Mental Health Statistical Note 211. May 1994

Center for Mental Health Services
Division of State and
Community Systems Development
Survey and Analysis Branch

Data Highlights on:

Male-Female Admission Differentials in State Mental Hospitals, 1880-1990

7
70
r1
585
). 211
LIBRARY
MAR 2
ITHACA, NY 1485

Michael J. Witkin, M.A., C.P.A., Joanne E. Atay, M.A., and Ronald W. Manderscheid, Ph.D.

Background and Purpose

For the period between 1880 and 1980, Stroup and Manderscheid (1988) found that male admissions per 100 female admissions in State and county mental hospitals (hereafter called State mental hospitals) exceeded 100 in each year shown and that the ratio of males to females grew larger after 1965 (appendix I table). This was observed despite the fact that the number of females in the general population diagnosed with mental disorders exceeds the number of males for any given period. This report updates the information presented in the Stroup and Manderscheid article and examines whether the historically high ratios shown between 1965 and 1980 have continued. It also explores reasons for the widening of the ratios. Sources and qualifications of the data as well as definitions are given in appendix II.

Major Findings

Prevalence of Mental Illness is Higher Among Females.

Stroup and Manderscheid (1988) cite the work of many researchers who "postulate that women are more vulnerable to mental illness than men, especially in highly industrialized societies." Since most of the studies cited were conducted prior to 1980, this report examines two additional epidemiological studies conducted since 1980 to corroborate the earlier evidence. The first study (Barker et al. 1992) of the adult household population was conducted jointly by the National Center for Health Statistics and the National Institute of Mental Health during 1989 in a representative sample of households throughout the United States. It identified 1,320,000 males as compared with 1,944,000 females with a serious mental illness. The corresponding rates per 1,000 population were 15.5 for males as compared with 20.6 for females, a corrected ratio of 75 males per 100 females, adjusted for the unequal numbers of males and females in the civilian population.

The second study (Regier et al. 1988) was based on one-month prevalence rates that were determined from a sample of 18,571 persons aged 18 years and over interviewed in the first-wave community samples of all five sites that constituted the National Institute of Mental Health Epidemiologic Catchment Area Program. This study found rates of 14.0 for males and 16.6 for females, a corrected ratio of 84 males per 100 females, consistent with the study cited above. Also, the rates for females were higher than those for males in each age group.

Admission Rates to State and County Mental Hospitals are Higher among Males.

As shown in figure 1 and appendix I table, the admission rates per 100,000 population for males exceeded those for females for each year shown between 1880 and 1990. In general, the trends in the rates for males mirrored those of females, with the rates for males being consistently higher. Figure 2, which depicts the ratios of male to female rates given in figure 1, multiplied by 100, shows that, notwithstanding two dips in the rates in 1900 and 1945, the ratios remained in a narrow range of 106 to 136 between 1880 and 1965. After 1965, the rates increased greatly and reached a peak of 199 in 1985, before decreasing to a provisional estimate of 183 in 1990.

This publication may be reproduced without permission.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES/Public Health Service/Substance Abuse and Mental Health Services Administration
CENTER FOR MENTAL HEALTH SERVICES • Division of State and Community Systems Development • Survey and Analysis Branch

Digitized by Google
Original from
CORNELL UNIVERSITY
Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Figure 1. Admission rates to State mental hospitals for males and females

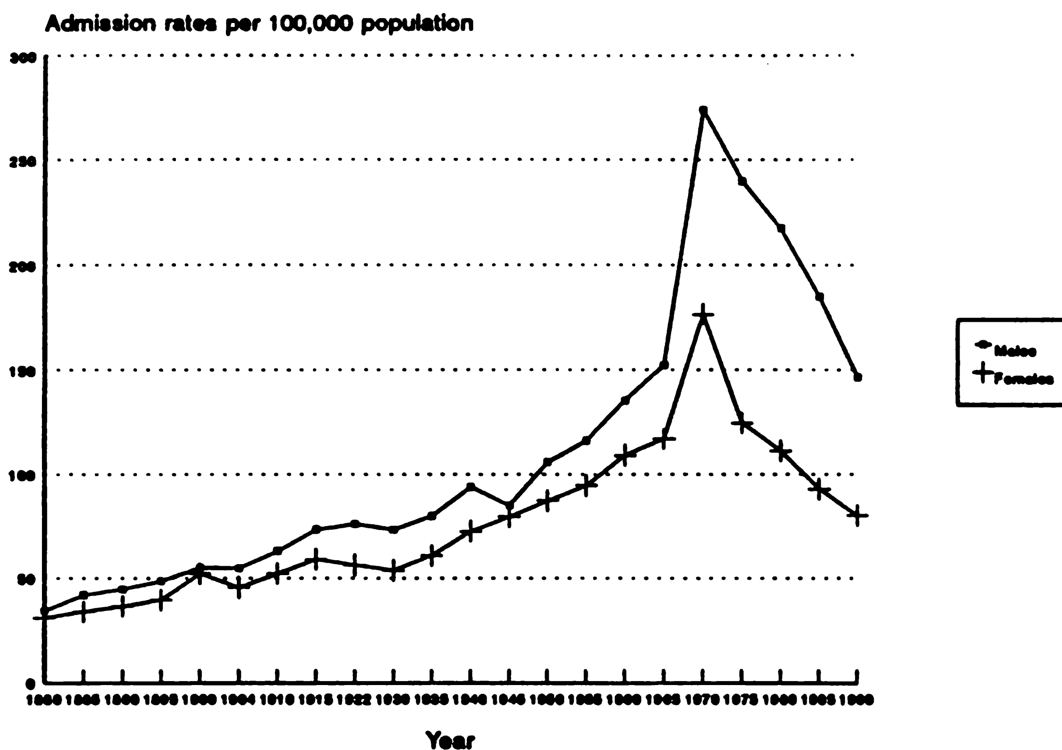

Figure 2. Corrected male to female admission ratio* in State mental hospitals.

*(Male admission ratio/female admission ratio) x 100

Digitized by Google

Original from
CORNELL UNIVERSITY

Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Policy Observations

Although the reasons for this tremendous increase in the male to female ratios subsequent to 1965 are not entirely known, Stroup and Manderscheid (1988) give probable reasons based on their findings and others. The general theme in their explanation is the growing perception by society, whether true or not, of males being more dangerous and thus having a higher probability than females of committing antisocial acts.

With regard to the widening male to female ratio, two factors seem of paramount importance--the difference in diagnoses between males and females and the fact that "the legal hearing (for commitment) is moving away from the subjective definition of psychopathology toward the specification of behavioral acts or events (Stone 1977; Shah 1975)." Stroup and Manderscheid (1988) point out that male subcategories are "characterized by "acting out" behaviors including personality disorders and alcohol related syndromes," while depression or anxiety, which are less threatening to society, are more typically female-related. Frequently, "courts are reported to be insisting on clear and convincing proof regarding dangerousness on the part of the client, and physicians who testify are asked to indicate the probability level of overt, dangerous acts taking place in the future (Dix 1980)."

This change in emphasis in commitment proceedings from psychopathology to "perceived dangerousness" as the primary criterion for admission has resulted in substantially more involuntary admissions to State mental hospitals, which have risen from 42 percent of total admissions in 1970 (Meyer 1974) to 51 percent in 1980 (NIMH 1984) to 69 percent in 1986 (Center for Mental Health Services 1988). Since males are more likely to exhibit overt behavior that would be perceived as "dangerous," proportionately more males would therefore be admitted to State mental hospitals.

Stroup and Manderscheid (1988) cite various other studies that describe the characteristics of new groups of persons admitted to State mental hospitals during the last 20 years. These persons are described in the aggregate as predominantly young males of low socioeconomic status, who are seriously mentally ill. They have had little or no prior hospitalization, but have had frequent contact with emergency rooms and other community services. Finally and most importantly they have been perceived as dangerous and are often involuntarily admitted (DeRisi and Vega 1983; Schwartz and Goldfinger 1981; and Taube et al. 1983).

In conclusion, since there are more females in the general population who are mentally ill, as compared with males, one would expect that females would exceed males among admissions to State mental hospitals. To the contrary, from 1880 through 1990, the admission rates for males to State mental hospitals have always exceeded those for females. Even more importantly, since the mid 1960s, the ratio of male to female admission rates has widened. The most plausible reason for this is that the "perception of dangerousness" has replaced psychopathology as the major criterion for admission to State mental hospitals, which has led to an increase in involuntary admissions in the last 20 years. Compared with females, males would more likely manifest behaviors that society feels are dangerous and would consequently be more likely to be admitted involuntarily to State mental hospitals.

Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from
CORNELL UNIVERSITY

APPENDIX I

Table 1. Admissions[a] and male-female ratios per 100,000 population, State mental hospitals[b], United States, 1881 to 1990[c]

Year	Males	Females	Male-Female Ratio (x 100)	Males per 100,000[d]	Females per 100,000[d]	Corrected male-female ratio (x 100)
1881	8,874	7,743	115	34.6	31.3	111
1885	12,153	9,455	129	42.2	34.3	123
1890	14,389	11,255	128	44.9	36.8	122
1895	17,268	13,514	128	48.7	39.9	122
1900	21,408	19,435	110	55.1	52.2	106
1904	23,131	18,260	127	54.9	45.6	120
1910	30,008	23,444	128	63.1	52.3	121
1915	37,965	28,967	131	73.6	59.1	125
1922	42,570	30,493	140	76.2	56.3	135
1930	40,743	32,709	140	73.4	53.8	136
1935	51,422	38,542	133	80.2	61.0	131
1940	62,307	47,812	130	93.9	72.7	129
1945	59,694	55,693	107	85.2	79.7	107
1950	79,992	66,646	120	105.9	87.5	121
1955	95,282	78,841	121	116.2	94.7	123
1960	120,961	99,655	121	135.4	109.1	124
1965	145,707	115,609	126	152.4	117.1	130
1970	274,761	184,762	149	274.0	176.6	155
1975	248,937	136,300	183	239.9	124.6	193
1980	239,400	129,649	185	217.6	111.3	196
1985	212,085	113,855	186	185.0	93.0	199
1990	175,647	102,166	172	146.6	80.3	183

[a]Admissions include admissions and readmissions: 1970 through 1990 data based on additions, which include admissions, readmissions, and returns from long-term leave.

[b]In States such as Wisconsin where county hospitals are functionally equivalent to State sponsored ones, county data have been included.

[c]Data for 1881 to 1980 are derived from table 1 in Stroup and Manderscheid, 1988; data for 1985 and 1990 are unpublished.

[d]The population used in the calculation of the rates is based on Series A 23-28 Historical Statistics of the United States, Colonial Times to 1970, Part I. U.S. Bureau of the Census, Washington, DC, 1975; Annual Statistical Abstracts of the U.S. for 1975 and 1980; and unpublished data from the U.S. Bureau of the Census for 1985 and 1990.

Sources of these data:

1. 1881-1885: Census Report, Insane, Feebleminded, Deaf and Dumb, and Blind in the United States, 1890. Washington, DC, U.S. Govt. Print. Off., 1895.

Digitized by Google
Original from CORNELL UNIVERSITY
Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

2. 1890-1904: Census Report, Insane and Feebleminded in Hospitals and Institutions, 1904. Washington, DC, U.S. Govt. Print. Off., 1906.
3. 1910: Census Report, Insane and Feebleminded in Institutions, 1910. Washington, DC, U.S. Govt. Print. Off., 1914.
4. 1915: Census Report, Statistical Directory of State Institutions for the Defective, Dependent and Delinquent Classes, 1916. Washington, DC, U.S. Govt. Print. Off., 1919.
5. 1922: Census Report, Patients in Hospitals for Mental Disease, 1923. Washington, DC, U.S. Govt. Print. Off., 1926.
6. 1929-1965: NIMH. Patients in Mental Institutions.
7. 1970: NIMH, Statistical Note 106.
8. 1975: NIMH, Series CN No.2. Characteristics of Admissions to Selected Mental Health Facilities: 1975. DHHS Pub. No. (ADM)81-1005. Washington, DC, U.S. Govt. Print Off. 1981.
9. 1980: Unpublished data. Division of Biometry and Epidemiology, NIMH.
10. 1985: Unpublished data, Division of Biometry and Epidemiology, NIMH.
11. 1990: Unpublished data, Division of State and Community Systems Development, CMHS.

APPENDIX II. SOURCES AND QUALIFICATIONS OF THE DATA AND DEFINITIONS

Sources and Qualifications of the Data

The Center for Mental Health Services and its predecessor organizations have collected data on admissions to State mental hospitals by age, sex, and diagnosis in certain years since 1880. From 1880 until 1946 the data were collected by the United States Bureau of the Census, from 1947-1989 by the National Institute of Mental Health, and since 1990 by the newly created CMHS.

In the earlier years, data were obtained on individual patients and then aggregated by the Federal Government to State and U.S. totals. Since 1947, data have been aggregated at the State level and a composite report incorporating data from all the hospitals in a given State submitted to the Federal Government. If the State is unable to provide a composite State report for its hospitals, the Federal Government sends the forms to the individual hospitals for completion and aggregates the data itself. If neither a State nor its individual hospitals are able to report, total admissions are obtained from the Inventory of Mental Health Organizations and General Hospital Mental Health Services, another CMHS data collection. The males and females within these nonreporting hospitals are then distributed according to the distribution by gender in the reporting hospitals.

Definition of Terms

Measures Used

Additions during year includes returns from extended leave and transfers from other types of organizations, as well as admissions and readmissions. Transfers from public institutions for persons with mental retardation are also included. If a person is admitted more than once during the year, each admission is counted separately. Not included are transfers from other mental hospitals within the same State system; returns from short-term leave with an overnight or weekend pass; and returns from escapes, AWOL, or unauthorized absences. Data for 1970 through 1990, shown in this report, are based on additions.

Admissions are the defined in the same way as additions (see above definition) except that returns from extended leave are excluded. Data for 1880 through 1965, shown in this report, are based on admissions.

Male-Female Ratio is the number of male admissions in a given year divided by the number of female admissions times 100.

Corrected Male-Female Ratio is the ratio of the male rate per 100,000 U.S. civilian population in a given year divided by the female rate times 100.

Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from
CORNELL UNIVERSITY

Types of Mental Health Organizations and Services

State and county mental hospital. A psychiatric hospital that is under the auspices of State or a county government, or operated jointly by both a State and county government. This organization type is referred to throughout this report as a State mental hospital.

Inpatient service. Provision of 24-hour care in a hospital setting.

References

Barker, P.; Manderscheid, R.; Hendershot, G.; Jack, S.; Schoenborn, A; and Goldstrom, I. Serious mental illness and disability in the adult household population. *Advance Data.* National Center for Health Statistics, Centers for Disease Control, 218, 01-12, 1992.

Center for Mental Health Services. Unpublished data. 1986 Client/Patient Sample Survey of Inpatient, Outpatient and Partial Care Programs, 1992.

Center for Mental Health Services and National Institute of Mental. *Mental Health, United States, 1992.* Manderscheid, R.W., and Sonnenschein, M.A., eds. DHHS Pub. No. (SMA)92-1942. Washington, D.C.: Supt. of Docs., U.S. Govt. Print. Off., 1992.

DeRisi, W. and Vega, W. The impact of deinstitutionalization in California State hospital populations, *Hospital and Community Psychiatry*, (34) 140-45, 1983.

Dix, G. Clinical evaluation of the 'dangerousness' of 'normal' criminal defendants. *Virginia Law Review*, (62) 523-81, 1980.

Meyer, N. Legal status of inpatient admissions to State and county mental hospitals. *Statistical Note 105*, NIMH, Biometry, Survey and Reports Branch, Rockville MD, 1974.

National Institute of Mental Health. Unpublished report. NIMH, Biometry Division, Survey and Reports Branch, Rockville MD., 1984.

Regier, D.; Boyd, J.; Burke, J.; Rae, D.; Myers, J.; Kramer, M.; Robins, L.; George, L.; Karno, M.; Locke, B. One-month prevalence of mental disorders in the United States. *Archives of General Psychiatry.* (45) 977-986, 1988.

Schwartz, S., and Goldfinger, S. The new chronic patient. *Hospital and Community Psychiatry*, (32) 470-74, 1981.

Shah, S. Dangerousness and civil commitment of the mentally ill. *American Journal of Psychiatry*, (132) 501-05, 1975.

Stone, A. Recent mental health litigation: a critical perspective. *American Journal of Psychiatry*, (134) 273-79, 1977.

Stroup, A. and Manderscheid, R. Male-female admission differentials in State mental hospitals, 1880-1980. *Journal of the Washington Academy of Sciences*, (78) 259-70, 1988.

Taube, C.; Thompson, J.; Rosenstein, M.; Rosen, B.; and Goldman, H. The 'chronic' mental hospital patient. *Hospital and Community Psychiatry*, (33) 711-17, 1983.

The authors: DSCSD staff members Michael J. Witkin, M.A., C.P.A., Joanne E. Atay, M.A., and Ronald W. Manderscheid, Ph.D., conceptualized the survey upon which the report is based, provided and edited data for the table, and prepared sections of the text. The CMHS Statistical Notes are edited by Mary Anne Sonnenschein, M.A., DSCSD.

Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
CORNELL UNIVERSITY

Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from
CORNELL UNIVERSITY

DEPARTMENT OF
HEALTH & HUMAN SERVICES

Public Health Service
Substance Abuse and Mental Health Services Administration
Rockville MD 20857

Official Business
Penalty for Private Use $300

BULK RATE
POSTAGE AND FEES PAID
PHS/SAMHSA
PERMIT NO. G-283

DHHS Publication No. (SMA) **94-2086**
Substance Abuse and Mental Health Services Administration
Printed 1993

Generated on 2018-08-03 12:49 GMT / http://hdl.handle.net/2027/coo.31924084761455
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
CORNELL UNIVERSITY