

Detoxification

In contrast to the criticism that chemotherapy is a life sentence to addiction with the substitution of methadone for heroin, 51 (7%) of the 770 patients in treatment at the end of the study period had been methadone-free for from three months to over one year, and an additional 53 were undergoing slow detoxification on dosages of 30 mg. or less a day. Another 23 had begun detoxification and been returned to high dosage.

Follow-Up of Patients Who Left Methadone Maintenance Treatment

Of the 393 still-living former patients, 41% were reported to have been arrested or imprisoned at least once, 27% had been hospitalized for detoxification at least once, 15% were in an

abstinence program, 6% were known dead, 3% were reported under treatment by private practitioners, 3% had moved from the metropolitan area, and the remaining 5% had returned to the program one or more times for relatively short periods.

CONCLUSIONS

Selection factors of the study population (volunteers, unwilling or unable to abstain, long-term survivors of the hazards of addiction) are accepted in the belief that heroin addicts, like patients with other chronic diseases, respond successfully to any treatment regimen to the degree that they are not motivated to become personally involved in their own rehabilitation. These results, however, cannot be compared with the results from Methadone Maintenance Treatment Programs in other cities because (a) the selection factors differ, (b) the populations are not comparable, and (c) the periods of observation are limited in most of the other programs to a maximum of two years.

Gearing, Frances Rowe. A road back from heroin addiction. In: Proceedings of the 4th National Conference on Methadone Treatment. New York: National Association for Prevention of Addiction to Narcotics (NAPAN), 1972. pp. 157-158.

DRUG	Heroin; Methadone
SAMPLE SIZE	6,109 Total
SAMPLE TYPE	Treatment (outpatient)
AGE	Not Specified
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Exploratory/Descriptive; Longitudinal
DATA COLLECTION INSTRUMENT	Criminal & Employment Records
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	0

PURPOSE

To help measure the social efficacy of methadone maintenance, two major treatment milestones were analyzed in a patient population in New York City: anti-social behavior (criminality) and employment.

METHODOLOGY

In an attempt to measure anti-social behavior in terms of arrests and incarcerations, four groups were identified: (1) a sample of patients in treatment as of September 1, 1971 (n=5,000); (2) those patients who left the program voluntarily (n=250); (3) patients who were discharged from Methadone Maintenance Treatment for cause (n=650); and (4) a contrast group selected from admissions to the Detoxification Unit at Morris Bernstein in 1965. For each group, all records of arrests and detentions reported to the New York City Narcotics Register were collected for each of the three years prior to admission and, for the contrast group, for the three years prior to 1965. This was called the BEFORE sample. Data for the AFTER sample were collected in the same fashion and from the same source for each group.

In order to demonstrate the fact that patients on Methadone Maintenance are "employable," a cross-sectional sample was conducted of patients who were in treatment as of September 30, 1971.

RESULTS

Anti-social Behavior

In the BEFORE sample, the arrest patterns in each group appeared very similar, except that in the year prior to admission there was a slightly lower percentage of arrests in Group I and II. This could possibly be a small measure of motivation.

After treatment there was a striking decrease in the percentage of patients who had been arrested in Group I, and there was, perhaps, some evidence of a "halo" effect in Group II for each year following discharge.

The number of arrests and incarcerations per one hundred person years of observation for patients in Methadone Treatment was contrasted with patients from the Detoxification Unit. Before treatment the Methadone group demonstrated somewhat more criminal activity than the contrast group. Afterwards there was not only a sharp reversal of this pattern, but also a slight increase in criminal activity in the contrast group. The ratio of one incarceration for every two arrests has been a consistent finding over the past six years.

Employment

The rate of employment increased as the period of observation lengthened. The converse was true for the percentage of patients receiving welfare. The range of occupations included about 10% in professional and managerial jobs, 60% in skilled or semi-skilled jobs, and the remaining 30% in unskilled or service jobs. Less than 5% of the employed patients were employed by the program. It is interesting to note that a few patients were working in an abstinence program.

CONCLUSIONS

Patients in Methadone Maintenance Treatment in New York City are a highly selected, highly motivated group. However, unless the patient is motivated to become personally involved in his rehabilitation, there is no treatment regimen which will have any measure of success. Taking this for granted, methadone maintenance appears to be assisting a substantial number of former heroin addicts on their road back, as measured by decreased "criminality" and increased social productivity.

Hayim, Gila J. Changes in the criminal behavior of heroin addicts under treatment in the Addiction Research and Treatment Corporation: Interim report of the first year of treatment. In: Hayim, Gila J.; Lukoff, Irving; and Quatrone, Debra. Heroin Use and Crime in a Methadone Maintenance Program. Washington, D.C.: U.S. Dept. of Justice, National Institute of Law Enforcement and Criminal Justice, February 1973. pp. 1-62.

DRUG	Methadone; Heroin
SAMPLE SIZE	416
SAMPLE TYPE	Treatment (outpatient)
AGE	Adults (average 33)
SEX	80% Male; 20% Female
ETHNICITY	86% Black; 14% White
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Statistical Analysis; Longitudinal
DATA COLLECTION INSTRUMENT	Criminal Records; Program/Clinic Statistics
DATE(S) CONDUCTED	1969-1973
NO. OF REFERENCES	24

PURPOSE

Changes in the criminal behavior of addicts in a New York methadone maintenance treatment center (the Addiction Research and Treatment Corporation) were studied with emphasis on changes related to period of treatment. Though the treatment center offers a variety of rehabilitative services, crime reduction was a central objective, since much addict crime is attributable to the need for drugs. To determine the magnitude and quality of change, addict criminal behavior was examined before and during addiction, and for one year after entry into the program.

METHODOLOGY

Four hundred and sixteen addicts admitted to the Addiction Research and Treatment Corporation program since October 1969 were studied. They were volunteers who were living in the catchment area the clinic serves, were at least 21 years old and heroin addicts for at least two years, and had been enrolled in at least one other treatment program. Criminal charge rates were collected from police and court records for the period of one year from date of admission, whether they remained in treatment or withdrew from the program.

Criminological and addiction characteristics were measured by computing aggregate crime rates (incidence of charges per year spent in period) for different phases of addiction (pre-addiction, addiction, and one year of treatment). Age specific rates also were measured for these periods, and age, race, and sex specific rates were related to period and type of offense. The impact of treatment was assessed by comparing crime rates during treatment with the total addiction period and the period of one year prior to entry.

RESULTS

Subjects were predominantly Black and male, with an average age of 33 years upon admission to the program, and an average of 12 years of addiction. Sixty-four percent were unemployed at the time of entry into the program. Subjects displayed a long history of addiction and crime, mainly drug and property offenses, with a low incidence of crimes of violence. The crime rate reached a peak in the year preceding entry into the program, though pre-admission crime rates were not higher than for addicts in the general population.

The overall crime rate declined 21% one year from the date of admission, but remained higher (.8 charges per person) than the rate for the total period of addiction (.65). Drug-related crimes and, to a lesser extent, property and prostitution offenses accounted for much of the decrease. Crimes against the person and robbery increased slightly.

Patients who remained in the program for two years continued to commit less crime, and showed a decline from the rate during the period of total addiction. Older patients (30+) showed a greater decline than younger patients (21-30), a 23% vs. 15% reduction. Older patients appeared to have pre-program advantages in lower crime rates, more employment, and more education. They retained about the same level of drug offenses, while accounting for much of the decrease in drug-related crime. No consistent relationship was found between changes in drug use and profitable crime,

The pre-addiction phase showed a relatively low crime rate, with slight emphasis on property crimes. Overall crime rate and year of addiction showed low but consistent correlation.

The period of addiction was marked by a threefold increase in overall crime rate (.21 to .65), with specific increases in drug, property, and forgery offenses. The older group had a lower rate of charges during this period, but changes in age did not appear to account for changes in crime rates. Females differed from expectation both in higher rates as well as in type of charges--forgery and property offenses predominated, rather than prostitution charges. Also contrary to expectation, White males had higher rates than their Black counterparts, though the same disadvantages that explain racial differences in crime rates applied to the White subjects in this sample. The sample reached a crisis in its crime/addiction career in the year prior to entry, with .103 charges per person.

The crime index showed a modest decline during the year of treatment compared to the year preceding entry (21% lower), but not compared to total addiction period. This period, however, was marked by time incarcerated, during which subjects were not at risk. Again, drug-related charges showed the highest reduction, followed by property offenses and prostitution. Drug and property reductions referred to different age groups. The older group showed a greater overall reduction in crime than the younger group, though the decrease was only in property and prostitution offenses. The younger group, in contrast, reduced their drug charges, but increased property charges. Both groups increased their assault rate. Treatment results seemed to vary according to age at entry, which in turn was influenced by age at onset of drugs.

CONCLUSIONS

Though the sample displayed an overall decrease in crime rate, the data do not establish a connection between the decrease in drug crime and property crime, since the younger group is responsible for the former, and the older group the latter. The factor of age, which differentiates the response to treatment, is also associated with past social characteristics that tend to favor the older subjects. Similarly, current forces need to be explored for their impact on the present and future functioning of the addict.

There does not appear to be a simple relationship between drug use and profitable crime, nor between methadone maintenance and decreased criminal behavior. Once crime has become a way of life, even if the original impulse came from drugs, methadone alone will not be enough to effect a total change. Long-term changes will require long-term treatment, perhaps on the model of other correctional systems which attempt to change the offender as a member of the community.

Lukoff, Irving, and Quatrone, Debra. Heroin use and crime in a methadone maintenance treatment program: A two year follow-up of the Addiction Research and Treatment Corporation program. A preliminary report. In: Hayim, Gila J.; Lukoff, Irving; and Quatrone, Debra. Heroin Use and Crime in a Methadone Maintenance Program. Washington, D.C. U.S. Dept. of Justice, National Institute of Law Enforcement and Criminal Justice, February 1973. pp. 63-112.

DRUG	Methadone; Heroin
SAMPLE SIZE	765
SAMPLE TYPE	Treatment (outpatient)
AGE	Adults (average 31.7)
SEX	81.5% Male; 18.5% Female
ETHNICITY	77.4% Black; 10.4% White 11.7% Puerto Rican; .4% Other
GEOGRAPHICAL AREA	New York, New York
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Criminal Records; Program/Clinic Statistics
DATE(S) CONDUCTED	1969-1973
NO. OF REFERENCES	8

PURPOSE

This study is the first of a series of reports on the Addiction Research and Treatment Corporation, a multi-modality methadone program in the Bedford Stuyvesant area of New York. Unlike many other programs, the ARTC patient population is heavily weighted with so-called "hard-core" addicts who lacked education and job skills and who had long criminal records. Evidence was gathered on aggregate outcomes for heroin usage, criminal activity, program retention, and regularity of attendance among hard-core patients. Terminations were compared with those who remained in the program for two years.

METHODOLOGY

The sample covered the first 765 patients admitted into the program between October 1969 and February 1971, and who were in the program for at least one year. Of these, 216 remained for two years. This sample was compared for drug use, absenteeism, and arrest rates. Outcome measures were also related to methadone dosage levels.

Data on the amount of heroin use in different patient groups based on length of stay in the program were gathered through urinalysis. Police department arrest records were obtained for each patient upon entrance to the program, and updated one year from admission. Several aggregate rates were computed from this data: (1) the annual arrest rate for all patients from onset of drug use to entry into the program, (2) the rate for the year prior to entry, (3) the rate for the first year in the program, and (4) the rate for those in the program for two years. Rates within each time span were divided according to overall crime rate, assaultive charges, drug-related charges, and misdemeanors, larcenies, and felonies.

This methodology made it possible to identify whether those who remained in treatment differed initially in their criminal behavior from those who left the program, and whether the criminal behavior of those who stayed in treatment was altered more dramatically. It also made it possible to observe, if only crudely, program impact on arrest experience for patients who remained in comparison with those who withdrew in intervening periods.

RESULTS

The average patient was 31.7 years old when admitted to the program, and had been addicted for ten years. The sample was primarily black, unemployed, and had not finished high school. Almost half (48%) reported that their major source of income was from illegal activities. The typical patient had about two-thirds of an arrest per year since he began heroin.

The year prior to entry into the program represented a peak in criminal activity (120 total charge rate, compared to 67 for the entire addiction period). Drug arrests and charges for misdemeanors, larcenies, and felonies rose sharply; assaultive crimes showed little change. The year prior to treatment thus provides a base that exaggerates the decline in criminal activity.

The overall index during the first year of the program declined relative to the preceding year (from 120 to 84), but remained higher than the rate for the entire period of addiction. The decline was largely attributed to the sharp drop in drug charges (from 52 to 29).

Preliminary analysis of the overall crime index for the 216 patients who remained in the program for two years showed a considerable drop in criminal activity during the second year, most significantly in the drug-related category. The decline in the index of misdemeanors, larcenies, and felonies also was more significant in the second year than in the first.

Patients who terminated had higher arrest rates prior to starting the program, indicating that those who were retained tended to be less "criminal" to begin with. Terminations also showed a reduced arrest rate during treatment, though the decline was smaller than that for the active patients.

Arrest records revealed only the treated group showed reduced arrest rates (22% decline) in the larceny, misdemeanor, and felony category below pre-entry rates (onset to entry). However, this did not occur until after two years of treatment.

To contrast these results with data from other programs, where no differentiation between types of crimes is made, attention was confined to "ALL CHARGES," to "ALL" patients in the period for one year preceding entrance, and to those who remained active for successive periods. A seeming decline was observed, from 120 in the year prior to entrance, to 84 in the first year (a 30% decline), to 50 by the second year (a 43% decline). However, this aggregation of rates exaggerates the decline in significant areas of criminal behavior.

CONCLUSIONS

Patients who remained in treatment had fewer arrests prior to entrance; a substantial proportion of the subsequent decline was attributable to fewer arrests directly associated with purchase, possession, and sale of drugs; the year prior to treatment provided a base that exaggerated the decline in criminal activity; and the decline in the crimes that most concern the community requires a prolonged investment in treatment before they begin to show a substantial decline relative to crime rates based on their full period of drug use. Further investigation is needed into the implications of the modest decline in non-drug offenses; however, it is already apparent that there is no simple short-term solution to the problem of crime which accompanies heroin addiction.

Lukoff, Irving F. Issues in the evaluation of heroin treatment. In: Josephson, Eric, and Carroll, Eleanor, E., eds. Drug Use: Epidemiological and Sociological Approaches. Washington, D.C.: Hemisphere Publishing, 1974. pp. 129-157. (31 References)

PURPOSE

Current heroin treatment programs, particularly methadone maintenance, stress as objectives the cessation of drug use and the reduction of criminal behavior. There exists, however, two unresolved issues involved in assessing the outcome of these programs: (1) will there be a significant abatement of crime as current programs expand? (2) will this expansion curtail the recruitment of individuals into the drug scene? Drawing upon data from a few programs and from studies already completed by the Addiction Research and Treatment Corporation Evaluation Team at Columbia University, these issues and the limitations of program successes were examined.

THEORETICAL DISCUSSION

Heroin and Crime

If for many addicts, heroin addiction is only one aspect of a coherent pattern of deviance, then there are very important consequences: (1) it is doubtful that the crime associated with addiction is merely a function of the need for money for drugs, or that providing methadone to addicts will necessarily reduce addict criminal activity; (2) therapeutic communities have had limited success in transforming deviant patients into useful or productive citizens; and (3) in view of the emphasis on transforming deviant behavior of persons already addicted, how successful will the treatment system be in reducing the number of new recruits to the drug scene?

A Paradigm for Assessment

Any evaluation must be assessed in the context of the differences or similarities in crucial variables that are associated with remission. The intervention system also must be assessed in a thorough evaluation, even if the predisposition of some individuals to change is dwelt upon as a crucial element in success. Finally to understand the nature of any decline in criminal activity and the other parameters of "success," an attempt must be made to link the patients to their communities.

RESULTS

An examination of the findings of the Addiction Research and Treatment Corporation studies and other program evaluations indicated several themes:

1. Early onset of drug use is associated with a truncated socialization that impedes accommodation to the demand of the treatment program.
2. Length of stay in the program is a function of advancing age.
3. A disproportionate share of crime is associated with early onset of drug use.
4. Patient attrition over time is a substantial element in the improvement that takes place through time.
5. Criminal behavior is not simply a response to the financial demands of drug addiction, but part of a cohesive pattern of deviance.

Regarding the impact of ambulatory methadone programs on criminal behavior, and the consequences of the expansion of such programs, it is felt that:

1. Arrest rates alone tend to exaggerate the decline in criminal behavior.
2. The decline in criminal behavior is a function of increasing age.

3. More conventional socialization, with attendant consequences for program retention and continuing deviant behavior, is linked to age at onset of drugs, and has consequences for the retention of patients as well as continuous deviant behavior.
4. Programs are attracting patients who are older than most heroin addicts, and are succeeding in retaining these patients as well as those who were less deviant to begin with.
5. Program mortality appears continuous and unrelating.
6. A large part of the decline in crime is a function of the unusually high rates in the period preceding entrance and possibly is the reason why many enter treatment. The largest part of the decline is attributable to fewer arrests for drug charges.
7. Those with arrests preceding heroin use tend to persist in criminal behavior; and where they began drug use when young, these persons are responsible for a high proportion of assaultive crimes.

The drug addict is also not an isolated member of his community. He provides an important link in the market system for stolen goods and is on intimate terms with other addicts and nonaddicts in the community. Methadone programs may be unwittingly helping to stabilize the addict's adaptation by providing him with a basic source of drugs which he can then supplement with other drugs, by enabling him to obtain welfare by showing that he is receiving treatment for his addiction. Methadone programs may simply be making the life of the addict more bearable.

CONCLUSIONS

It is important to scrutinize the treatment system more carefully. This study suggests the following conclusions, some of them conjectures. The expansion of treatment programs can have only a negligible impact on the recruitment of new addicts unless they can succeed in attracting and successfully working with large numbers of younger addicts. Secondly, a strategy that mobilizes resources and energy on treatment systems alone is one that essentially does not intrude on the continuous supply of new addicts. Addiction is a functional element in some communities--certainly for some segments of the nonaddicted inhabitants. It is useful to have mechanisms such as methadone to help even older addicts get their bearing; but such programs will not interfere with the crime wave because the addicts who continue to commit crimes are not likely to remain in treatment. Moreover, the market for methadone may have been saturated by the rapid expansion that has been underway.

Maddux, James F., and Bowden, Charles L. Critique of success with methadone maintenance. American Journal of Psychiatry, 129(4):440-446, October 1972.

PURPOSE

Problems in the selecting and evaluating of criteria in methadone maintenance programs are examined to estimate how these problems affected reported success rates. Three methodological flaws are presented and analyzed: (1) choice of criteria to represent "success"; (2) data analyses of samples remaining on methadone maintenance, with dropouts excluded; and (3) insufficient comparison data.

SUMMARY

Criteria of Success

In order to evaluate the criterion of "success" in treatment of addiction to morphine types of drugs, the concept of success was questioned and redefined. Whereas "success" has traditionally been defined as achievement of a drug-free state, this idea was not acceptable due to its inapplicability to a person in a drug use program, for dependency continues to exist. New criteria for "success" were established: (1) reduced craving for heroin; (2) tolerance to the euphoric effects of heroin; (3) acceptance of continued methadone dependence; (4) reduced use of heroin; (5) social rehabilitation, as measured by increased legitimate employment and reduced criminality.

Analyses of Data from Remaining Samples

Frequency of employment and of arrest and conviction are usually reported for samples who remain on methadone maintenance after variable periods, not for the initial samples admitted and started on the program. It further appears that subjects having more severe personal and social problems are dropped from the program. When the data for five studies on the percentages of subjects employed were recalculated based on original total sample size, in each case there was a drop in percentage employed (range: 9% to 36%); the median dropped from 71% to 56%.

An example of the problems in reporting data is the "instant rehabilitation" of 100% employment found in one program. In this case, patients had to be legitimately employed in order to receive their methadone. Due to the fact that verification of employment was not made through the employer, only the patient's word was taken as evidence, thus allowing room for considerable error in calculation of actual employment.

Estimates of criminal behavior also are usually reported only for remaining samples, but two additional problems contribute to the ambiguity of reported estimates. First, frequency of arrests and convictions is not a direct measure of criminal behavior. Secondly, unequal periods of time cannot be equally compared. For example, in one study (Wieland and Chambers, 1971), 93% of 128 subjects had been arrested prior to treatment but only 21% were arrested during methadone maintenance, suggesting a drop in arrest frequency of 91%-92%. However, the 92% represented a cumulative lifetime frequency for subjects with a mean age of 36 who, when admitted, had been using drugs for a median period of 15-19 years. On the other hand, the rate of 21% represented a cumulative frequency during a mean period on methadone of only 15 months. If this group were followed for 15-19 years, the cumulative arrest frequency would undoubtedly go above 21%. In the Dole, Nyswander and Warner study (1965), adjustments were made for time inequality but dropouts were still not included in the data analysis.

Insufficient Comparison Data

To correct the misleading implication of some studies that addicts have no legitimate employment, various statistics on employment rates were cited which indicate that frequency of employment among addicts when they enter treatment is not zero, but in the range of 27% to 40% with a median of about 30%.

Four follow-up studies of addicts having drug-free treatment provided employment rates which were compared with those for methadone maintenance. In the first, a five-year follow-up study, statistics were recomputed to include dropouts, resulting in a 30% employment rate. Two other projects (one year follow-up studies on employment of former narcotic addicts on parole), 63% were found to be employed in one sample and 35% were either employed or in full-time education in the second. When the dropouts were included in recomputing for the fourth project, the employment rates dropped to 41% from 75%.

Percentages of the methadone maintenance samples employed ranged from 41% to 62% with a median of 53%. Of the samples followed after drug-free treatment, the percentages employed ranged from 30% to 63% with the median falling between 35% and 41%. The median percentage of the methadone maintenance samples employed exceeded that of the samples after drug-free treatment by 15 percentage points.

CONCLUSIONS

Several methodological flaws may exist in studies of the success of methadone maintenance programs. These flaws, which may allow for generation of misleading data, may lead to exaggerated reports of success. Rates of success do not appear nearly as high when data are recomputed to include dropouts from original samples, when adjustments for time period comparisons are made and when certain social rehabilitation criteria are stated as requirements of success of rehabilitation of former drug abusers.

Maddux, James F., and McDonald, Linda Kay. Status of 100 San Antonio addicts one year after admission to methadone maintenance. Drug Forum, 2(3):239-252, Spring 1973.

DRUG	Methadone; Heroin
SAMPLE SIZE	100
SAMPLE TYPE	Treatment (outpatient)
AGE	2 Adolescents; 98 Adults
SEX	86 Male; 14 Female
ETHNICITY	3 Black; 88 Mexican-American; 9 White
GEOGRAPHICAL AREA	San Antonio, Texas
METHODOLOGY	Statistical Analysis; Longitudinal
DATA COLLECTION INSTRUMENT	Arrest Records; Interviews; Laboratory/Examination
DATE(S) CONDUCTED	1970-1971
NO. OF REFERENCES	5

PURPOSE

Researchers at the San Antonio, Texas, State Hospital compared arrest and employment data on 100 chronic heroin users upon admission to methadone maintenance treatment, and one year later.

METHODOLOGY

The 100 subjects were admitted consecutively over a five-month period, from February 1 through July 1, 1970. Of the sample group, 86 were male, and 88 were of Mexican-American ancestry; three were Black, and nine were classified White. A precoded data schedule was developed. Drug use history and employment information was provided by the subjects and/or relatives. Arrest data were taken from the San Antonio Police Department and consisted of the number of arrests during the year prior to admission, and the number during the following year, for each subject; arrests were not coded by crime. Treatment information such as methadone dosage and urinalysis by thin layer chromatography and acid hydrolysis was obtained from clinical records.

Data analysis consisted principally of obtaining frequency distributions of categories. The .05 level of confidence was accepted to indicate statistical significance.

RESULTS

Seventy-four percent remained continuously on methadone through one year after admission. Employment increased from 21% at admission to 65% one year later, and heroin use declined from 100% to 4%. Incarceration increased from 1% (one subject was admitted to the program from jail) to 6%. The actual number of arrests of all subjects dropped from 129 to 103, a reduction of 20%. Most of the arrests occurred for minor offenses: vagrancy, drunkenness, minor motor vehicle violations, and theft under \$50.

The distribution of arrests was not found to be statistically significant. None of the background or outcome variables had a statistically significant association with the dichotomous variable (no arrest versus one or more arrests). Arrest apparently occurred randomly among the subjects with respect to the variables studied.

CONCLUSIONS

The minor reduction in arrests, rather than the anticipated major reduction, may be explained in several ways. First, arrest frequency does not directly measure criminal activity: arrest does not always mean criminal behavior occurred, and the absence of arrest does not signify absence of criminal behavior. Secondly, the high level of arrest for minor violations may indicate close police surveillance of known lawbreakers. Data on the relationship between methadone maintenance and the reduction of serious criminal activity is ambiguous.

Massachusetts Department of Correction. An Evaluation of the Special Narcotics Addiction Program at the Massachusetts Correctional Institution, Walpole. Massachusetts Department of Correction, 1971. 11 pp.

DRUG	Heroin; Multi-Drug
SAMPLE SIZE	130
SAMPLE TYPE	Incarcerated; Treatment
AGE	Adults
SEX	Male
ETHNICITY	72 Black; 58 White
GEOGRAPHICAL AREA	Walpole, Massachusetts
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis
DATA COLLECTION INSTRUMENT	Not Specified
DATE(S) CONDUCTED	1968
NO. OF REFERENCES	1

PURPOSE

A one-year follow-up study of recidivism rates was conducted among prison inmates who had participated in a voluntary drug treatment program while incarcerated. The Special Narcotics Program, or SNAP, at the Massachusetts Correctional Institution, Walpole, Mass., is a self-help program patterned on Alcoholics Anonymous, which treated approximately 150 inmates from 1962 to 1968. A sample from the SNAP program was compared with non-SNAP inmates on background factors, drugs used, incarceration and criminal history, and recidivism rate. Recidivism within the SNAP group also was studied in relationship to the type of drug used and length of time in the program.

METHODOLOGY

The two samples were composed of 84 SNAP participants who were released to the community between 1963 and September 1, 1967, and 46 non-SNAP inmates who admitted to drug abuse and were released during the same period. Follow-up occurred in September 1968.

RESULTS

Both samples displayed a wide variety of drugs used and length of habit. The average age at first drug experience for both was 18 years. Blacks comprised 55.3% of the combined samples, compared to 30% of the general inmate population. This was due to the overrepresentation of Blacks using heroin.

The SNAP and non-SNAP groups were similar in all background characteristics except two: the non-SNAP group had more prior arrests for drunkenness, and the SNAP members tended to be younger at the time of commitment. Data are supplied for both groups in regard to age at first arrest,

age at first narcotic arrest, number of arrests (narcotics, felonies against property and person, sex offenses), and number of incarcerations.

Overall recidivism rates were not significantly different: 40.5% for the SNAP group, compared to 47.8% for the non-SNAP group. In analyzing the data for differential impact of the program, however, it was found that SNAP subjects who were 18 years or older at their first arrest had a 23.1% recidivism rate, compared to 55% for their non-SNAP counterparts. The SNAP sample also had consistently lower recidivism rates when comparing the 12 variables indicating contacts with law enforcement and correctional agencies.

Within the SNAP program, non-users of heroin had lower recidivism rates than heroin users, although recidivism rates for heroin users decreased with increased time in the program. Overall recidivism increased with length of time spent in the program, though this was due to the increasing proportion of heroin users among those who attended the most sessions.

CONCLUSIONS

It appears from the data that the SNAP program is most effective with those inmates who are not yet too deeply involved in drug use or criminal behavior. Findings on the relationship of heroin use and recidivism, however, are based on too few subjects to permit generalization. Further research is needed to clarify the relationship.

Nash, George. The Impact of Drug Abuse Treatment Upon Criminality: A Look at 19 Programs.
 Upper Montclair, New Jersey: Montclair State College, 1973. 92 pp.

DRUG	Heroin; Methadone
SAMPLE SIZE	2,798
SAMPLE TYPE	Treatment (inpatient); Treatment (outpatient)
AGE	Adolescents; Adults
SEX	82% Male; 18% Female
ETHNICITY	43% Black; 52% White; 5% Hispanic
GEOGRAPHICAL AREA	New Jersey
METHODOLOGY	Statistical Analysis; Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Program/Clinic Statistics Questionnaires; Arrest Records
DATE(S) CONDUCTED	July 1, 1972 - June 30, 1973
NO. OF REFERENCES	3

PURPOSE

To compare the effectiveness of methadone treatment and drug free treatment programs, researchers at the Drug Abuse Treatment Information Project (DATIP) compiled arrest abatement data on subjects enrolled in 19 drug abuse programs in New Jersey. Histories of arrests for narcotics-related and other crimes, before and after treatment in each type of program, were analyzed and correlated with other data on the clients and the programs, to yield information about each type of treatment mode.

METHODOLOGY

Between July 1, 1972 and June 30, 1973, 19 drug abuse programs representative of methadone and drug free treatment methods in New Jersey were examined. Thirty subjects were selected from each of the 17 programs in which most clients were over age 18. Of the 577 clients whose arrest histories were included in the follow-up study, 277 were interviewed in person. Eighty-two percent were male, 52% White, 43% Black, and 5% Hispanic. Arrest data were obtained from state-wide New Jersey police records and divided into two categories: narcotics-related arrests, and all others.

For subjects in both the methadone and the drug free treatment programs, arrest data were compiled for three periods: prior to addiction, after addiction and prior to therapy, and after admission to therapy. The measure of effectiveness for each treatment program was the difference between the number of arrests prior to treatment, and the number after treatment was begun. This arrest abatement figure, expressed in numbers and in percent, was the central measure of the study.

Abatement data was obtained for nine methadone and eight drug free programs. At two drug free programs, compilation of data was impractical because the average age of clients was below 18,

and the State Police maintain arrest records only for persons 18 and over. Abatement figures for each program were compared with program and client characteristics to discover associated factors.

RESULTS

Arrests Before Treatment

Eighty-three percent of the methadone and 57% of the drug free clients had been arrested prior to entry into treatment. Subjects in the methadone programs were older, and therefore had accumulated a larger number of arrests per person since age 18. They averaged 5.7 arrests compared with 2.3 for subjects in the drug free program. The number of arrests per year after age 18 was .67 for those in the methadone programs, and .69 for the others. For each type of treatment, narcotics-related arrests were in the minority, making up 35% of the total in both programs. The specific break-down of crimes is not presented for the non-narcotics-related arrests, but most involved crimes against property (such as robbery and breaking and entering).

Demographic factors, especially age and ethnicity, had a strong bearing on the type of arrests among subjects. Whites and younger people in both types of programs were more likely to have had a high proportion of their total arrests for crimes related to narcotic offenses. Whites in drug free treatment programs had the highest portion of arrests on narcotics-related charges (50%). Whites in methadone programs had 40% narcotics-related arrests. Blacks in methadone programs had 30%, and in drug free programs 23% narcotics-related arrests. Subjects 22 years old and younger had 45% narcotics-related arrests compared with 26% in older subjects. Sexual differences were negligible.

Arrests While Using Heroin

The overwhelming majority of all arrests of both types occurred during the period of heroin use. For the average methadone subject, 94% of all arrests prior to the beginning of treatment occurred after beginning heroin use. The figure for the drug free programs was 83%. It is natural that the drug-related offenses would occur during heroin use; what was unexpected was that the proportion of all arrests would be so high.

There was more uniformity in the proportion of arrests occurring after onset of heroin use among the methadone programs than among the drug free programs.

Arrests After Treatment

Essentially the same types of arrests occurred before and after treatment. For the methadone programs, exactly the same proportion of arrests (35%) were for narcotics-related charges before and after treatment. In the drug free programs, where 35% of the arrests prior to treatment were narcotics-related, the figure was 41% afterward.

Abatement in Criminality Due to Treatment by Type of Arrest

In the methadone programs, the average client had .44 non-narcotics arrests per year prior to treatment, and .33 per year after treatment, an abatement of .11 arrests per year. This was double the rate of abatement for narcotics-related crimes, which went from .23 to .18 arrests per year, an abatement of .05 arrests per year.

Similarly in the drug free programs, the average client went from .46 to .32 arrests per year for non-narcotics-related offenses, an abatement of .14 arrests per year. For narcotics-related charges, the figures were .24 to .15 arrests per year, an abatement of .09.

This typical pattern did not hold true for all programs. Some did much better in the abatement of non-narcotics-related crimes than in narcotics-related offenses. All the methadone programs showed an abatement of other types of arrests.

The methadone and drug free programs also were ranked on the abatement of both types of crimes. For five of the nine methadone programs, the abatement rank for each type of crime was approximately equal. In the drug free programs there was even more uniformity: seven out of eight ranked equally.

Abatement Tied to Client Characteristics

The largest abatement occurred with the young methadone clients who showed an improvement of .44 arrests per year after beginning treatment. For the medium age methadone clients abatement was .26 arrests per year. There was less variation between the young and medium age drug free clients, but the older drug free clients actually had .08 more arrests per year after beginning treatment.

There were important differences in the effectiveness of treatment between men and women. In both types, women had fewer arrests per year prior to treatment, but there was little difference in the pre-treatment and post-treatment figures for women in either type of program. The women in methadone treatment had .09 less arrests per year, and those in drug free treatment .03 more per year.

In methadone treatment, the abatement was identical between Blacks and Whites. In drug free treatment, the abatement was much greater for Whites at .45 arrests per year, whereas the figure for Blacks was .16.

For clients in the methadone programs, abatement was related to employment. Stable employment prior to and following treatment generally correlated with a high abatement rate. For subjects in the drug free programs, a high abatement rate tended to correlate with staff effectiveness, leadership, teamwork and morale. In general, methadone clients had to remain in treatment to experience abatement, whereas subjects who completed drug free programs showed a decrease in arrests even after leaving treatment.

CONCLUSIONS

There is a role for each type of treatment, and it is possible to measure the effectiveness of both. The abatement in arrests due to treatment was greater for the drug free programs than for the methadone treatment programs. In the long run, drug free programs which serve a steady stream of new clients are able to reach more people and cause a greater proportion of abatement in arrests than do methadone programs.

Both treatment modes showed abatement, but for different reasons. For the methadone programs, it was largely the characteristics of the clients before they entered treatment, and particularly their employment records, which determined the effectiveness of the programs. In the drug free programs, abatement was largely due to staff effectiveness (which was in turn related to personal characteristics, rather than staff size or expenses).

Each method of treatment is effective, but works differently with different types of clients. Both treatment methods are effective with younger and median age clients, but neither is effective with subjects age 27 or older. Drug free treatment decreases the likelihood of arrest even after clients have left treatment, whereas methadone patients must remain in methadone treatment for abatement to continue.

Newman, Robert G., and Bashkow, Sylvia. Arrest histories before and after admission to an ambulatory detoxification program. In: National Association for the Prevention of Addiction to Narcotics. Proceedings of the Fifth National Conference on Methadone Treatment. Washington, D.C., March 17-19, 1973. Vol. 1. New York: The Association, 1973. pp. 101-108.

DRUG	Opiates; Methadone
SAMPLE SIZE	280
SAMPLE TYPE	Treatment (outpatient)
AGE	Not Specified
SEX	Both Sexes
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Program/Clinic Statistics; Police Records
DATE(S) CONDUCTED	July, 1971-July 1972
NO. OF REFERENCES	0

PURPOSE

Researchers at the New York City Ambulatory Detoxification Program compared patterns of arrest histories for single- and multiple-detoxification patients, to determine the impact of the program upon criminality. The program used decreasing doses of methadone administered on an outpatient basis.

METHODOLOGY

The sample consisted of 280 randomly selected addicts admitted to the New York City Ambulatory Detoxification Program in July, 1971 and during the following 12 months. Subjects included men and women, of unspecified age, who had been addicted to narcotics for at least one year. Detoxification was achieved in a seven-day schedule.

The sample was divided into subjects who returned for subsequent detoxification during the following six months, and single-detoxification patients. This latter group was subdivided into those who left the program within five days, and those who remained in treatment for six or seven days, ultimately receiving the 5-10 mg, lowest methadone maintenance dosage.

Demographic characteristics of the subjects and their arrest histories during the six months prior to admission to the program were obtained from records of the New York Police Department Bureau of Criminal Identification. Arrest histories are presented as arrest rates per 100 person years, and percent of patients arrested. Specific crime data is presented for the single-detoxification group.

RESULTS

Demographic characteristics did not differ significantly among the groups of subjects, except that the multiple-detoxification group included a higher proportion of women. Arrest histories, however, were considerably different. The 217 single-detoxification patients experienced an increase in overall arrest rate from 27.7 to 62.7 (128%) when the quarter-year prior to admission was compared with the rate during the second quarter before entering treatment. After detoxification, arrests declined 24% in the first quarter and another 22% in the second quarter after treatment. The 63 multiple-detoxification patients had a decline in arrest rate from 76.2 to 12.7 (83%) in the pre-admission period, followed by a rise subsequent to treatment to a rate of 82.5 in the first quarter and 94.5 in the second quarter.

The percent of multiple-detoxification patients arrested declined from 12.7% to 3.1% prior to admission, and increased to 15.9% and 18.6% in the two periods following entry into the program. Single-detoxification patients remaining in treatment six or seven days had a greater increase in arrest rate from the second to the first pre-admission quarter than did patients treated five days or less. Those completing treatment experienced a 36% decline in arrests in the first post-treatment quarter, with no further change. Those leaving prematurely experienced no change in the first quarter, but a 45% decline in the second post-admission quarter.

The percent of persons arrested declined for all patients, 38% for those remaining six or seven days, and 27% for those who left prematurely. Following admission there was a sharp decline in all charges, especially drug-related crimes.

CONCLUSIONS

The observed likelihood of arrest reflects an increased dependence on criminal activities, which may be a major factor in leading addicts to seek treatment. A rising arrest record prior to admission may be associated with increased motivation to accept long-term referral. The multiple-detoxification patients, who did not experience a rise in arrests prior to admission, may be less inclined towards rehabilitation.

Among the single-detoxification patients, the decline in arrests indicates a positive impact upon criminality, even for those who left the program prematurely. Findings indicate that ambulatory detoxification programs must be designed to complement long-term addiction treatment programs, to have a significant impact upon criminality.

Newman, Robert G.; Bashkow, Sylvia; and Cates, Margot. Arrest histories before and after admission to a methadone maintenance treatment program. Contemporary Drug Problems, 2(3):417-430, 1973.

DRUG	Heroin; Methadone
SAMPLE SIZE	330
SAMPLE TYPE	Program Applicants
AGE	330 Adults
SEX	Both Sexes
ETHNICITY	Black, White, Puerto Rican
GEOGRAPHICAL AREA	New York, N. Y.
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	Arrest Records
DATE(S) CONDUCTED	November 1970 - May 15, 1972
NO. OF REFERENCES	3

PURPOSE

Arrest histories of applicants to a New York City methadone maintenance program were studied to attempt to indicate the program's effectiveness in changing addict criminal behavior. The program, begun in 1970 by the New York City Health Services Administration, was modeled after the Dole-Nyswander method. It was initiated to provide prompt treatment to all applicants who met the admission criteria of age (18 or older), duration of addiction (two years mainlining history of heroin use), and residence (within New York City).

METHODOLOGY

The sample consisted of 330 individuals who applied to the program between November 1970 and October 1971 and who were subsequently admitted. Arrest histories before and after admission (until May 15, 1972) were taken from the "rap sheets" of the New York City Police Department Bureau of Criminal Investigation.

For purposes of analysis, the subjects were divided into three cohorts, according to length of time in treatment. Thus pre- and post-admission rates would reflect the experience of the same individuals. In order to show a more accurate measure of the effectiveness of the program, arrests of patients subsequently terminated were included with those who continued in active treatment. For easier comparison of data, arrests were shown as the rates per 100 person years.

RESULTS

Arrest rates did not change considerably until the six-month period preceding application for admission to the program. In that period, there was a 32% increase in arrest rates. There was an additional increase of 12% in the arrest rate between application and actual admission to the program. The following was found for each cohort:

1. All admissions--first half year in treatment. During the year prior to admission, 40% of the 330 subjects were arrested at least once; the pre-admission arrest rate per 100 person years was 70.6. There were 35 terminations during the first six-month period of treatment. For the first six months, the post-admission arrest rate per 100 person years was 30.2, a decline of 57% from the pre-admission rate.

11. Patients in treatment seven months or more--arrest histories 1-6 and 7-12 months after admission. Seventeen (8.2%) of the 208 patients in the program seven months or more were terminated during the second six months of treatment. While 38% (69.2 arrest rate) had been arrested one or more times during the year preceding admission, during the first half-year of treatment the arrest rate decreased by 63%. The decrease during the first year of treatment was 59%.

111. Patients in program 13 months or more--arrest histories 1-6, 7-12, and 13-18 months after admission. For the 54 patients in treatment 13 months or longer, there was one termination. During the 12 months before entering treatment, 43% were arrested at least once (92.6 arrest rate). The arrest rate during the first six months of treatment decreased by 84%, and the decrease at the one-year point was 76%. The decline for the average 14.4 months of treatment was 82%.

For women among the 330 subjects, the arrest rate in the year prior to admission was 48% less than that for the men (40.7/100 person years for women, 77.8 for men). During the first six months of treatment, the arrest rate for women decreased 73%, men 55%. Women in the program seven months or longer had an arrest rate decrease of 72%, men 59%. For treatment over 13 months, the decline was 100% for women, 80% for men.

Out of all subjects, the pre-admission arrest rates for Whites was 63.0, for Blacks it was 79.3, and for Puerto Ricans it was 70.9. Records showed a marked decrease in arrest rates for all races in the post-admission period.

CONCLUSIONS

Methadone maintenance is a highly effective means of reducing criminality among narcotic addicts who have chosen the program voluntarily. The effectiveness is not limited to a small segment of the population. All subsamples studied showed a major decrease in arrests after admission to the program. Considering the pre-admission arrest records of the patients under study, the population presently served by the methadone maintenance treatment program definitely needs the services provided.

Patch, Vernon D.; Fisch, Alan; Levine, Matthew E.; McKenna, Gerald J.; and Raynes, Anthony E. Heroin addicts and violent crime. In: Proceedings of the Fifth National Conference on Methadone Treatment. Washington, D.C., March 17-19, 1973. Vol. I. New York: National Association for the Prevention of Addiction to Narcotics (NAPAN), 1973. pp. 386-390.

DRUG	Heroin; Methadone
SAMPLE SIZE	526
SAMPLE TYPE	Treatment (outpatient)
AGE	Young Adults
SEX	Not Specified
ETHNICITY	Black; White; Puerto Rican; Other
GEOGRAPHICAL AREA	Boston, Massachusetts
METHODOLOGY	Exploratory/Descriptive; Statistical Analysis
DATA COLLECTION INSTRUMENT	Probation Records
DATE(S) CONDUCTED	August 1972
NO. OF REFERENCES	0

PURPOSE

The results of the studies of Frances Gearing have raised questions concerning the relationship of methadone maintenance and crime reduction, and the comparability of data from different sources in their evaluation. Of particular concern are the effects of: (1) patient selection factors; (2) variations in law enforcement activities during the study period; (3) lack of inclusion of suburban crime data; and (4) possible changes in police practices in classifying offenses during the study period. The answers to these questions have important bearing on reported crime reduction. Also of interest is whether Gearing's crime reduction data are generalizable to a treated population of younger addicts.

In Boston's 3-year-old Drug Treatment Program, the mean age of the addict population as of August 1972 was only 25.9 years, as opposed to 33.1 years in the Gearing study. Younger addicts, since they have not yet exhausted their superficial veins, might be less responsive to methadone maintenance than the Gearing population.

The focus of police activities has shifted from marijuana violations to heroin violations in the past 3 years. An apparent reduction in arrests for narcotic violations might be indicated when no change in actual patient behavior occurred. In addition, the attitude of local law enforcement authorities towards a drug treatment program constitutes an important variable to be considered in assessing crime reduction data, depending on whether police tend to "crack down" or "go easy" on addicts undergoing drug treatment.

To provide further answers to these questions, a study was conducted among patients in various methadone treatment programs in Boston.

RESULTS

Information from the Massachusetts Department of Probation was obtained for 1,878 patients in Boston from June 1, 1970 through the end of July, 1972. Studies of 526 patients revealed a ratio of violent crime to property crime of 1:2.82, and a ratio of violent crimes to drug crimes of 1:2.58 for a period of 2 years prior to methadone, and a mean of 1.35 years following treatment.

Contrary to expectations, reduced crime was directly correlated with lower age. Patients in the Boston City Hospital Drug Clinic (n=172), with a mean age of 29.35 years, showed a 1-year post-treatment crime reduction of 40.5%. Patients in the East Boston Methadone Clinic (n=88), with mean age being 23.99 years, showed a crime reduction of 51.2%, and those in the Brighton Methadone Maintenance Clinic, who were intermediate in age between the other two, showed 44.2%. Increasing age was also associated with longer criminal records and more time spent in jail.

The patients in the areas served by these 3 clinics differed sharply in background, and data strongly suggested an unevenness in law enforcement activities in various parts of the city, factors which create special problems in data interpretation. The Boston City Hospital Clinic serves the predominantly Black and Puerto Rican urban ghetto, where the patients studied were brought to court at the rate of 0.819 crimes per patient per year. The East Boston Drug Clinic serves a tightly-knit, second and third generation Italian-American community; here patients were brought to court at the rate of 1.23 crimes per patient per year. In the Brighton Clinic area, which is 95% White and where the addicts may be characterized as "hippie dropouts," patients came to court at the rate of 1.44 crimes per patient per year. The above figures are a total average of all types of crimes for the period immediately preceding the institution of methadone maintenance programs.

CONCLUSIONS

It seemed abundantly clear that the Boston City Hospital Drug Clinic patients, who faced the court for crimes at little more than half the rate for patients in the Brighton Clinic and approximately two-thirds the rate for patients in the East Boston Clinic, should, perhaps, be measured by a different yardstick when one considers crime reduction and methadone maintenance. The point is that baseline data for measuring crime reduction are not necessarily even from clinic to clinic within a single city and most certainly are not even from city to city.

Patch, Vernon D.; Fisch, Alan; Levine, Matthew E.; McKenna, Gerald J.; Raynes, Anthony E. Urban versus suburban addict crime. In: National Association for the Prevention of Addiction to narcotics. Proceedings of the Fifth National Conference on Methadone Treatment. Washington, D.C., March 17-19, 1973. Vol. I. New York: The Association, 1973. pp. 393-396.

DRUG	Heroin; Methadone
SAMPLE SIZE	526
SAMPLE TYPE	Treatment (inpatient & outpatient)
AGE	Adults (median age: 25.9)
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Boston, Mass.; Suburbs of Boston
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Probation Records
DATE(S) CONDUCTED	July 1972
NO. OF REFERENCES	0

PURPOSE

Heroin addicts have been considered responsible for up to 50% of all crimes committed within the city of Boston. In an effort to evaluate the assumption that drug use is a major factor in recent crime increases, arrest records for addicts in treatment served as a data base for calculation of the actual crime within Boston.

METHODOLOGY

The sample consisted of 526 heroin addicts in treatment during July 1972 at clinics in the Boston area: 244 from Boston City Hospital Drug Clinic, 84 from the Brighton Drug Clinic, 150 from the East Boston Drug Clinic, and 48 from the Mattapan Detoxification Unit. The mean age of the patients was 25.9 years. Probation records were obtained from the Massachusetts Department of Probation for all subjects during the 12 months prior to admission to treatment; this data is presented by crime and by location. Using this information, as well as the national averages by crime obtained from the FBI Uniform Crime Report of 1971, addict crime rates were calculated for the Boston area. Findings are graphed and tabulated as urban and suburban crimes.

RESULTS

Five hundred and ninety-eight separate crimes resulted in court charges for the sample over a one-year period prior to treatment. Subjects at the Boston City Hospital Clinic committed 19% of their total crimes outside the inner city. Those at the Brighton Clinic committed 41% of all crimes in the Brighton-Allston suburban community. Those from the East Boston clinic, located in an area somewhat removed from the city, committed 56.8% of all crimes in the suburbs.

Of total crime in all localities, larceny comprised 20.9%; receiving stolen goods, 9.5%; breaking and entering, 8.6%; assault, 3.3%; forgery, 3.3%; and robbery, 3.3%. Pretreatment arrests were calculated per patient per year as .277 for larceny, .0437 for robbery, and .114 for breaking and entering. Probable addict crime for the Boston area was calculated at 9,050 larcenies, 1,110 robberies, and 4,110 burglaries. It was estimated that the probable number of addicts was 6,846 and that they accounted for 41.1% of all larcenies within Boston, 13% of all robberies, and 18.7% of all burglaries.

CONCLUSIONS

Addicts, at least in Boston, are inclined to confine their criminal behavior to locations not far from home. However, the total percentage of crime committed by addicts indicates that only 56.7% of all addict crime is actually committed within the city. Addicts account for smaller percentages of crimes in Boston than previously believed.

Perkins, Marvin E., and Bloch, Harriet I. Survey of a methadone maintenance treatment program. American Journal of Psychiatry, 126(10):33-40, April 1970.

DRUG	Heroin
SAMPLE SIZE	521; 1233
SAMPLE TYPE	Treatment (outpatient)
AGE	Adults
SEX	82% Male; 18% Female
ETHNICITY	Black; White
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Exploratory/Descriptive
DATA COLLECTION INSTRUMENT	Laboratory/Examination; Program/Clinic Statistics
DATE(S) CONDUCTED	Feb. 8, 1965-Feb. 7, 1968
NO. OF REFERENCES	14

PURPOSE

As a guide to future policy formulation, program development and further studies, the operating experience of a methadone maintenance treatment program in New York City was studied. It was felt that comparing the admitted to the nonaccepted would crystallize questions germane to the admission selection process.

METHODOLOGY

The program studied was the Morris J. Bernstein Institute (MJBI) which handled a large clinical portion of the Beth Israel Medical Center program initiated by Nyswander and Dole. A retrospective survey was conducted of the 521 addicts admitted from the start of the program, February 1965 to February 1968, as well as the 712 addicts not accepted.

The survey of the admitted addicts utilized information from intake and medical records, urine reports, pharmacy reports, the patient register, and the unit director's reports. Three sets of variables were produced. Preadmission variables described the subjects' demographic characteristics, social and health conditions. Program variables presented experience in the workings of service controls and procedures. Reevaluation variables permitted an estimate of change from preadmission to the end of the survey. Four interrelated studies were accomplished: (1) A descriptive analysis of MJBI patients. (2) An analysis of variables associated with discharge. (3) An analysis of variables associated with continued drug use. (4) A comparative analysis of MJBI patients with nonaccepted addicts.

RESULTS

Study I

The typical MJB patient was male, White, 32 years old, and Catholic. "Achieved status" (schooling, employment, marital status) was low; health was good and "substance use" (heroin, other drugs, alcohol) was extensive. Criminal-legal involvement was high; sixty-eight percent admitted to illegal activities during the six months prior to the interview. The mean number of arrests was five; the mode eight or more. The mean number of incarcerations was four.

Modal average hospitalization period for stabilization was six weeks, and mean length of time in the program one year. The average patient was maintained on 91 to 100 mg. of methadone daily. Reevaluation indicated improved social and health functioning, although 20% continued to use drugs in addition to methadone. As to program status, 14% of the patients had been discharged.

Study II

Program status was found to be unrelated to "ascribed status" (demographic characteristics). Discharge appeared to be significantly associated with poor social and health functioning at both preadmission and reevaluation. The highest percentages of discharge occurred among the unemployed, multiple-substance users, the physically and mentally ill, and the criminally involved. All 24 patients who were never involved in illegal activities remained active in the program as did nearly all who had never been arrested or incarcerated. Patients arrested seven or more times were more often discharged than those less frequently arrested. Patients incarcerated five or more times were likewise more often discharged.

Regarding program variables, the lower the methadone dosage, the higher the proportion of discharge; patients treated less than a year were discharged more often than patients treated for more than two years.

Study III

The third study indicated that most preadmission and program variables were not significantly associated with continued drug use, except that patients in treatment a year or less showed a higher proportion of continued use than those treated over a year. Legal status was not significantly associated with continued use. At reevaluation there was a significantly higher proportion of drug use among patients manifesting poor social and health functioning.

Study IV

The fourth study underscored the differences between patients admitted and patients not accepted. Admitted patients were more often White, employed, and were less criminally involved. (At the intake interview, more nonaccepted subjects had reported illegal activities). They also used fewer barbiturates, and had proportionally fewer alcohol and psychiatric problems than nonaccepted applicants.

CONCLUSIONS

From the data it appears that patients are at greater risk of discharge during the earlier part of the six-week period for stabilization on methadone than later, and that patients are more liable to discharge during the first year than the second. This may suggest the necessity of intensifying efforts at retaining patients during these two critical stages. The importance of educational and occupational advancement is also evident, suggesting that the vocational rehabilitation part of the program may need greater emphasis. Further predictive research is required.

Schut, Jacob; Steer, Robert A.; and Gonzalez, Frank I. Types of arrests recorded for methadone maintenance patients before, during, and after treatment. British Journal of Addictions, 70:80-93, 1975.

DRUG	Methadone
SAMPLE SIZE	65
SAMPLE TYPE	Treatment (outpatient)
AGE	Adults (mean age 33.8 years)
SEX	Male
ETHNICITY	38 Black, 27 White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Statistical Survey
DATA COLLECTION INSTRUMENT	Police Records
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	6

PURPOSE

A dramatic reduction in the total number of arrests officially recorded for narcotic addicts after admission to a methadone maintenance program has been well documented by researchers. However, research has not established conclusively that this decrease applies across all types of possible criminal activity engaged in by addicts. This study attempted to determine whether or not addicts admitted to methadone programs showed decreased incidences of arrests for (1) violence, (2) property, and (3) drug related crimes.

METHODOLOGY

Male heroin addicts admitted to a methadone maintenance therapy program during 1967-1972 were included in the study. Random samples of 25 men who had received continuous treatment for three months or more were drawn from each of the fiscal years 1967-1968, 1969-1970, and 1971-1972. Eighty-seven percent (N=65) of the proposed sample had sufficient background information and police records to allow comparison of pre- and post-treatment arrests. The men had a mean age of 33.8 years, and had been in the program for 2.4 years by the time the study began. Nineteen of the 65 patients had been discharged for 1.6 years, and all these men had left the program against medical advice.

Arrest histories were obtained from local police files, which included FBI data. All arrests for any type of violence, property or drug related crime prior to treatment and all such crime committed while in treatment were included for study. For the 19 men who had been discharged against medical advice, the incidences of any arrests for violence, property or drug related crimes were also recorded for the time that they had been out of the program. McNemar's chi-square test was employed for analysis of the data.

RESULTS

The proportion of addicts who had been arrested for violence, property, and drug related crimes decreased significantly for all three types of crime after their admission; and the proportion of addicts who had not been arrested for any of the three types of crime did not increase. For those men who dropped out of the program, incidences of arrest were comparable to those while in treatment.

CONCLUSIONS

The findings suggest that male heroin addicts' incidences of arrests for violence, property, and drug related crimes diminish significantly while they are receiving methadone maintenance, and that even those who are dropouts continue to show the same low incidence of arrest that they demonstrated while in treatment. This study supports other researchers' findings.

Sechrest, Dale K., and Dunckley, Thomas E. Criminal activity, wages earned, and drug use after two years of methadone treatment. Addictive Diseases, 1(4):491-512, 1975.

DRUG	Heroin; Methadone
SAMPLE SIZE	463
SAMPLE TYPE	Methadone Treatment Patients
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Santa Clara County, California
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Criminal Records
DATE(S) CONDUCTED	1971-1973
NO. OF REFERENCES	6

PURPOSE

In view of the heavy emphasis on methadone maintenance as a drug treatment program, the Santa Clara County Methadone Program was evaluated in terms of impact on patient performance based on the criteria of: (1) decreased criminal activity, (2) increased employment and earnings, and (3) decreased narcotic and drug abuse.

METHODOLOGY

Subjects were the first 463 admissions into the program, divided into status groups (those who were on the program after two years, and those who terminated before two years) and design groups (based on determination of success, failure, or no change). These groups were compared for pre-program differences, and then changes over time were measured between and within groups. Since no control group was used, performance was measured against the patients' own baseline level of pre-program functioning.

Data on criminal activity were gathered from California Department of Justice records, coded for period of time in which it occurred, and measured by number, type, and severity of offense, as well as months incarcerated. Since success or failure might be influenced by time at risk (i.e., length of exposure in the community), this factor also was recorded pre- and post-program.

Employment and earnings data were collected from information gathered by a pharmacological study group, and from the "Base Wage Files" of the California Department of Human Resources, yielding quarterly earnings from start quarter to fifth quarter in the program.

RESULTS

Program retention, considered an important variable because of presumed correlation with program success, was 55.3% for the cohort sample. The 256 patients still on the program after two years had been there about twice as long as those who had left.

Criminal activity was analyzed by status groups pre- and post-program. Pre-program criminal activity was greater and more severe for those who went off the program. These patients registered post-program arrest increases in almost all offense categories, except receiving stolen goods. Arrests for heroin sales increased threefold, and heroin possession arrests doubled. Patients who stayed on the program showed arrest decreases for burglary, heroin possession, and other misdemeanor arrests. Convictions generally showed the same pattern. The only post-program decreases for those who left the program were convictions for forgery, receiving stolen goods, petty theft, and miscellaneous traffic and misdemeanor offenses.

Statistical analysis showed significant differences in total arrests pre- and post-program by status groups. Misdemeanor arrests increased for both groups, but there was no significant difference pre- to post-program for either misdemeanor arrests or convictions. In pre- and post-program felony arrests and convictions, however, patients who stayed on the program did better than expected; those who left did worse than expected. While criminal activity did not cease, patients who remained on the program were less criminally active.

Differences were examined in mean number of pre- and post-program arrests and convictions between patients who remained and patients who terminated. The two groups were different populations prior to admission. Those who stayed on the program were "better" to begin with, and either remained the same or improved. Those who left were "worse" to begin with, and either remained the same or did worse.

The extent of post-program improvement was then measured for each group of patients against their own baseline performance. Results for patients who stayed on the program were all in the direction of reduced criminal justice activity: felony arrests, parole and probation revocations, jail sentences, and commitments to the California Rehabilitation Center. For the patients who left the program, mean criminal justice activity increased in almost every category.

A stepwise multiple regression technique was used to develop a means of predicting patient success based on background information. Four patient-outcome variables were used against 30 baseline (independent) variables, confirming earlier findings. The best predictor of success in outcome performance was the seriousness of prior criminal activity. The best predictor for staying on the program was the number of arrests in the 18 months prior to coming on the program. Pre-program time at risk was the best predictor of serious post-program criminal activity, i.e., the greater the time at risk, the less likely was the individual to become involved in serious criminal activity.

CONCLUSIONS

The findings indicate that a methadone program can produce some impact on the lives of its patients--the retention rate alone is impressive for an ambulatory, community-based clinic. It appears to work best, however, with those patients who begin with less serious problems. Though the patients who left the program did not do as well as those who stayed on, it is assumed that a control group (receiving no treatment) would have done even more poorly. The question remains: how well would the program drop-outs have done had they remained on the program? Changes in life-style, especially in serious cases, take at least two years; programs must be prepared to meet the long-term needs of the patients.

Sobol, Norman L.; Wieland, William F.; Jacobsen, Richard; Wochok, Taras M.; Wolfe, Robert C.; and Savitz, Leonard D. The Philadelphia TASC Program (Treatment Alternatives to Street Crime). Conference workshop. In: Proceedings of the Fifth National Conference on Methadone Treatment. Washington, D.C., March 17-19, 1973. Vol. II. New York: National Association for the Prevention of Addiction to Narcotics (NAPAN), 1973. pp. 928-942.

DRUG	Methadone
SAMPLE SIZE	100
SAMPLE TYPE	Treatment (outpatient); Incarcerated; Treatment (inpatient)
AGE	Adults (median age: 23.1 years)
SEX	80 Male; 20 Female
ETHNICITY	50 Black; 50 White
GEOGRAPHICAL AREA	Philadelphia, Pennsylvania
METHODOLOGY	Longitudinal
DATA COLLECTION INSTRUMENT	Interviews; Observations; Program/Clinic Statistics
DATE(S) CONDUCTED	After Dec. 1972
NO. OF REFERENCES	0

PURPOSE

Philadelphia's Treatment Alternatives to Street Crime (TASC) program is a new diversion plan designed to interrupt the drug-driven cycle of arrest, bail, trial, confinement, and return to former patterns. Its goals are to reduce street crime through treatment and rehabilitation, both social and clinical. Summarized below are the contents of five short papers describing the diversion system for TASC clients, its treatment programs which encompass several modalities including methadone maintenance and planned research, as well as some early results.

PROGRAM DESCRIPTION

TASC is one of five diversion programs in Philadelphia by which arrestees who are also drug addicts may be placed in treatment in lieu of criminal prosecution and conviction. Treatment modalities include methadone maintenance, drug free therapy, hospital detoxification, and group therapy, conducted by a team of medical persons, social workers, and ex-addict counselors. Clients are individually placed in modalities according to need.

METHODOLOGY

For the preliminary results, the first 100 arrestee-clients were selected as a sample. Eighty percent of this group was male, 50% was Black and 50% White. The mean age was 23.1 years. Follow-ups indicated arrest history after treatment. Information about abstinence, stabilization or socially productive behavior was not yet compiled.

RESULTS

For the sample, the mean arrests were 2.4, and mean convictions .68, prior to the current arrest leading to diversion and treatment. Seventy-four percent reported using heroin from 2 to 5 years prior to the current arrest. The mean cost of drugs was \$35 per day, and 44% of the sample said that 90% to 100% of the drug cost was obtained illegally. A total of 71% reported that they violated the law on a continuous basis to support their habits. Re-arrest figures indicated that of 97 active clients, only 4 were subsequently arrested. Of 44 subjects dropped from the TASC program, 10 were re-arrested within a month or two.

CONCLUSIONS

The effectiveness of the TASC diversion program can be evaluated only superficially at present, and requires further comprehensive study. However, preliminary findings indicate that its multi-modality treatment does reduce the frequency of re-arrests among clients, as compared with drop-out controls.

Soloway, Irving H. Methadone and the culture of addiction. Journal of Psychedelic Drugs, 6(1): 91-99, January-March 1974.

DRUG	Opiates; Methadone
SAMPLE SIZE	103
SAMPLE TYPE	Treatment (outpatient); Other
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Not Specified
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	June 1970-February 1972
NO. OF REFERENCES	11

PURPOSE

In an unspecified eastern city, methadone maintenance was examined as a legal medication and as a street drug, comparing effectiveness evaluations by agencies and by addicts, in order to determine the viability of methadone maintenance as a treatment modality.

METHODOLOGY

The sample consisted of 103 drug users in a large eastern city currently taking illegal drugs (marihuana was excluded from consideration). Of these, 26 (25%) were active patients on a methadone program, 56 (54%) had been patients within the past year, prior to the initial interview conducted in June, 1970. Follow-up case studies were continued until February, 1972. Subjects were interviewed regarding drug use and life style before, during and after treatment, when applicable, and about illegal traffic in methadone. Specifically, they were asked for information about how the methadone maintenance treatment modality has been incorporated into the ongoing operating ethos of illegal drug use. The responses of patient and non-patient subjects were compared with the evaluation of methadone programs by funding and treatment agencies.

RESULTS

All subjects, including patients currently in methadone therapy, reported current illegal use of drugs. Most patients indicated that the primary motivation for entering treatment was not rehabilitation or change in life style, but control of the demands of addiction.

Of the 82 informants with experience on the programs, 12 (15%) had at one time been enrolled in more than one program simultaneously. Thirty-four (41%) had used extra methadone procured from

illegal channels, and 40 (49%) admitted having sold or given away their weekend medication to another person on at least one occasion. (Six of these 40 continued this practice throughout treatment.) Most informants cited clinics and hospitals as excellent marketplaces for illegal methadone and other drugs.

Despite contrary reports, of the 82 subjects with program experience, 21 (26%) maintained that they had continued or increased criminal activities while on methadone, and admitted lying to their counselors about their behavior. Violent crimes correlated with increased cocaine use while on the program. These subjects also reported falsifying employment status to placate treatment agencies (who report 63.7% employment for patients).

Informants also reported that the availability of methadone programs produced a casual attitude towards possible heroin addiction in youths, who then felt freer to experiment with this drug.

CONCLUSIONS

Addicts and other users and dealers of methadone have discovered in this medication yet another addicting drug with pleasurable effects. The cultural ethos of illegal drug use remains unaltered by the introduction of methadone, despite agency claims to the contrary. Patients falsify claims of rehabilitation to insure ready supply from programs. As one addict commented, the program is the biggest dealer of them all.



7 The Economics of Drugs and Crime

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Alexander, Michael. The heroin market, crime and treatment of heroin addiction in Atlanta. In: Proceedings of the Fifth National Conference on Methadone Treatment. Washington, D.C., March 17-19, 1973. Vol. 1. New York: The National Association for the Prevention of Addiction to Narcotics, (NAPAN), 1973. pp. 733-751.

DRUG	Methadone; Heroin
SAMPLE SIZE	Not Specified
SAMPLE TYPE	Treatment (outpatient)
AGE	Not Specified
SEX	Not Specified
ETHNICITY	Not Specified
GEOGRAPHICAL AREA	Atlanta, Georgia
METHODOLOGY	Statistical Analysis
DATA COLLECTION INSTRUMENT	Program/Clinic Statistics; Arrest Statistics
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	14

PURPOSE

An attempt was made to correlate fluctuations in heroin availability and cost, crime rates, and levels of methadone treatment in Atlanta, Georgia, from 1971 to 1972. The study was done in part to test the validity of the assumptions on which current national law enforcement strategy is based, namely that reducing the availability of heroin will force addicts into treatment programs or abstention, and that methadone treatment programs can reduce crime. Also of concern was the question of whether a methadone treatment program would selectively reduce property crime over violent crime. These studies were in essence an attempt to predict addict behavior by quantifying parameters of the heroin market and to evaluate the effectiveness of law enforcement policies on heroin.

METHODOLOGY

Data on cost and potency of heroin available in Atlanta during the test period were compiled from local law enforcement sources. Crime statistics were obtained from the Atlanta Police Department, the largest of a number of local law enforcement agencies. Methadone treatment statistics were provided by the Drug Abuse Services Section (DASS) of the Georgia State Division of Mental Health.

RESULTS

Treatment of Heroin Addiction and Crime Rates

It was difficult to relate changes in Atlanta crime rates to the large-scale introduction of methadone treatment. It has been claimed that heroin-associated crimes are primarily property crimes; thus, one might expect methadone treatment to reduce property rather than violent crime rates. Violent crime rates had increased in Atlanta since 1970; property crimes had stabilized. However, this change in property crime rates antedated the institution of DASS.

The Heroin Market and Crime

From January 1971 through December 1972 there were significant correlations between heroin market parameters (heroin cost, availability, potency) and robbery, burglary, aggravated assault, and murder rates. At times when heroin potency was low and cost was high, rates rose for robbery, burglary, aggravated assault, and murder. The highest correlation was of heroin potency with robbery. Of the property crimes, only burglary rates correlated with potency. There was no correlation between potency or cost and larceny rates.

The Heroin Market and Treatment

Heroin cost and potency can also be used to evaluate treatment. The initiation of a methadone treatment program in September of 1971 unexpectedly corresponded to an increase in heroin potency, the reverse of predictions. The increase in heroin potency probably coincided with the large initial influx of addicts into the treatment program, thus diminishing the "addict pool" by about 50%. A more objective and useful measure of the value of the treatment program was in the comparison of heroin potency with the fluctuations in the number of addicts suspended from the program each week as a function of the total number of patients in the program during the previous week. Causes for suspension included detection of heroin in the urine and failure to appear for methadone doses. These computations revealed a significant correlation between potency and the percentage of suspensions per week.

CONCLUSIONS

The quantitative approach to assessing the heroin market has been shown to be feasible. Nevertheless, the large number of variables which influence the type of data used in this study render inconclusive the demonstration of any cause-and-effect relationship between heroin addiction and crime. The absence of correlation between larceny and heroin potency would seem to indicate this, particularly in the light of other studies.

It is possible that success by the government in reducing the availability of heroin could have an effect opposite to the desired one, since it might force addicts to commit more crimes in order to support their habit. It would seem premature to accept without reservation the correlation of heroin scarcity and increases in robbery, burglary, aggravated assault, and murder until data are evaluated over longer periods of time.

Brown, George F., and Silverman, Lester P. The retail price of heroin: Estimation and applications. Journal of the American Statistical Association, 69(347):595-606, September 1974.
(25 References)

PURPOSE

Applying market statistics to data regarding the cost of heroin, researchers developed price series for estimating the retail price of heroin in a number of major U.S. cities. A model of the heroin market in several cities was correlated with crime statistics to explore the relationship between fluctuation in heroin price and criminal activities.

METHODOLOGY

Data from forty-one cities were examined, but price series were constructed for only three: New York, Detroit, and Los Angeles. The model of the heroin market in these cities and the estimation of price series were derived from monthly reports by field agents of the Bureau of Narcotics and Dangerous Drugs, and from reports by local narcotics enforcement officers. Data covered July 1970 through June 1972.

The total quantity of heroin supplied in a given city at a specific time was considered a function of the retail price of heroin, the average quantity and potency of a transaction, the activities of law enforcement agencies, and the availability of the heroin to wholesalers. Various supply and demand factors could not be analyzed in terms of cause and effect; however, a price series was constructed estimating monthly variation in prices for a given quantity and potency. This series was tabulated within the study.

One problem with the price series was the fact that it was based upon data from purchases at different levels of the distribution system. Still, the explanatory power of the model was over 90% for 24 of the other cities studied, and under 80% for only four. Individual residuals exceeding three times the standard error were found to be the result of keypunch errors.

To examine the relationship between price fluctuations and crime, data was obtained from the FBI Uniform Crime Reports for nine major cities, and a formula was devised to relate monthly drug prices to specific offenses. The formula incorporates variables for temperature and time to reflect seasonal variations and a trend in the level of crime over the two-year period of the study. The parameters of this model were estimated by ordinary least-squares by category of offenses, for each of the nine cities for which most data were available. The explanatory power of the model was about 80% for aggravated assault, grand larceny and auto theft, and reasonably high for the other categories.

RESULTS

The price series varies by city. For example, the highest price per gram in New York and Los Angeles was \$60; in Detroit it was \$160. For 37 of the 41 cities in the data base, price per gram was a decreasing function of the number of grams of heroin purchased. Dilution increased as size of the transaction decreased at the lower levels of the distribution system.

The relationship between price fluctuations and crimes in major cities was ambiguous, but the results for New York suggest a positive relationship between heroin prices and eight of ten crime categories, as well as the total. A 10% increase in the price of heroin was predicted to lead to a 3.6% increase in robberies, a 1.8% increase in burglaries, a 2% increase in petty larceny, and a 2.5% increase in auto theft. A further analysis indicates that a 10% rise in heroin costs may be expected to lead to a 1.7% increase in taxicab robberies.

Houston findings were similar; however, those in Boston suggest a negative drug-price and crime relationship. Both positive and negative associations were found in Miami.

CONCLUSIONS

Two hypotheses regarding the heroin market as elastic or inelastic predict opposite results. If heroin consumption is constant, higher prices lead to more addict crime. On the other hand, if

criminal activity is independent of the price of heroin, a price fluctuation may simply cause criminals to consume less heroin when prices are high, and more when prices are low.

Unavailability of data has made it impossible to measure the extent to which fluctuations in the price of heroin actually affect crime. If addict crime is only a small proportion of total crime, or when addict population is small, the effect of drug prices may be a factor impossible to isolate. Or, addict crimes may be systematically underreported as a proportion of total crime.

Short- and long-run effects of an increase in heroin prices may be quite different. In the short run, increased drug costs may lead addicts to a higher level of criminal behavior. In the long run they may discourage entry into the addict population, and encourage rehabilitation, thus leading to a decrease in addict-related crime.

This preliminary work, while not conclusive, is suggestive of a positive relationship between drug prices and crime, and also of the type of research which can be conducted using statistics similar to those developed herein.

Casey, John J. Addiction-related crime: Its social cost and forced transfers. In: Casey, J. "Economics of Narcotics Addiction." Unpublished Dissertation, Department of Economics, Georgetown University, Washington, D.C. Ann Arbor, Michigan: University Microfilms, No. 72-22,770. pp. 126-198.

DRUG	Heroin; Multi-Drug
SAMPLE SIZE	3,623 Proxy Sample
SAMPLE TYPE	Treatment; Other
AGE	Adolescents; Adults (32.4% age 16-20)
SEX	Both Sexes
ETHNICITY	38.2% Black; 28.7% White; 32.8% Puerto Rican
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Exploratory/Descriptive; Economic Analyses
DATA COLLECTION INSTRUMENT	Secondary Sources
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	25

PURPOSE

In this chapter extracted from doctoral research on the economics of heroin addiction, crime by addicts was analyzed in terms of total expenditures for drugs, amount of habit support, and type of criminal activity. Other related social costs were tabulated, including losses due to public and private expenditures for law enforcement, judicial procedures and general prevention measures.

METHODOLOGY

Data necessary for measuring the cost of drugs to addicts, extent of illegal support, and type of illegal activity engaged in, were taken from the New York Narcotic Commission's Annual Report. Of the 3,623 Southern and urban addicts in the sample group, 28.7% were White, 38.2% were Black, 32.8% were Puerto Rican, and other categories comprised .3%. The sample was used as a proxy for all addicts.

Secondary source figures were used to construct an estimate of the number of addicts on the street nationwide. From this estimate and known costs of drugs, total national cost figures were devised. The extent of illegal support (percent of habit costs and how much money) was investigated for two groups of addicts--Southerners, and urban addicts. The data on Southerners, drawn from O'Donnell's study of Kentucky addicts, were derived from police records. Findings were tabulated by crime, before and after addiction, for males and females. Information as to addicts' criminal specialty was drawn from Preble and Casey's New York-based report, which was skewed toward greater representation of Puerto Ricans.

Total value transfer figures were derived from estimates of cash received for criminal activity plus the value of stolen property, considered equal to the dollars received from the fence multiplied by four. (Fenced goods are presumably resold for one-quarter current value.)

Using these techniques, value transfers were tabulated and totalled for business and individuals by crime (shoplifting, burglary, robbery, flat-footed hustling, prostitution and drug sales). Total transfer value was divided by number of crimes to yield an average transfer value per crime of each type.

RESULTS

Approximately 64,000 addicts (80,000 less 20% in detention or treatment) were on the street during 1966. Of these, females comprised 12% or 7,680. Most addicts supported habits of up to \$40 per day: 41% of the male and 28% of the female addicts spent \$1 to \$19 per day; 33% of the males and 35% of the females spent \$20 to \$39; and slightly over 12% of both groups had habits costing \$40 to \$59 per day. The retail cost for these street addicts was approximately \$1.79 million per day or \$645 million per year.

Assuming that all addicts, Southern and urban, male and female, spent 90% of their incomes for drugs, and that legal income is known, it was calculated that the total income earned by addicts from illegal sources was \$668.3 million. Of this figure, 46.5% comes from selling heroin and related services, 14.2% from burglary, 12.1% from shoplifting, 16.5% from prostitution. It was further assumed that there was no connection between habit size and criminal specialty. Of the addict population, 14% specialized in shoplifting, 23.9% in burglary, 31.6% in dealing, 9.9% in armed robbery, 13.2% as flat-footed hustlers (purse-snatching, conning), 1.6% in pimping, and 4.9% in prostitution.

Patterns of crime altered with addiction. Among males, 6% had committed violent crimes against persons prior to addiction, 5% after addiction; among females, pre- and post-addiction figures for violent crimes were 2% and 6%. Crimes against property increased with addiction, from 15% to 37% among males, and from a negligible amount to 4% among females.

The \$668 million figure computed above required correction, since it did not represent the total value transfer from addict crime, but only income to addicts. (Fenced goods are reduced to 25% of their value.) The corrected specific amount of revenue by property crime was tabulated by total dollar value of the transfer, and also by average value per crime. The total dollar value of transfers for each crime was: for shoplifting, \$372.4 million at \$27 per crime; for burglary, \$400 million at \$242 per crime; for robbery, \$66.1 million at \$254 per crime; for flatfooted hustling, \$195 million at \$84 per crime. This last category tended to be under-reported. The estimated total transfer caused by all addict crimes was equal to approximately \$1.3 billion.

Other social costs included law enforcement, courts, penal institutions, parole and probation expenses sub-totalling \$49.1 million for narcotics law violations, and \$290.1 million for addict non-drug law violations; private costs of insurance and prevention came to \$523.5 million. Total social cost was estimated at \$862 million.

Goldman, Fred, and Coate, Douglas. The Relationship Between Drug Addiction and Participation in Criminal Activities: An Economic Analysis. Unpublished preliminary report. New York: Center for Policy Research, June 1975. 71 pp.

DRUG	Opiates
SAMPLE SIZE	1,151
SAMPLE TYPE	Treatment (inpatient)
AGE	Adults
SEX	70% Male; 30% Female
ETHNICITY	Black; Puerto Rican; White; Other
GEOGRAPHICAL AREA	New York City
METHODOLOGY	Econometric Analysis
DATA COLLECTION INSTRUMENT	Interviews
DATE(S) CONDUCTED	Not Specified
NO. OF REFERENCES	80

PURPOSE

This report is a preliminary analysis of an econometric study which sought to determine the extent to which the need for narcotic drugs causes the drug addict to engage in criminal activity. More specifically, the following questions are addressed: Is the variation in addict-related criminal activity due to variation in the addict's drug habit? If so, how much on the average can criminal activity be expected to change when an addict's drug habit changes?

Provided are a detailed analysis of the findings and weaknesses of previous studies, a discussion of an econometric model of addict behavior as an analytical technique of mitigating the observed deficiencies, and a presentation and estimation of the model. The model was developed on the basis of a data set gathered from 1,151 addicts. All findings are preliminary.

METHODOLOGY

Literature Review

No satisfactory methodological approach to determining the causal relationship between the need to obtain drugs and participation in criminal activities was found. Much of the past research on this issue reflected a lack of multivariate statistical techniques. It is inappropriate, for example, to analyze the relationship between criminal activity and drug use without controlling for legal income, age, education, and other variables. In some cases this failing was not the fault of the researchers. The data which were available to them were not extensive enough to warrant the use of more rigorous techniques. Also overlooked was the fact that illegal income may be a cause rather than a result of drug habit size.

The Data Set

The data set used in this survey was the 1970 Phoenix House Survey which contained the responses of 1,151 Phoenix House addicts to a lengthy interview. The sample group consisted of two-thirds of the addict population residing in Phoenix House between July 15, 1970, and July 15, 1971. Subjects were interviewed for information on their drug and criminal histories, legal employment, salaries, socioeconomic characteristics, and family background.

Of the sample, 93% were heroin addicts, 66% were Black or Puerto Rican; 30% were female. The average age was 22.2 years. More than half had arrest records, 35% prior to drug use. Twenty-seven percent of the sample did not support their drug habits by illegal activities. Thirty-eight percent had never been arrested for nondrug-related crimes, and 45% had never been arrested for drug use or sale.

The sex and ethnic composition of the sample was similar to that of the addict population of New York City, according to the city's narcotics register.

The Economic Model

The formal model consisted of three structural equations that employed three interdependent or jointly determined variables. These endogenous variables are (1) income from criminal activities, (2) income from legal activities, and (3) dollar size of habit. The primary assumption underlying the formulation of the model was that the addict rationally chooses his amount of legal and illegal income and his size of habit, depending upon his evaluation of the "costs" and "benefits" of these activities. These, in turn, are influenced by family background and other environmental variables which predispose the individual to engage in the activities.

It was assumed that all addicts who had been employed for a month or more were earning their last salary at the time of their heaviest criminal activity. The assumption that the addicts were not engaging in legal market activities at the time of their heaviest drug use reduces the formal model of addict behavior to two equations. One describes determinants of addict income from nondrug sale criminal activity; the other presents those variables expected to influence the dollar size of drug habit. The two variables which are jointly determined or endogenous in this model are income from nondrug sale criminal activities and the dollar size of the habit. Both the two equation and the three equation models were estimated.

Many of the independent variables which were expected to play an important role in the model of addict behavior turned out to be statistically insignificant when the model was estimated.

RESULTS

The model of addict behavior indicates that an increase of one dollar in the value of heroin consumed causes the addict to participate in criminal activity which nets 30 cents. Income secured from illegal activities and earnings from legal activities had opposite effects on the size of the addict's drug habit: income from criminal activities engaged in for reasons other than the need for drugs was almost entirely devoted to increased drug expenditures; however, a dollar increase in legal earnings resulted in a 50 cent decrease in drug expenditures. Females, despite a larger habit size, earned less than males in legal and illegal markets.

CONCLUSIONS

The model that was specified and the techniques used to estimate it overcome many of the problems present in the previous literature and should enable a more precise determination of the extent to which the need to secure drugs leads to participation in illegal activities.

In general, findings indicate that an addict does not commit personal or property crimes because of a need for drugs that results in income approximating the value of drugs used. Nor do addicts come from a criminal class and engage in criminal activities caused by deviant predispositions and not drug habits. Rather, a middle ground between these two prevalent hypotheses seems most likely.

Drug consumption and the accompanying criminal activity appear to be responsive to changes in legal earning opportunities. Estimates of the effect of age upon drug consumption suggested that addicts tend to mature out of their drug habits, a finding which is well-established in the previous literature.

Holahan, John. The Economics of Drug Addiction and Control in Washington, D.C.: A Model for Estimation of Costs and Benefits of Rehabilitation. Washington, D.C.: District of Columbia, Department of Corrections, November 1970. 93 pp. (7 References)

PURPOSE

There are four basic alternatives in approaching the problem of drug addiction: (1) apprehension and incarceration of distributors, (2) apprehension and incarceration of consumers (addicts); (3) treatment and rehabilitation of addicts; and (4) direct attack upon environmental factors that breed and sustain addiction. Social costs of addiction and potential gains from investment in drug addiction control and treatment were analyzed in Washington, D.C. during 1969 in an attempt to provide information and a method of analysis helpful to communities facing these alternatives.

Social costs included losses from theft, estimates of which were tabulated by severity of habit and by crime. Other costs considered were judicial and law enforcement expenses, salaries, court costs, and costs of treatment, without comparing efficiency of treatment modalities.

METHODOLOGY

Estimates were based on the informed opinions of police and program administrators and on preliminary empirical research. Treatment cost estimates were based on expected expenditures of the Narcotics Treatment Administration. Estimates of the number of addicts, average daily expenditure for drugs, means of obtaining funds, and the amount of crime attributable to addicts were based on discussion with police officials and program administrators, not on findings of empirical research. Stolen goods were estimated to bring only one third of their retail value, and it was assumed that 20% of the heroin consumed by addicts was obtained by pushing drugs.

RESULTS

Police estimate an addict population of 5,000 to 15,000 in Washington, D.C. Five thousand addicts, each with a habit of \$25 per day, would steal \$56,940,000 annually; this same number of addicts with \$40 per day habits would steal \$91,104,000 annually. Fifteen thousand addicts with \$25 and \$40 habits would steal \$170,820,000 and \$273,312,000 respectively per year.

Other illegal activities excluding prostitution gave rise to the following estimates: 5,000 addicts with \$25 and \$40 habits obtain \$4,562,500 and \$7,300,000 annually by illegal means; 15,000 addicts with \$25 and \$40 habits obtain \$13,687,500 and \$21,900,000 annually.

To correct for unreported crimes (believed to be three to ten times the number of reported crimes), figures for stolen property values were multiplied by five (robbery and burglary) and ten (larceny). This yielded the estimated annual cost to victims of selected offenses: \$9,338,000 for robbery, \$22,823,000 for burglary, and \$26,611,000 for larceny, a total of \$58,772,000.

In 1969, a D.C. Department of Corrections study indicated that 45% of all July-August arrestees were heroin users. If it is assumed that 75% of all robbery, burglary and larceny offenses were committed by addicts, the amount stolen by addicts was \$45,608,938. If 50% of these offenses were committed by addicts, the figure was \$30,402,625. However, more addict income may derive from legal activity or other illegal sources (fraud, gambling) than is known.

Other social costs including drugs, police, courts, corrections, parole, probation, and foregone earnings yielded estimates of from \$205 million to \$53 million. Estimates of property crimes range from \$273 million to \$56 million. On the other hand, the Narcotics Treatment Administration estimates that the cost per addict treated would be \$2,000 per year.

CONCLUSIONS

The costs to society in terms of stolen property and misallocation of resources are quite large. Cost estimates based on NTA expected expenditures indicate that investment in a comprehensive treatment program is better than continuing to combat addiction problems as in the past.

McGlothlin, William H., and Tabbush, Victor C. Costs, benefits, and potential for alternative approaches to opiate addiction control. In: Inciardi, James A., and Chambers, Carl D., eds. Drugs and the Criminal Justice System. Beverly Hills, Calif.: Sage Publications, Inc., 1974. pp.77-124. (85 References)

PURPOSE

For various approaches to narcotics addiction control, estimates were made of the maximum number of addicts who might be treated, the cost of the treatment, and the social benefits derived, including crime reduction. The control approaches examined were: (1) methadone maintenance, strict control; (2) methadone maintenance, dispensing only; (3) heroin maintenance; (4) therapeutic community; (5) detoxification; (6) civil commitment; and (7) combination civil commitment and other modalities.

METHODOLOGY

The addict population (1971) was estimated to be 375,000; 107,000 of these were incarcerated or in treatment. Data from various studies were utilized to estimate: (1) the total annual quantifiable social costs of an untreated addict resulting from theft, anti-crime expenditures and unemployment; (2) the treatment cost for patient year; and (3) the treatment benefits for patient year, i.e., the reduction in social costs resulting from treatment.

The most critical item was the estimate of addict theft which was set at \$10,000 per year for addicts on the street. Anti-crime expenditures and foregone production (unemployment) were estimated at \$1,250 and \$3,450 per addict year respectively.

An attempt was made to take into account the differential social costs, treatment costs and treatment benefits per addict as a function of the portion of the population involved. For instance, those initially attracted into chemotherapy programs were assumed to be older addicts exhibiting larger habits and associated social costs. Those remaining outside this type of treatment and those entering treatment through recruitment were expected to demonstrate somewhat lower social costs. Similarly, those initially volunteering for treatment were assumed to be more motivated and to show above average treatment benefits, whereas the more marginal patient who was included as the program reached its maximum potential was likely to experience lesser benefits. The following is a summary of the estimated results expected for the various approaches considered separately.

SUMMARY

Methadone Maintenance, Strict Control (MM-1)

The maximum potential was estimated at 125,000 (average number in treatment). The reduction in addict theft could be 80% for the first 100,000 enrolling in this type of treatment. Employment could rise from 30% pre-treatment to 60% during treatment. Cost of treatment was set at about \$1,500 per year; the maximum net social benefit realized could be \$1.4 billion per year.

Methadone Maintenance, Dispensing Only (MM-2)

This type of maintenance program would dispense methadone without imposing controls on illicit drug use or other behavior. It was estimated to have a maximum treatment potential of 50,000 more than MM-1, but to result in somewhat lower reduction in social costs per patient. The maximum net social benefit realized could be \$1.7 billion per year.

Heroin Maintenance

The only data on heroin maintenance were from England where the prescribing of heroin or injectable methadone was estimated to attract somewhat less than 50% of an addict population of around 2,500 to 3,000. For various reasons the acceptance of heroin maintenance in the United States would probably be considerably higher, and the maintenance was estimated at 250,000. Disadvantages include the greater expense for administration, greater diversion, higher rates of mor-

bidity and mortality and the possibility of attracting additional persons into the addict population. The estimated reduction of social costs per addict was lower than that for the methadone maintenance programs, and the maximum net benefit was \$1.6 billion per year.

Therapeutic Communities

This approach has the advantage of achieving good results at relatively low costs but the maximum potential is relatively low. The maximum number attracted was estimated to be 40,000, resulting in a net treatment benefit of \$0.4 billion. Addict theft could be reduced by 95%.

Detoxification

This type of treatment does not fit the model utilized for the other approaches; however, it results in a number of benefits. It provides a means of withdrawal for persons motivated and capable of remaining abstinent, permits increased flexibility in treatment assignment, temporarily reduces illicit drug use and associated theft, and can provide treatment contact with a large proportion of the addict population. The temporary reduction in addict theft alone would result in a net social profit over the cost of treatment.

Civil Commitment

The only significant programs of this type are those in California and New York, and the Federal NARA program. Even within these jurisdictions, the percentage of the addict population civilly committed is only a small percentage of the eligible population. The principal reason is not an inability to apprehend the addict for various drug and non-drug offenses, but the reluctance of the courts to commit addicts for long periods (seven years in California) when the rehabilitative aspects of the program have not demonstrated an effective cure for addiction, and when the alternative jail terms for most of the offenses are only a few months. If society, through the courts, did elect to fully implement civil commitment, it appears probable that the large majority of the addict population would be committed within two or three years. Thus, the maximum potential for this approach was estimated to be relatively high in comparison to voluntary treatment programs--about 220,000 not including those in an abscondence status. The reductions in social costs were generally comparable to the chemotherapy programs, but treatment costs were higher. The maximum net benefit could be \$1.9 billion, with addict theft decreasing 85%.

Combined Civil Commitment and Other Modalities

This differs from the civil commitment approach only in permitting a wider variety of treatment approaches. In fact, civil commitment and methadone maintenance are already frequently combined. The maximum potential for this approach would be 270,000. The increase over that estimated for straight civil commitment would be predicted because of its increased flexibility in treatment as well as a higher acceptability among the addict population. Net benefits were estimated at \$2.3 billion.

CONCLUSIONS

The study estimated the maximum potential of various voluntary and compulsory programs for reducing the quantifiable social costs of addiction by considering each approach separately. Addicts exist, however, in a highly coercive environment, and the attempted isolation of the treatment and coercive elements is often more illusory than real.

If society should decide to eliminate coercion as a means of controlling addiction, then heroin maintenance would be the appropriate treatment. If the goal is to achieve a given level of control with the minimum overall amount of coercion, then it seems unnecessary to integrate the elements of coercion and treatment into a single cooperative effort.

Moore, Mark. Policy Concerning Drug Abuse in New York State, Volume III: Economics of Heroin Distribution. Croton-on-Hudson, New York: Hudson Institute, 1970. (No References)

PURPOSE

Analysts of the heroin problem have often referred to the economics of the heroin industry as an important determinant of the character and multitude of the problem; however, this industry has received little systematic attention by marketing analysts. The cost of heroin consumption by various types of users, the illegal means of financing use, and the effect of various public policies were included in a systematic treatment of the micro and macroeconomics of the heroin industry in New York City, examined as a unique production and marketing system.

METHODOLOGY

Much of the data for this study was taken from Preble and Casey (1969). Some of this data were derived from sources of questionable validity. Estimates such as the number of addicts, degree of use, and theft losses, were derived from police, federal and state narcotics board figures, and other secondary sources. Operating costs and gross profits were analyzed at six distribution levels, from the importer to the juggler, and at four quantity levels from importers to weight dealers. The estimated impact of prohibition and other anomalies of the industry enter into computations. The theoretical framework was traditional micro-economic and macro-economic market analysis.

RESULTS

The market analysis of heroin involves data on consumers' incomes. Specifically to the relationship of heroin use and crime, the percent yearly consumption of heroin by income source was tabulated along with yearly cash income to addicts and annual cost to society. According to these figures, 46.5% of heroin used was paid for by selling and similar services, and involves no cash transfer. However, burglary finances 14.2% of heroin used, providing a cash income of \$62 million to addicts, and costing the rest of society \$174 million. (Theft figures assumed that 40% of this amount was cash and the remaining 60% goods discounted to 25% actual value when resold.)

Shoplifting financed 12.1% of heroin use, bringing \$51 million to addicts at a cost of \$204 million. Violent crimes (armed robbery and mugging) financed only 1.8% of heroin use, and involved \$8 million. The total yearly cash income to addicts from all sources, legal and illegal, was \$235 million, at a cost to society of \$411 million. The addictive quality of heroin implies that for most prices the demand for the drug is inelastic. Illegality contributes to increased cost--the most important problem facing consumers of heroin--as suppliers attempt to increase revenues to compensate for the risks of continuing in business.

Economically, the heroin industry is characterized by small distribution units, a centralized monopoly at the top of the distribution system, and monopolistic competition at lower levels. The six different levels of distribution differ substantially in degree from monopolization, risk, and other characteristics. Quality and cost remain beyond the control of the heroin consumer; however, law enforcement can substantially alter the structure of the industry.

The objectives of a heroin policy include: reduction of addict crime, reduction of suppliers' incomes, curing addicts, and halting the spread of addiction. Increased law enforcement, by its effect upon market conditions, would increase the crime rate, illegal income rate and cure rate (among apprehended addicts) but decrease new addictions. Diminished law enforcement would decrease the crime rate, illegal income rate and cure rate, but increase the number of new addictions.

CONCLUSIONS

More stringent enforcement is recommended. Decreasing the number of addicts is a more humane priority than decreasing the amount of crime.

O'Connor, Garrett; Wurmser, Leon; Brown, Torrey C.; and Smith, Judith. The economics of narcotics addiction: A new interpretation of the facts. In: National Academy of Sciences. Problems of Drug Dependence, 1971. Proceedings of the 33rd Annual Scientific Meeting, Committee on Problems of Drug Dependence, Toronto, Feb. 16-17, 1971, vol. 1, Washington, D.C.: National Academy of Sciences, 1971. pp. 397-424.

DRUG	Heroin; Morphine
SAMPLE SIZE	115
SAMPLE TYPE	Volunteer; Treatment
AGE	Not Specified
SEX	Not Specified
ETHNICITY	50% Black
GEOGRAPHICAL AREA	Baltimore, Maryland
METHODOLOGY	Exploratory/Descriptive; Case Study
DATA COLLECTION INSTRUMENT	Interviews; Questionnaires
DATE(S) CONDUCTED	December 1969-August 1970
NO. OF REFERENCES	5

PURPOSE

Statistical evidence of connection between narcotics addiction and crimes against property and persons has been parlayed into a stereotypical system which encourages the nonaddicted population to believe illicit drugs constitute a menace which threatens society. Researchers at Johns Hopkins Drug Abuse Center, in an economic analysis of illegal methods of habit support, explored the hypothesis that the war against addiction fails because of hidden economic interests which benefit from its continuance.

METHODOLOGY

Between December 1969 and August 1970, confidential questionnaires were administered to 115 patients voluntarily seeking treatment at the John Hopkins Drug Abuse Center. Two-thirds of the sample resided in inner-city poverty areas; nearly half were Black; most were heroin addicts of six months to 36 years duration. Some measure of validity was obtained for 20 patients subsequently in psychotherapy. A supplementary series of interviews was carried out with addicts other than the sample, non-addicted local residents, ex-addict counselors, and police officers of the Narcotics Squad of Baltimore.

Findings were tabulated by case number, and included habit cost in dollars per day, duration in years, illegal activity, money received as a fraction of market value, money netted in one day, goods stolen in one day, and arrests. Crimes included shoplifting, dealing, burglary, robbery and mugging, gambling, fraud and forgery, family theft, and prostitution.

RESULTS

The median cost of heroin to patients in the sample was \$35 per day. Amounts ranged from \$10 twice a week to \$250 per day. Most patients' habits cost between \$10 and \$60 per day, typically \$15 per day.

Ninety-three percent of the patients supported their drug habits by illegal activities, often in combination with legitimate work and family support. Eighty percent reported that the sale of stolen goods realized profits of about one third their retail value. Thus, an addict with a \$100-a-day habit must steal \$300 worth of merchandise. Using the questionnaire as a base for calculations, an estimated \$166 million to \$313 million in merchandise was stolen each year by addicts in Baltimore and sold on the black market for between \$52 million and \$104 million. Interviews with local residents indicated purchase of stolen goods to be endemic to inner city culture. Addiction-related theft thus resembled a major industry.

CONCLUSIONS

It appears that a self-sustaining economic cycle is maintained intact by complicity between workers in the narcotics industry, drug addicts, and the general public who receive stolen goods, or profit in some more indirect way such as theft insurance. The nonaddicted population benefits because desirable merchandise is available at reduced prices; theft victims benefit by lodging inflated claims against insurance companies who then raise the cost of premiums and increase their own profit; manufacturers benefit from an increased market for replacement items; even institutions benefit from federal grants to fight drug abuse. Efforts at prevention must be directed at interruption of the cycle, a difficult task because of widespread vested interests in maintaining the status quo.

A large, bold, black stylized number '8' logo. The top loop is smaller than the bottom loop. A solid black circle is positioned to the right of the bottom loop, partially overlapping the text.

**Supplementary
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and Indexes**

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DRUGS

The general and specific names of all drugs mentioned in the abstracts, as used by the author of the document.

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