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STATISTICS

OF

INSANITY RELATIVE TO RE-ADMISSIONS.

TO THE

RETREAT.

BY

H. P. STEARNS, A. M., M. D.



HARTFORD:

PRESS OF THE CASE, LOCKWOOD & BRAINARD COMPANY.

1876.

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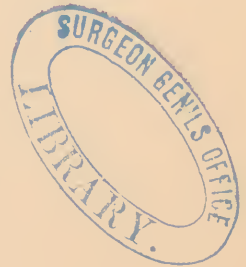
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STATISTICS OF INSANITY RELATIVE TO RE-ADMISSIONS.

Preliminary.

1. The following inquiries and tables relate to persons only who have been re-admitted, and to all such who have been in the Retreat, since it was opened for the reception of patients, to January 1st, 1877—a period of 53 years and 9 months.

2. The persons contributing them will be considered in relation to the population as a whole, only in the way of comparison. In other respects they will be considered as if they were the only ones who had ever been in the Retreat.

3. It is necessary in order that the general statistics of the institution may be of scientific value, that all which relates to re-admissions, and therefore to persons who have before been once placed on record, should be presented separately and in detail, outside such general statistics.

In relation to General Population.

1. The whole number of *persons* re-admitted is to the whole number who have been admitted but once, as 834 to 2856; that is, nearly three-tenths (29 + per cent.) of all persons who have been admitted to the Retreat have been admitted more than once. It is certain that many of this number have also been treated again in other hospitals, and con-

sequently do not appear as cases of re-admissions to the Retreat; therefore it is reasonable to expect that from 30 to 50 per cent. of all persons who shall in future be received at the Retreat for the first time as insane, and recover, will again apply for admission either here or at some other hospital.

2. The whole number of *admissions* of persons admitted more than once, is to the whole number of those admitted but once, as 2,176 to 3,776, equivalent to 59.1 per cent.

3. The whole number of *recoveries* contributed by the 834 persons who have been admitted more than once, is to the number contributed by the 2,856 who have been admitted only once, as 1,128 is to 1,537. In other words, 2,856 persons have contributed only 409 more recoveries than the remaining 834; or again, 834 persons contributed 73.3 per cent. as many recoveries as 2,856; and 42.3 per cent. of all recoveries which have taken place in the Retreat.

4. The whole number of *discharges* of the 834 persons admitted more than once is to the whole number of discharges of those admitted but once as 2,014 to 3,036; or 66.3 + per cent.; and 39.8 per cent. of all the discharges.

5. The number of *deaths* occurring among those re-admitted is to the number among those admitted but once as 133 to 537; equivalent to 24.7 per cent.; and 15.9 per cent. of the whole number of deaths.

Number of Re-Admissions.

1. The whole number of re-admissions is 1,342, while the number of persons contributing them is only 834.

2. One person only has been re-admitted 12 times, and one 11 times; two have been re-admitted 9 times, and two 8 times; three 7 times, eight 6 times, fourteen 5 times,

twenty-five 4 times, sixty-one 3 times, one hundred and forty-six 2 times, and five hundred and seventy-one once.

Those re-admitted once only, have therefore contributed 42.3 per cent. of the whole number of re-admissions, and those re-admitted twice only, more than one-fifth of all the re-admissions.

Recoveries from Re-Admissions.

1. The 834 persons re-admitted contributed 649 recoveries, from their re-admissions; equivalent to 77.8 per cent. of recoveries of persons, and 48.3 per cent. of recoveries from re-admissions.

Supposing these cases to have been received as *recent* ones, and considered in relation to persons, they contributed but little above the average per cent. of recoveries, which has usually been reported as the result of the yearly admission of *recent* cases in the Retreat since its establishment. They, however, in reality contribute a smaller per cent. on re-admissions (48.3 per cent.) than the usual yearly reports exhibit, as this has been from 60 to 80 per cent.

They contributed 24.3 per cent. of all the recoveries which have occurred in the Retreat.

2. Referring to the recoveries of the several admissions in detail, we find that 354 of the 834 persons recovered on the second admission, equivalent to 43+ per cent. of the whole number, and with 20 persons remaining. The result of their first admission had been 58.8 per cent. of recoveries.

The recoveries on third admissions was 55+ per cent., with 7 persons remaining in the Retreat. The per cent. of recoveries of these same persons on their second admission had been 66+ per cent.

The recoveries on the fourth admissions was 60+ per

cent., while those on the previous admissions of the same persons had been 78+ per cent.

The recoveries on the fifth admissions was 58.4 per cent., and those on their previous admissions was 83+ per cent.

The recoveries on the sixth admissions was 61+ per cent., while those of their fifth admissions had been 74+ per cent.

The recoveries on the seventh admissions was 76+ per cent., and the same on their previous admission.

The recoveries on the eighth admissions was 55+ per cent., and on their previous one 88+.

Those of the ninth admissions was 83+, while on their previous one it was only 66+.

Those on the tenth admissions, 100 per cent., and the same on their previous one.

The same was true in reference to the eleventh and twelfth re-admissions, and also their previous tenth and eleventh re-admissions.

Much Improved from Re-Admission.

1. The second admissions contributed to the number of the much improved 85, or 10+ per cent. of the whole number; and this same class had, on first admissions, contributed 137, or 16+ per cent.

The third admissions contributed to the number of the much improved 20 persons, or 7+ per cent., and 24 persons on their previous admissions.

The fourth, fifth, and sixth admissions contributed respectively 5+, 14+, and 14+ per cent. to the much improved.

Improved from Re-Admission.

1. From the second admissions there were discharged 128, or 15+ per cent. as *improved*, while on their previous first admissions 138 of the same class (16+ per cent.) were so discharged.

From the third admissions there were 27 discharged as under this head; and on their previous admissions 43; and on subsequent admissions something less than one per cent.

Unimproved from Re-Admission.

1. One hundred and fifty-seven, or 19+ per cent., were discharged from their second admission as unimproved; and of this class 80 were so discharged from their previous admission.

Forty-five were discharged from their third admissions as unimproved, and of this class 27 had been so discharged from their second admissions.

The number discharged under this head from their fourth admission was 13+ per cent., and from subsequent admissions somewhat less than one per cent.

Deaths.

1. Of the 834 persons re-admitted, 133 died; equivalent to 15+ per cent., which is nearly one-third larger than the average death-rate in the Retreat population during its history. We may therefore conclude, in a general way, that a person's probabilities for death in subsequent invasions of

insanity are largely increased, the same law obtaining as in some other diseases.

2. About two-thirds of the number, or more than 10 per cent., died on their second admission.

Nine per cent. of those admitted the third time died; and 9+ per cent. on their fourth admission; and 67 per cent. on their fifth, sixth, and seventh admissions; while no deaths occurred among those admitted more than seven times.

3. Thirty-three persons died from exhaustion, eleven died from acute mania, ten from apoplexy, and only three from general paralysis. Organic disease of the nervous system was the cause of death in very nearly one-fourth of the whole number, 23+ per cent.

Intervals between Admissions.

1. We find that only two persons of the 834 have been re-admitted within one month from the time of their previous discharge, and that neither of these had been discharged as recovered.

2. We find that 248 of the 834 were re-admitted in less than one year from the date of their previous discharge, equivalent to 29+ per cent., and that of these 102 had been discharged from their previous admissions as recovered, equivalent to 41+ per cent.

It will be borne in mind that this is not largely more than half the supposed ordinary per cent. of recoveries in *recent cases* in the Retreat during the larger portion of its first 50 years' history.

3. There have been 483 whose interval before re-admission extends from one to ten years, a little more than 50 per

cent. of the whole number, and of these there were discharged as recovered 172, equivalent to 35 + per cent.

4. There have been 103 whose interval before re-admission is longer than 10 years, equivalent to 12 + per cent, of the whole number, and of these there have been discharged 37 as recovered, equal to 35 + per cent.

It will be observed that the per cent. of recoveries in those cases re-admitted in less than one year is greater by 6, than in those cases where the interval was longer than one year. The probability of recovery, therefore, when once re-attacked does not apparently increase by *the length of time* persons may escape an attack, but on the contrary diminishes.

5. From the above it will be seen that 58 + per cent. of all those whose re-admissions occurred in less than one year, and 64 + per cent. of these whose interval before re-admissions was longer than one year did not recover.

General Summary.

1. In 834 persons the recoveries equaled	. . . 135.25
Much improved, . . . . .	. . . 31.53
Improved, . . . . .	. . . 38.12
Unimproved, . . . . .	. . . 36.45
Died, . . . . .	. . . 15.92
Total, . . . . .	. . . 257.27

with 29 of the 834 persons remaining in the Retreat Jan. 1st, 1877.

2. One-third or one-half of the 834 persons could be selected, and a table of results in their cases constructed, which would furnish a much larger per cent. than appears on the above.

Conclusions.

1. The general effect upon the reader arising from a perusal of these statistics will depend largely upon his former impressions relative to insanity. If he has supposed insanity a disease which rarely affects a person more than once, and that the statistics which are published in the yearly reports of asylums refer to *persons*, and not to *cases*, the above general summary will demonstrate his error. If, however, he has regarded insanity as we do many other diseases, not unlikely to recur several times in the same individual, and hospitals for the insane in the same light as hospitals for other classes of disease, they may prove to be of interest in confirming this view.

2. There are many diseases from which, if a person is once affected, he is more likely to suffer again ; especially is this true if he has inherited a tendency to the disease. The statistics of general hospitals will abundantly confirm this point. It appears from this paper that insanity is one of these diseases in a very marked degree.

3. In making provision for the insane this very important factor should not be left out of consideration. All such estimates must be made, not on the supposed number of *persons*, who are, or may become insane once in their lives, but rather on the probable number of *cases* likely to arise.

TABLE I.—Continued. Re-admissions.

	6th Admission.			7th Admission.			8th Admission.			9th Admission.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
The result in each case of all persons re-admitted.												
Recovered,	6	13	19	6	7	13	3	2	5	3	2	5
Much Improved,	2	2	4	.....	.....	.....	2	1	3	.....	.....	.....
Improved,	1	3	4	.....	1	1	1	.....	1	.....	.....	.....
Unimproved,	1	.....	1	.....	2	2	.....	.....	.....	.....	1	1
Died,	1	2	3	.....	1	1	.....	.....	.....	.....	.....	.....
Total Discharged,	11	20	31	6	11	17	6	3	9	3	3	6
Jan. 1st, 1877.												
Remaining as Patients, .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total,	11	20	31	6	11	17	6	3	9	3	3	6
Result of previous admissions.	Result of the previous (5th) admission of the same persons.			Result of the previous (6th) admission of the same persons.			Result of the previous (7th) admission of the same persons.			Result of the previous (8th) admission of the same persons.		
Recovered,	10	13	23	4	9	13	6	2	8	2	2	4
Much Improved,	1	3	4	1	2	3	.....	.....	.....	.....	1	1
Improved, .....	.....	4	4	.....	.....	.....	.....	1	1	.....	.....	.....
Unimproved, .....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....
Total,	11	20	31	6	11	17	6	3	9	3	3	6

Interval from discharges to re-admissions.	Interval from the 5th discharge to the 6th admission of the same persons.						Interval from the 6th discharge to the 7th admission of the same persons.						Interval from the 7th discharge to the 8th admission of the same persons.						Interval from the 8th discharge to the 9th admission of the same persons.					
	Recovered.			All others.			Recovered.			All others.			Recovered.			All others.			Recovered.			All others.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Under 1 month.....
From 1 to 2 months.....
" 2 to 3 ".....
" 3 to 6 ".....
" 6 to 9 ".....
" 9 to 12 ".....
" 12 to 18 ".....
" 18 to 24 ".....
" 2 to 3 years.....
" 3 to 4 ".....
" 4 to 5 ".....
" 5 to 10 ".....
" 10 to 15 ".....
" 15 to 20 ".....
" 20 to 25 ".....
" 25 to 30 ".....
Over 30.....
Total.....	10	13	23	1	7	8	4	9	13	2	2	4	6	2	2	8	1	1	1	2	2	4	1	2

TABLE I.—Continued. Re-admissions.

	10th Admission.			11th Admission.			12th Admission.			13th Admission.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
The result in each case of all persons re-admitted.												
Recovered,.....	3	1	4	1	1	2	1	.....	1	.....	.....	1
Much Improved,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Improved,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unimproved,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Died,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total Discharged,.....	3	1	4	1	1	2	1	.....	1	.....	.....	1
Jan. 1st, 1877.												
Remaining as Patients,.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Total,.....	3	1	4	1	1	2	1	1	1	.....	.....	1
Result of previous admissions.	Result of the previous (9th) admission of the same persons.			Result of the previous (10th) admission of the same persons.			Result of the previous (11th) admission of the same persons.			Result of the previous (12th) admission of the same persons.		
Recovered,.....	3	1	4	1	1	2	1	1	1	1	.....	1
Much Improved,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Improved,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Much Improved,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total,.....	3	1	4	1	1	2	1	1	1	1	.....	1

Interval from discharges to re-admissions.	Interval from the 9th discharge to the 10th admission of the same persons.						Interval from the 10th discharge to the 11th admission of the same persons.						Interval from the 11th discharge to the 13th admission of the same persons.						Interval from the 12th discharge to the 13th admission of the same persons.								
	Recovered.			All others.			Recovered.			All others.			Recovered.			All others.			Recovered.			All others.					
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.			
Under 1 month,																											
From 1 to 2 months,																											
“ 2 to 3 “																											
“ 3 to 6 “																											
“ 6 to 9 “																											
“ 9 to 12 “																											
“ 12 to 18 “																											
“ 18 to 24 “																											
“ 2 to 3 years,																											
“ 3 to 4 “																											
“ 4 to 5 “																											
“ 5 to 10 “																											
“ 10 to 15 “																											
“ 15 to 20 “																											
“ 20 to 25 “																											
“ 25 to 30 “																											
Over 30																											
Total,	3	1	4				1	1	2				1	1	2				1	1	2				1	1	1

TABLE II.—RE-ADMISSIONS.

WHOLE NUMBER OF ADMISSIONS OF 834 PERSONS RE-ADMITTED.

	NUMBER OF PERSONS ADMITTED.			NUMBER OF SINGLE ADMISSIONS.		
	Males.	Females.	Total.	Males.	Females.	Total.
Admitted thirteen times, - - -	1	....	1	13	....	13
Admitted twelve times, - - -	....	1	1	....	12	12
Admitted eleven times, - - -	....	....	....	....	....	....
Admitted ten times, - - -	2	....	2	20	....	20
Admitted nine times, - - -	....	2	2	....	18	18
Admitted eight times, - - -	3	....	3	24	....	24
Admitted seven times, - - -	....	8	8	....	56	56
Admitted six times, - - -	5	9	14	30	54	84
Admitted five times, - - -	8	17	25	40	85	125
Admitted four times, - - -	28	33	61	112	132	244
Admitted three times, - - -	61	85	146	183	255	438
Admitted twice, - - -	252	319	571	504	638	1142
Total, - - -	360	474	834	926	1250	2176

TABLE III.—RE-ADMISSIONS.

THE RESULT OF THE WHOLE NUMBER OF ADMISSIONS OF 834 PERSONS RE-ADMITTED.

	Males.	Females.	Total.
Recovered, - - - - -	464	664	1128
Much improved, - - - - -	108	155	263
Improved, - - - - -	145	173	318
Unimproved, - - - - -	144	161	305
Died, - - - - -	53	80	133
Remaining as patients, Jan. 1, 1877, - - -	12	17	29
Total, - - - - -	926	1250	2176

TABLE IV.—RE-ADMISSIONS.

CLASSIFIED TABLE OF RECOVERIES OF ALL CASES RE-ADMITTED.

	NUMBER OF PERSONS WHO RECOVERED.			NUMBER OF SINGLE RECOVERIES.		
	Males.	Females.	Total.	Males.	Females.	Total.
Recovered once, - - - -	85	126	211	85	126	211
Recovered twice, - - - -	86	114	200	172	228	400
Recovered three times, - - - -	23	35	58	69	105	174
Recovered four times, - - - -	14	25	39	56	100	156
Recovered five times, - - - -	4	8	12	20	40	60
Recovered six times, - - - -	4	3	7	24	18	42
Recovered seven times, - - - -	1	4	5	7	28	35
Recovered eight times, - - - -	....	1	1	....	8	8
Recovered nine times, - - - -	2	....	2	18	....	18
Recovered ten times, - - - -	....	....	....	....	....	....
Recovered eleven times, - - - -	....	1	1	....	11	11
Recovered twelve times, - - - -	....	....	....	....	....	....
Recovered thirteen times, - - - -	1	....	1	13	....	13
Total, - - - -	220	317	537	464	664	1128
Made no recoveries, - - - -	140	157	297	....	....	....
Total, - - - -	360	474	834	464	664	1128

TABLE V.—RE-ADMISSIONS.

THE INTERVAL BETWEEN DISCHARGES AND RE-ADMISSIONS OF ALL CASES.

	DISCHARGED RECOVERED.			DISCHARGED NOT RECOVERED.			ALL CASES.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Under 1 month, - - - -	1	....	1	2	1	3	3	1	4
From 1 to 2 months, - - - -	8	5	13	8	10	18	16	15	31
From 2 to 3 months, - - - -	8	10	18	14	13	27	22	23	45
From 3 to 6 months, - - - -	30	30	60	31	42	73	61	72	133
From 6 to 9 months, - - - -	23	19	42	23	25	53	51	44	95
From 9 to 12 months, - - - -	12	31	43	14	20	34	26	51	77
From 12 to 18 months, - - - -	44	45	89	38	38	76	82	83	165
From 18 to 24 months, - - - -	12	36	48	8	12	20	20	48	68
From 2 to 3 years, - - - -	52	80	132	17	23	40	69	103	172
From 3 to 4 years, - - - -	32	55	87	8	24	32	40	79	119
From 4 to 5 years, - - - -	24	41	65	11	17	28	35	58	93
From 5 to 10 years, - - - -	61	99	160	23	25	48	84	124	208
From 10 to 15 years, - - - -	16	23	44	14	12	26	30	40	70
From 15 to 20 years, - - - -	6	16	22	7	2	9	13	18	31
From 20 to 25 years, - - - -	7	6	13	1	7	8	8	13	21
From 25 to 30 years, - - - -	2	4	6	....	....	....	2	4	6
Over 30 years, - - - -	1	....	1	3	....	3	4	....	4
Total, - - - -	330	505	844	227	271	498	566	776	1342

TABLE VI.—RE-ADMISSIONS.

DEATHS AND THE CAUSES OF DEATH IN RE-ADMITTED CASES.

	ADMISSION.															
	2d.		3d.		4th.		5th.		6th.		7th.		Total.			
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.		
	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.		
Apoplexy, - - - - -	2	7	9	..	1	1	..	..	..	..	..	..	3	7	10
Paralysis, - - - - -	4	2	6	2	..	..	..	..	..	..	..	..	6	2	8
General Paralysis, - - - - -	1	1	2	1	1	..	..	..	..	..	..	..	2	1	3
Brain Disease, - - - - -	2	2	4	..	1	1	..	..	..	..	..	..	3	2	5
Epilepsy, - - - - -	3	2	5	..	..	..	..	..	..	..	..	..	3	2	5
Exhaustion, - - - - -	4	11	15	1	6	7	2	2	4	3	2	1	8	24	32	
Acute Mania, - - - - -	..	7	7	3	3	1	..	1	..	..	..	..	1	10	11
Chronic Mania, - - - - -	2	..	2	1	1	2	..	..	..	..	1	1	3	2	5
Typhomania, - - - - -	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
General Debility, - - - - -	2	2	4	1	1	2	..	..	..	..	..	..	3	3	6
Old Age, - - - - -	..	1	1	1	1	1	..	..	..	..	..	..	1	1	2
Erysipelas, - - - - -	3	3	1	3	..	1	1	..	..	..	..	..	3	3	6
Dysentery, - - - - -	3	3	6	..	1	1	..	1	..	1	..	..	4	3	7
Phthisis, - - - - -	3	4	7	..	2	2	..	1	1	..	..	..	3	7	10
Heart Disease, - - - - -	1	1	2	..	..	1	1	..	..	..	..	..	1	2	3
Rheumatism, - - - - -	2	..	2	..	..	..	..	..	..	..	..	..	2	..	2
Typhoid Fever, - - - - -	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Pneumonia, - - - - -	1	1	2	..	..	..	..	..	..	..	..	..	1	1	2
Epithelioma, - - - - -	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Marasmus, - - - - -	..	2	2	..	..	..	..	..	..	..	..	..	..	2	2
Purpura, - - - - -	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Abscess, - - - - -	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1
Suicide, - - - - -	1	..	1	1	1	..	..	..	..	..	..	..	1	1	2
Disease of Stomach, - - - - -	1	1	2	..	..	..	..	..	..	..	..	..	1	1	2
Diarrhœa, - - - - -	2	2	4	..	..	1	1	..	..	..	..	..	2	3	5
Prostatitis, - - - - -	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Total, - - - - -	38	52	90	7	16	23	6	5	11	1	4	5	1	53	80	133

