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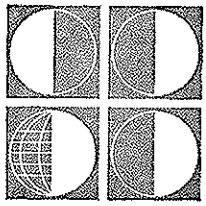
Marital Status of First Admissions to Psychiatric Beds in England and Wales in 1965 and 1966



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There are two main reasons for studying the relation between mental illness and marital status. In the first place, marital status is highly correlated with fertility, so that we may confidently infer deviations of fertility from deviations of marital status. It is of course desirable to have direct information on fertility, but so far national statistics on the fertility of psychiatric patients are available only from Norway (Ødegaard, 1960). A measure of the relative fertility of psychiatric patients gives an idea of whether the heritable component of the predisposition to mental illness is increasing or declining in the population.

Secondly, for a long time reproductive behavior in general, and sexual behavior in particular, have occupied the thoughts of psychiatrists. Even before Freud developed his libido theory, it was thought that a relation existed between sexual behavior and mental illness. Since the time of Freud, mental mechanisms associated with sexual behavior have been implicated in the etiology of a variety of neuroses and psychoses. Information on sexual behavior is hard to obtain, and normative data are usually lacking. However, in the marital act we have one of the most important components of sexual behavior, and moreover a component which is lacking any aura of taboo and is very easily ascertained. Much information is already available on the topic. The numerous studies on small samples have been ably reviewed by Stevens (1969) and will not be mentioned further here, apart from points of particular relevance. National statistics on the marital status of first psychiatric admissions are available only for the United States and Norway. National figures have the advantages not only of size but also of good matching between psychiatric and control groups; therefore, it can be argued that further reports on a national scale are desirable.

Data for England and Wales will be presented and discussed in relation to the data available from the United States and Norway.

METHOD

The data on psychiatric patients were kindly provided by the Ministry of Health and Social Security. The data are derived from the Mental Health Enquiry which is described in the Ministry of Health Statistical Report Series No. 4 (Ministry of Health, 1969). Briefly, whenever a patient

is admitted to a National Health Service bed under the control of a psychiatrist, a card is completed (Hospital Index Card A [Admissions]:S.B.H. 15) and these cards are sent monthly to the Ministry. Among other information, the cards contain details of previous admissions to psychiatric units (so that first-ever admissions may be identified), the region of the admitting hospital, and also the age, sex, marital status, and diagnosis of the patient. The information for each patient is coded and stored on magnetic tape.

From the tapes supplied by the Ministry, containing data on all patients admitted to psychiatric beds in England and Wales during the years 1965 and 1966, tables were prepared by the M.R.C. Computer Unit of age (in five-year groups) by marital status by sex by 8 diagnostic groupings by region of hospital for all patients who had had no previous admission to a psychiatric bed at any time.

For comparison with the psychiatric admissions, we used the estimates of the population of England and Wales provided by the Registrar General in his Annual Statistical Report (Part 2:Tables, Population). The two relevant estimates are those for June 30, 1965 and June 30, 1966. These were added together, in their subdivisions of age, sex, and marital status.

The Registrar General's data are subdivided into the same age groups as those obtained from the Ministry, with one exception. The youngest age group of patients was a four-year period of 16–19 compared with the general population group of 15–19. For purposes of comparison, the general population in this age group has been divided by four-fifths; but since the number of those married must relate only to those of age sixteen and over, the number of married persons in this age group has been left unchanged.

The estimates of the Registrar General are based on the total census of England and Wales which was carried out in 1961, allowance being made for subsequent deaths and migration. The estimate for 1966 also took into consideration a supplementary 10% sample census of England and Wales taken on April 24, 1966 (General Register Office, 1970).

The results can be expressed either as the proportion of patients in any particular marital status or as rates of admission for persons of any particular marital status. There are arguments in favor of both methods, but on the whole we have preferred to use the former method. Admission rates can be calculated from the data given in the tables.

RESULTS

The data for psychiatric patients are given in Tables 1–9 and those for the general population in Table 10. In all, the proportion of single (never-married) persons is given for each age and sex group, and also the proportion of those who had ever been married who were widowed and not remarried at the time of inquiry. For psychiatric patients, the number of patients who were separated, divorced, or living apart is given under the heading "Separated," and this number is expressed as a proportion of those who had ever been married. The Mental Health Enquiry form does not differentiate between these three forms of marital breakdown, and since the Registrar General gives only the number of those divorced (and not remarried) a direct comparison on this important item of information is unfortunately not possible; an interesting feature of the diagnostic comparison is illustrated in Figure 7.

Our data contain 68,285 male and 99,986 female first admissions for the two years. Further data on these patients may

TABLE 1

ALL DIAGNOSTIC CATEGORIES: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	4,689	90	1	12	4,596	0.9802	0.0111	0.1333
20–	6,410	1,294	7	186	5,083	0.7930	0.0054	0.1437
25–	5,743	2,745	14	394	2,955	0.5145	0.0051	0.1435
30–	5,469	3,344	26	428	2,089	0.3820	0.0078	0.1280
35–	5,684	3,841	38	508	1,784	0.3139	0.0099	0.1322
40–	6,246	4,623	109	535	1,569	0.2512	0.0236	0.1157
45–	5,325	4,067	132	472	1,217	0.2285	0.0324	0.1160
50–	5,014	4,051	224	436	924	0.1843	0.0553	0.1076
55–	4,916	4,068	329	293	819	0.1666	0.0809	0.0720
60–	4,713	3,957	495	221	720	0.1528	0.1251	0.0558
65–	3,827	3,326	666	145	455	0.1189	0.2002	0.0436
70–	3,329	2,999	875	74	310	0.0931	0.2918	0.0247
75–	6,920	6,364	3,128	83	483	0.0698	0.4915	0.0130
				Females				
16–	5,231	539	5	41	4,682	0.8950	0.0093	0.0761
20–	8,066	4,103	31	369	3,910	0.4847	0.0075	0.0899
25–	8,383	6,512	50	593	1,820	0.2171	0.0077	0.0911
30–	7,923	6,666	80	588	1,205	0.1521	0.0120	0.0882
35–	8,061	6,828	176	617	1,188	0.1474	0.0258	0.0904
40–	8,297	7,039	316	612	1,216	0.1465	0.0449	0.0869
45–	7,238	6,120	500	535	1,089	0.1504	0.0817	0.0874
50–	7,164	6,002	853	484	1,136	0.1583	0.1421	0.0806
55–	6,637	5,471	1,211	378	1,136	0.1712	0.2213	0.0691
60–	6,318	5,193	1,811	222	1,103	0.1746	0.3487	0.0427
65–	6,089	5,064	2,440	173	996	0.1636	0.4818	0.0342
70–	5,989	4,862	2,974	100	1,092	0.1823	0.6117	0.0206
75–	14,590	12,006	9,674	113	2,507	0.1718	0.8058	0.0094

* Data provided by the Ministry of Health and Social Security.

TABLE 2

SCHIZOPHRENIA AND SCHIZO-AFFECTIVE DISORDERS (EXCLUDING PARANOID SCHIZOPHRENIA): FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	1,099	10	0	0	1,088	0.9900	0.0000	0.0000
20–	1,614	141	0	10	1,464	0.9071	0.0000	0.0709
25–	1,266	300	1	32	957	0.7559	0.0033	0.1067
30–	1,016	354	6	43	652	0.6417	0.0169	0.1215
35–	864	359	4	66	492	0.5694	0.0111	0.1838
40–	660	326	8	53	328	0.4970	0.0245	0.1626
45–	418	210	6	41	201	0.4809	0.0286	0.1952
50–	254	143	12	29	105	0.4134	0.0839	0.2028
55–	187	106	10	15	79	0.4224	0.0943	0.1415
60–	132	88	14	15	42	0.3182	0.1591	0.1704
65–	72	53	9	7	19	0.2639	0.1698	0.1321
70–	49	36	11	2	13	0.2653	0.3056	0.0555
75–	71	58	35	0	12	0.1690	0.6034	0.0000
				Females				
16–	736	39	1	1	697	0.9470	0.0256	0.0256
20–	1,092	337	1	24	753	0.6896	0.0030	0.0712
25–	1,091	667	6	63	421	0.3859	0.0090	0.0944
30–	1,077	770	1	78	302	0.2804	0.0013	0.1013
35–	1,058	769	19	84	282	0.2665	0.0247	0.1092
40–	963	696	33	77	262	0.2721	0.0474	0.1106
45–	738	557	47	73	178	0.2412	0.0844	0.1310
50–	632	460	78	61	167	0.2642	0.1696	0.1326
55–	487	309	82	38	176	0.3614	0.2654	0.1230
60–	394	258	103	17	135	0.3426	0.3992	0.0659
65–	326	237	132	17	89	0.2730	0.5570	0.0717
70–	264	176	114	9	87	0.3295	0.6477	0.0511
75–	403	289	245	1	110	0.2729	0.8477	0.0035

* Data provided by the Ministry of Health and Social Security.

TABLE 3

PARANOID SCHIZOPHRENIA AND PARANOIA: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	49	1	0	0	48	0.9796	0.0000	0.0000
20–	143	18	0	1	124	0.8671	0.0000	0.0555
25–	247	87	0	10	160	0.6478	0.0000	0.1149
30–	283	143	1	19	136	0.4806	0.0070	0.1329
35–	359	205	2	30	147	0.4095	0.0097	0.1463
40–	405	251	6	32	150	0.3704	0.0239	0.1275
45–	282	185	4	38	94	0.3333	0.0216	0.2054
50–	226	160	8	27	64	0.2832	0.0500	0.1687
55–	165	113	13	18	50	0.3030	0.1150	0.1593
60–	151	119	13	17	31	0.2053	0.1092	0.1428
65–	111	88	26	4	22	0.1982	0.2954	0.0454
70–	73	61	20	2	12	0.1634	0.3279	0.0328
75–	118	103	53	1	15	0.1271	0.5146	0.0097
				Females				
16–	38	1	0	0	36	0.9474	0.0000	0.0000
20–	75	32	1	6	43	0.5733	0.0312	0.1875
25–	143	96	3	11	45	0.3147	0.0312	0.1146
30–	263	197	4	26	63	0.2395	0.0203	0.1320
35–	347	278	3	46	65	0.1873	0.0108	0.1655
40–	418	331	12	46	81	0.1938	0.0362	0.1390
45–	383	299	22	35	81	0.2115	0.0736	0.1170
50–	398	305	53	33	88	0.2211	0.1738	0.1082
55–	337	260	57	34	75	0.2225	0.2123	0.1308
60–	242	193	87	21	46	0.1901	0.4508	0.1088
65–	199	165	95	13	32	0.1608	0.5757	0.0788
70–	178	127	89	3	51	0.2865	0.7008	0.0236
75–	378	283	230	6	92	0.2434	0.8127	0.0212

* Data provided by the Ministry of Health and Social Security.

TABLE 4

MANIC-DEPRESSIVE REACTION, MANIC AND CIRCULAR: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	49	0	0	0	49	1.0000	0.0000	0.0000
20–	76	12	0	1	64	0.8421	0.0000	0.0833
25–	76	27	0	3	47	0.6184	0.0000	0.1111
30–	81	51	0	7	28	0.3457	0.0000	0.1372
35–	65	45	0	2	20	0.3077	0.0000	0.0444
40–	77	66	1	9	10	0.1299	0.0151	0.1364
45–	71	58	2	2	12	0.1690	0.0345	0.0345
50–	93	85	5	11	8	0.0860	0.0588	0.1294
55–	112	94	7	10	17	0.1518	0.0745	0.1064
60–	116	104	9	4	11	0.0948	0.0865	0.0385
65–	86	77	15	2	8	0.0930	0.1948	0.0260
70–	69	59	22	2	9	0.1304	0.3729	0.0339
75–	83	81	29	3	2	0.0241	0.3580	0.0370
				Females				
16–	55	4	0	0	51	0.9273	0.0000	0.0000
20–	85	33	0	1	51	0.6000	0.0000	0.0303
25–	67	49	0	5	18	0.2686	0.0000	0.1020
30–	116	93	2	8	22	0.1896	0.0215	0.0860
35–	123	105	6	5	17	0.1382	0.0571	0.0476
40–	151	132	5	10	19	0.1258	0.0379	0.0757
45–	143	116	7	11	26	0.1818	0.0603	0.0948
50–	178	149	20	13	28	0.1573	0.1342	0.0872
55–	120	106	25	7	13	0.1083	0.2358	0.0660
60–	140	110	36	6	28	0.2000	0.3273	0.0545
65–	106	86	46	4	20	0.1887	0.5349	0.0465
70–	85	72	39	1	11	0.1294	0.5417	0.0139
75–	128	104	84	1	24	0.1875	0.8077	0.0096

* Data provided by the Ministry of Health and Social Security.

TABLE 5

MANIC-DEPRESSIVE REACTION, DEPRESSIVE; ENDOGENOUS DEPRESSION; DEPRESSIVE STATE OR REACTION; INVOLUTIONAL MELANCHOLIA: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	627	20	0	6	607	0.9681	0.0000	0.3000
20–	1,324	331	2	52	988	0.7462	0.0060	0.1571
25–	1,339	790	4	101	541	0.4040	0.0051	0.1278
30–	1,433	1,039	6	115	387	0.2701	0.0058	0.1107
35–	1,747	1,380	16	145	357	0.2043	0.0116	0.1051
40–	2,222	1,815	40	161	391	0.1760	0.0220	0.0887
45–	2,129	1,776	58	170	341	0.1602	0.0326	0.0957
50–	2,238	1,902	104	146	320	0.1430	0.0547	0.0768
55–	2,367	2,044	155	105	312	0.1318	0.0758	0.0514
60–	2,179	1,891	226	88	278	0.1276	0.1195	0.0465
65–	1,495	1,338	263	59	146	0.0976	0.1966	0.0441
70–	791	738	204	15	49	0.0619	0.2764	0.0203
75–	654	598	274	16	54	0.0826	0.4582	0.0267
				Females				
16–	1,237	152	2	16	1,084	0.8763	0.0131	0.1053
20–	2,523	1,400	8	134	1,101	0.4364	0.0057	0.0957
25–	2,915	2,393	12	210	508	0.1743	0.0050	0.0877
30–	2,988	2,645	23	192	326	0.1091	0.0087	0.0726
35–	3,374	2,998	69	218	364	0.1079	0.0230	0.0727
40–	3,771	3,376	116	216	380	0.1008	0.0343	0.0640
45–	3,621	3,185	227	207	425	0.1174	0.0713	0.0650
50–	3,908	3,410	462	205	490	0.1254	0.1355	0.0601
55–	3,746	3,215	694	181	517	0.1380	0.2159	0.0563
60–	3,445	2,924	981	100	513	0.1489	0.3355	0.0342
65–	2,982	2,521	1,145	69	451	0.1512	0.4542	0.0274
70–	1,905	1,587	927	31	312	0.1638	0.5841	0.0195
75–	1,634	1,371	1,031	16	257	0.1573	0.7520	0.0117

* Data provided by the Ministry of Health and Social Security.

TABLE 6

ANXIETY STATE, REACTION OR NEUROSIS; HYSTERIA; PHOBIC REACTION; NEUROTIC DEPRESSIVE REACTION; PSYCHONEUROSES: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*†

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	544	15	0	1	528	0.9706	0.0000	0.0667
20–	1,076	344	3	35	729	0.6775	0.0087	0.1017
25–	1,151	751	5	91	391	0.3397	0.0066	0.1212
30–	1,150	888	6	96	255	0.2217	0.0067	0.1081
35–	1,169	962	9	97	200	0.1711	0.0094	0.1008
40–	1,210	1,032	27	75	171	0.1413	0.0262	0.0727
45–	943	793	24	67	143	0.1516	0.0303	0.0845
50–	783	692	45	68	91	0.1162	0.0650	0.0983
55–	650	560	47	27	86	0.1323	0.0839	0.0482
60–	479	410	68	28	64	0.1336	0.1658	0.0683
65–	284	242	51	8	40	0.1408	0.2107	0.0330
70–	159	144	41	0	15	0.0943	0.2847	0.0000
75–	95	88	42	3	7	0.0737	0.4773	0.0341
				Females				
16–	1,330	177	1	11	1,151	0.8654	0.0056	0.0621
20–	2,318	1,295	11	121	1,005	0.4336	0.0085	0.0934
25–	2,492	2,070	23	225	401	0.1609	0.0111	0.1087
30–	2,208	1,974	36	194	218	0.0987	0.0182	0.0983
35–	2,035	1,831	55	158	193	0.0948	0.0300	0.0863
40–	1,967	1,782	108	180	180	0.0915	0.0606	0.1010
45–	1,456	1,302	126	133	150	0.1030	0.0968	0.1021
50–	1,174	1,039	153	103	131	0.1116	0.1472	0.0991
55–	965	835	197	60	124	0.1285	0.2359	0.0718
60–	773	668	249	30	104	0.1345	0.3727	0.0449
65–	551	477	241	13	71	0.1288	0.5052	0.0272
70–	326	274	172	6	51	0.1564	0.6277	0.0219
75–	257	227	172	3	29	0.1128	0.7577	0.0132

* Data provided by the Ministry of Health and Social Security.
† Not including obsessive-compulsive reaction and anankastic neurosis given in Table 7.

TABLE 7

OBSESSIVE-COMPULSIVE REACTION AND ANANKASTIC NEUROSIS: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	48	1	0	1	47	0.9792	0.0000	1.0000
20–	52	8	0	1	44	0.8461	0.0000	0.1250
25–	40	16	0	3	24	0.6000	0.0000	0.1875
30–	37	23	0	0	14	0.3784	0.0000	0.0000
35–	45	31	0	1	14	0.3111	0.0000	0.0322
40–	28	22	0	2	6	0.2143	0.0000	0.0909
45–	23	17	0	1	6	0.2609	0.0000	0.0588
50–	19	11	0	1	7	0.3684	0.0000	0.0909
55–	16	11	1	1	5	0.3125	0.0909	0.0909
60–	12	10	0	1	2	0.1667	0.0000	0.1000
65–	10	9	1	1	1	0.1000	0.1111	0.1111
70–	4	4	1	0	0	0.0000	0.2500	0.0000
75–	1	1	0	0	0	0.0000	0.0000	0.0000
				Females				
16–	40	1	0	0	39	0.9750	0.0000	0.0000
20–	59	24	0	1	35	0.5932	0.0000	0.0417
25–	71	54	0	2	17	0.2394	0.0000	0.0370
30–	83	67	0	3	16	0.1928	0.0000	0.0448
35–	57	53	0	2	4	0.0702	0.0000	0.0377
40–	64	53	1	1	10	0.1562	0.0189	0.0189
45–	41	33	3	3	8	0.1951	0.0909	0.0909
50–	24	19	2	1	4	0.1667	0.1053	0.0526
55–	16	16	3	1	0	0.0000	0.1875	0.0625
60–	17	15	4	1	2	0.1176	0.2667	0.0667
65–	13	10	3	0	3	0.2308	0.3000	0.0000
70–	8	7	5	0	1	0.1250	0.7143	0.0000
75–	3	2	1	0	1	0.3333	0.5000	0.0000

* Data provided by the Ministry of Health and Social Security.

TABLE 8

PERSONALITY DISORDERS: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	729	29	0	3	700	0.9602	0.0000	0.1034
20–	928	233	0	53	689	0.7424	0.0000	0.2275
25–	679	368	2	77	306	0.4507	0.0054	0.2092
30–	448	295	2	57	153	0.3415	0.0068	0.1932
35–	332	224	1	49	104	0.3132	0.0045	0.2187
40–	287	206	4	46	79	0.2753	0.0194	0.2233
45–	211	154	6	24	56	0.2654	0.0390	0.1558
50–	128	98	3	24	28	0.2187	0.0306	0.2449
55–	52	37	0	6	15	0.2885	0.0000	0.1622
60–	44	33	5	4	10	0.2273	0.1515	0.1212
65–	23	18	4	3	5	0.2174	0.2222	0.1667
70–	13	11	1	0	2	0.1538	0.0909	0.0000
75–	13	9	4	0	4	0.3077	0.4444	0.0000
				Females				
16–	581	40	0	10	540	0.9294	0.0000	0.2500
20–	548	228	6	44	315	0.5748	0.0263	0.1930
25–	357	240	1	37	114	0.3193	0.0042	0.1542
30–	276	212	6	41	61	0.2210	0.0283	0.1934
35–	196	152	5	26	39	0.1990	0.0329	0.1710
40–	130	94	9	14	34	0.2615	0.0957	0.1489
45–	112	84	13	11	27	0.2411	0.1548	0.1309
50–	71	57	7	7	14	0.1972	0.1228	0.1228
55–	64	44	12	1	20	0.3125	0.2727	0.0227
60–	34	20	6	1	14	0.4118	0.3000	0.0500
65–	17	15	7	1	2	0.1176	0.4667	0.0667
70–	16	10	6	0	6	0.3750	0.6000	0.0000
75–	27	19	16	0	8	0.2963	0.8421	0.0000

* Data provided by the Ministry of Health and Social Security.

TABLE 9

ALCOHOLISM AND OTHER ADDICTIONS: FIRST ADMISSION TO NATIONAL HEALTH SERVICE PSYCHIATRIC BEDS IN ENGLAND AND WALES, 1965 AND 1966*

Age	Total	Ever Married	Widowed	Separated	Single	Proportion Single	Proportion Widowed	Proportion Separated
				Males				
16–	171	7	0	1	164	0.9591	0.0000	0.1428
20–	304	86	0	17	216	0.7105	0.0000	0.1977
25–	301	158	0	48	138	0.4585	0.0000	0.3038
30–	446	280	3	60	164	0.3677	0.0107	0.2143
35–	562	385	5	91	168	0.2989	0.0130	0.2364
40–	740	539	14	126	192	0.2594	0.0260	0.2338
45–	647	496	16	88	148	0.2287	0.0322	0.1774
50–	506	421	23	81	80	0.1581	0.0546	0.1924
55–	398	334	31	62	63	0.1583	0.0928	0.1856
60–	209	172	31	23	36	0.1722	0.1803	0.1337
65–	72	56	15	4	13	0.1805	0.2678	0.0714
70–	27	25	10	2	2	0.0741	0.4000	0.0800
75–	19	16	7	2	1	0.0526	0.4375	0.1250
				Females				
16–	59	2	0	1	57	0.9961	0.0000	0.5000
20–	77	28	0	9	48	0.6334	0.0000	0.3214
25–	68	47	0	4	21	0.3088	0.0000	0.0851
30–	123	101	4	14	20	0.1626	0.0396	0.1386
35–	160	132	5	31	27	0.1687	0.0379	0.2348
40–	185	156	6	25	26	0.1405	0.0385	0.1602
45–	201	178	20	24	22	0.1094	0.1123	0.1348
50–	166	152	20	24	14	0.0843	0.1316	0.1579
55–	131	114	28	21	16	0.1221	0.2456	0.1842
60–	113	101	40	9	12	0.1062	0.3960	0.0891
65–	66	59	24	3	6	0.0909	0.4068	0.0508
70–	26	23	17	0	3	0.1154	0.7391	0.0000
75–	18	17	11	1	0	0.0000	0.6470	0.0588

* Data provided by the Ministry of Health and Social Security.

TABLE 10

MARITAL STATUS OF THE ESTIMATED POPULATIONS OF ENGLAND AND WALES AT JUNE 30, 1965 AND JUNE 30, 1966*

Age	Total	Ever Married	Widowed	Single	Proportion Single†	Proportion Widowed†
			Males			
16–	3,075.6	57.6	0.0	3,018.0	0.9813	0.0000
20–	3,342.7	1,073.4	0.2	2,269.3	0.6789	0.0002
25–	3,081.3	2,256.5	1.6	832.5	0.2702	0.0007
30–	3,033.2	2,541.1	4.3	492.1	0.1622	0.0017
35–	3,071.5	2,670.2	8.7	401.3	0.1306	0.0032
40–	3,290.6	2,924.4	21.1	366.2	0.1113	0.0072
45–	2,959.4	2,672.6	34.0	286.8	0.0969	0.0127
50–	3,075.5	2,804.2	62.2	271.3	0.0882	0.0222
55–	2,933.2	2,689.9	102.5	243.3	0.0829	0.0381
60–	2,522.4	2,319.4	151.1	203.0	0.0805	0.0651
65–	1,808.8	1,675.3	191.9	133.5	0.0738	0.1145
70–	1,241.6	1,154.8	215.2	86.8	0.0699	0.1863
75–	1,396.9	1,284.7	501.5	112.2	0.0803	0.3904
			Females			
16–	2,971.8	271.0	0.2	2,700.8	0.9088	0.0007
20–	3,222.9	1,879.5	2.8	1,343.4	0.4168	0.0015
25–	2,952.2	2,525.1	7.5	427.1	0.1447	0.0030
30–	2,840.4	2,573.5	12.7	266.9	0.0940	0.0049
35–	2,960.4	2,710.7	24.3	249.7	0.0843	0.0090
40–	3,258.9	2,984.9	68.1	274.0	0.0841	0.0228
45–	3,012.6	2,746.1	137.7	266.5	0.0885	0.0501
50–	3,249.7	2,922.8	268.7	326.9	0.1006	0.0919
55–	3,171.2	2,794.3	435.8	376.9	0.1188	0.1560
60–	2,899.2	2,508.5	646.8	390.7	0.1348	0.2578
65–	2,467.3	2,117.8	847.6	349.5	0.1416	0.4002
70–	1,994.8	1,692.7	934.1	302.1	0.1514	0.5518
75–	2,840.7	2,394.0	1,868.9	446.7	0.1572	0.7806

* Given by the Registrar General in his Annual Statistical Reports (Part II: Tables, Population). Figures in thousands.
† The proportion single of the total in each group has been calculated from the figures given, and also the proportion widowed of those ever married.

be found in the Ministry of Health Report (1969). There is a slight discrepancy in the numbers, since the Ministry report concerns 68,538 male and 100,071 female first admissions; the reason for the discrepancy is not known, but it is so small as to be completely insignificant. The same may be said of two categories of marital status which appear in the Mental Health Enquiry returns but are not reported for the general population; one is "cohabiting" which applies to 118 (0.17%) males and 235 (0.23%) females; the other is "not known" which applies to 394 (0.54%) males and 266 (0.27%) females. These small numbers

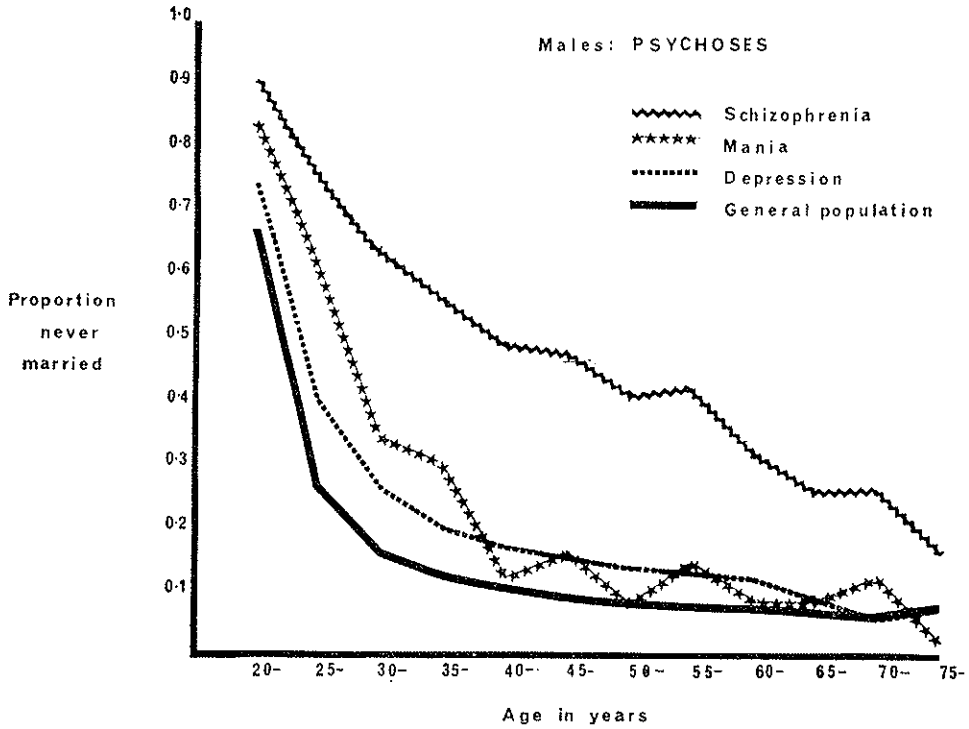

FIG. 1.—Proportion of single males (never married) in five-year age groups for schizophrenia, mania, and depression for first admissions to National Health Service psychiatric beds in England and Wales during 1965 and 1966 compared with the general population.

have been included in the totals for each age and sex group but have been omitted from any other statistics.

The main findings of the study are illustrated in Tables 1 to 7. The results will not be described in detail in the text, but the main features will be mentioned in the discussion, where they are assessed in relation to previously published national statistics.

DISCUSSION

PROPORTION SINGLE

All diagnostic groups of both sexes show an excess of single persons, with the exception of obsessional neurosis (in which the numbers are too small to give a reliable answer) and female addiction (see Figures 1–4). Below the age of 40 the female addicts are less often married, but over the age of 40 they are more often

married than the general population. The latter group consists almost entirely of alcohol addicts, in whom the addiction may well be secondary to the drinking habits of the husbands. The results agree well with those of Ødegaard (1960) who found an excess of single persons in all diagnostic categories of male first admissions in Norway during the years 1936–55 and in all categories of females with the exception of general paresis, symptomatic psychosis, and alcoholism. We have no equivalent category of symptomatic psychosis, which may have been biased by the inclusion of puerperal psychosis. A diagnostic breakdown of first admissions by marital status and sex is available for first admissions in the United States in 1933

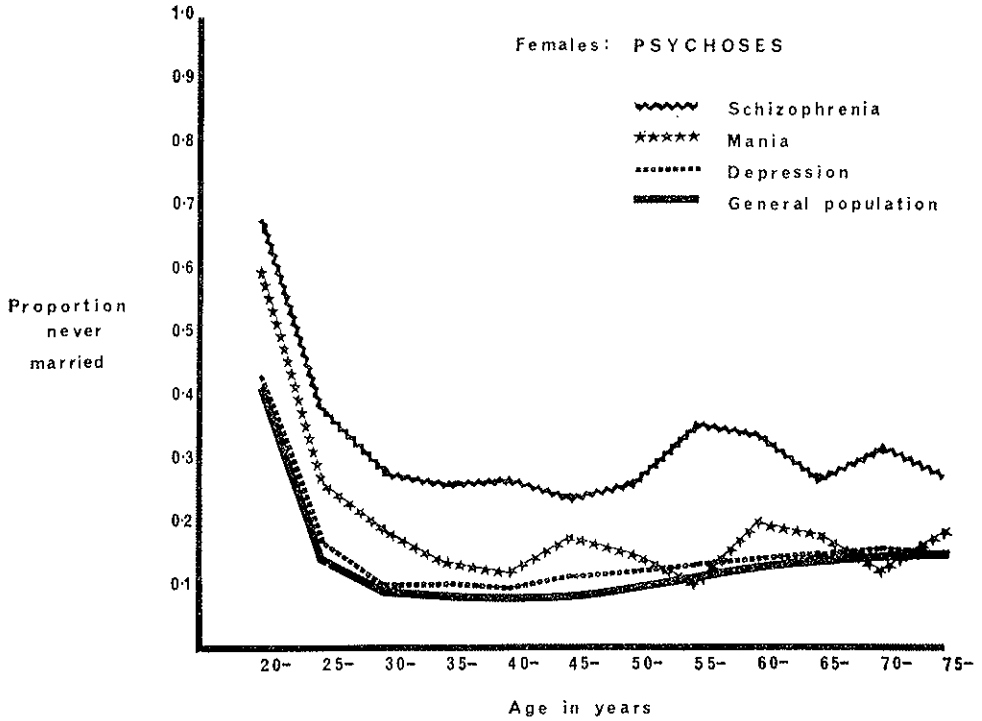

FIG. 2.—Proportion of single females (never married) in five-year age groups for schizophrenia, mania, and depression for first admission to National Health Service psychiatric beds in England and Wales during 1965 and 1966. Compared with the general population.

(U.S. Bureau of the Census, 1935, quoted by Landis and Page, 1938); this breakdown shows an excess of single persons in all diagnostic categories of male patients and in all categories of female patients except general paresis and alcoholism. The data from the United States, Norway, and England and Wales are consistent in finding a greater excess of single persons among males than among females, and among schizophrenics than among manic-depressives.

These three sets of national figures for first psychiatric admissions agree that for both sexes there is an excess of single manic-depressives, although the excess for females is not great. Since we know that fertility is correlated with marriage, and negatively correlated with age at marriage, it follows that fertility of manic-

depressive patients is reduced. The reduction shown by these figures is a minimal estimate, since it has been shown by Essen-Möller (quoted by Lewis, 1959) that whereas the marital status of manic-depressives at first admission is not greatly different from that of the general population, it falls to about half after admission. Essen-Möller also showed that the reduction in fertility of manic depressives was not due to misdiagnosis of schizophrenics. Those patients who later developed schizophrenia did not differ from the remainder on first admission, although with the development of a schizophrenic clinical picture, their marital status and fertility came to resemble the generality of schizophrenics rather than

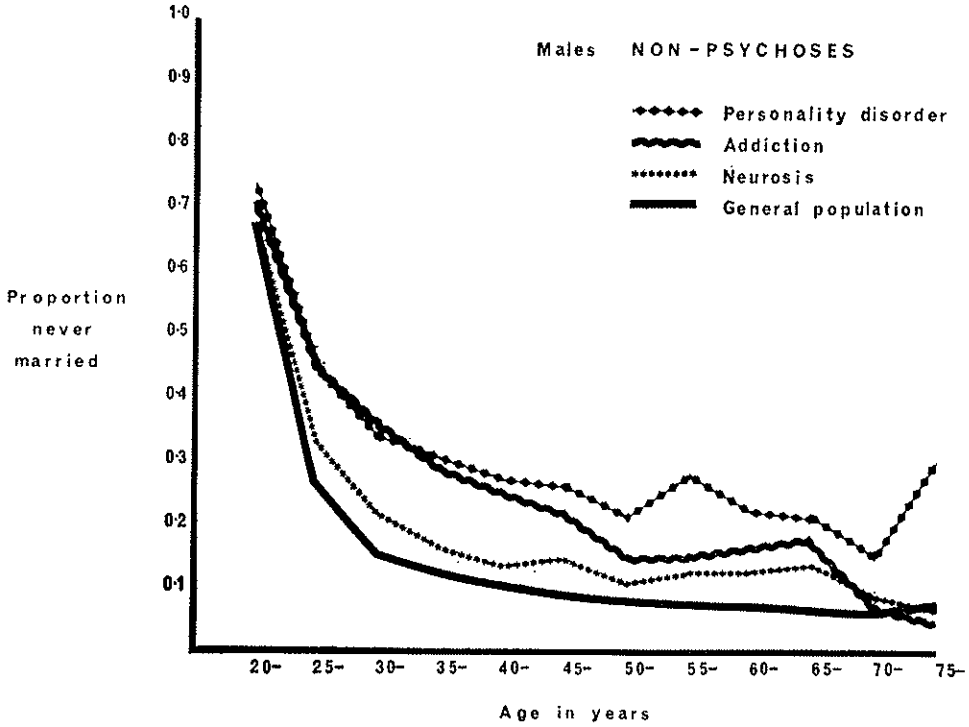

FIG. 3.—Proportion of single males (never married) in five-year age groups for personality disorder, addiction, and neurosis for first admissions to National Health Service psychiatric beds in England and Wales during 1965 and 1966 compared with the general population.

that of the manic-depressives with whom they had previously been classified.

In our data, manic-depressive illness is subdivided into its components of mania and depression, and this has led to an interesting finding not previously reported. In both sexes, patients admitted with mania are less often married than those admitted with depression, at least up to the age of 40.

PROPORTION WIDOWED

Taking all diagnostic categories together, the observed number of widowers was about 50% in excess of the age-corrected expected number, and the observed number of widows was about 15% in excess. The actual figures are as follows: Widowers: Obs. 6,044, Exp. 4,032.7, Excess as a per cent of male admissions, 2.9; Widows: Obs. 20,121, Exp. 17,412.4, Ex-

cess as a per cent of female admissions, 2.7.

The excess of widows falls with age (Figures 5 and 6); and it can also be seen that there is much less diagnostic variation than in the case of proportion single. Similar data for first admissions in the United States in 1922 (U.S. Bureau of the Census, 1926, quoted by Pugh and McMahon, 1962) also show the excess to be greater for males and to fall with age; but the overall excess is greater, being about 100% for males and 50% for females. The Norwegian data are similar to our own (Ødegaard, 1953) except that in Norway there is a negligible excess of widowers after age 50 and a negligible excess of widows after age 60.

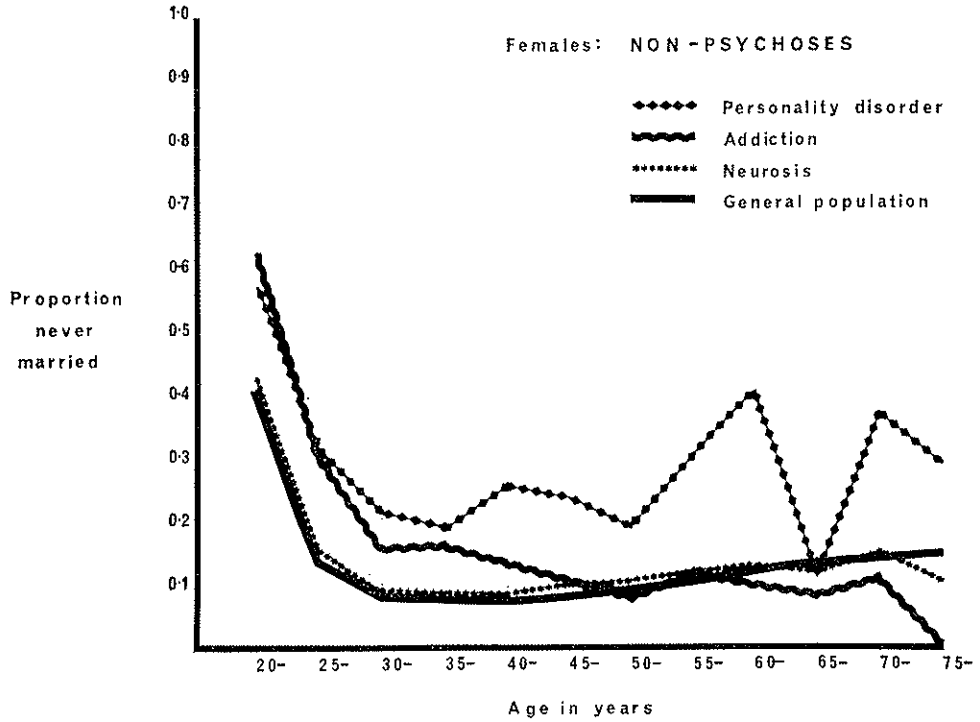

FIG. 4.—Proportion of single females (never married) in five-year age groups for personality, addiction, and neurosis for first admissions to National Health Service psychiatric beds in England and Wales during 1965 and 1966 compared with the general population.

The excess of widows and widowers is expressed above as a percentage of all first admissions. This gives an upper limit to the contribution of death of spouse to the total first admission rate. For the combined sexes it is 2.8% of all first admissions. This gives an upper limit to the contribution of death of spouse to the total first admission rate. For the combined sexes it is 2.8% of all first admissions. However, it must be emphasised that this is an upper limit and that if the deaths of all pairs of spouses were synchronized it would not necessarily result in a 2.8% fall in the first admission rate. As Ødegaard (1953) and Pugh and McMahon (1962) point out, an additional factor of self-selection is involved, in that widows with no predisposition to mental illness tend to get married again and

therefore are not enumerated in the population statistics on widows; those with a predisposition to mental illness, on the other hand, fail to marry again and are enumerated among the widows on admission to hospital. We may assume that a proportion of these predisposed individuals would have fallen sick even if their spouses had remained alive, so that the environmental factor of widowhood cannot be held responsible for the entire 2.8% excess of first admissions. Just how much it is responsible for we cannot say, until we introduce the category of "Ever widowed" into our statistics for both psychiatric and general populations.

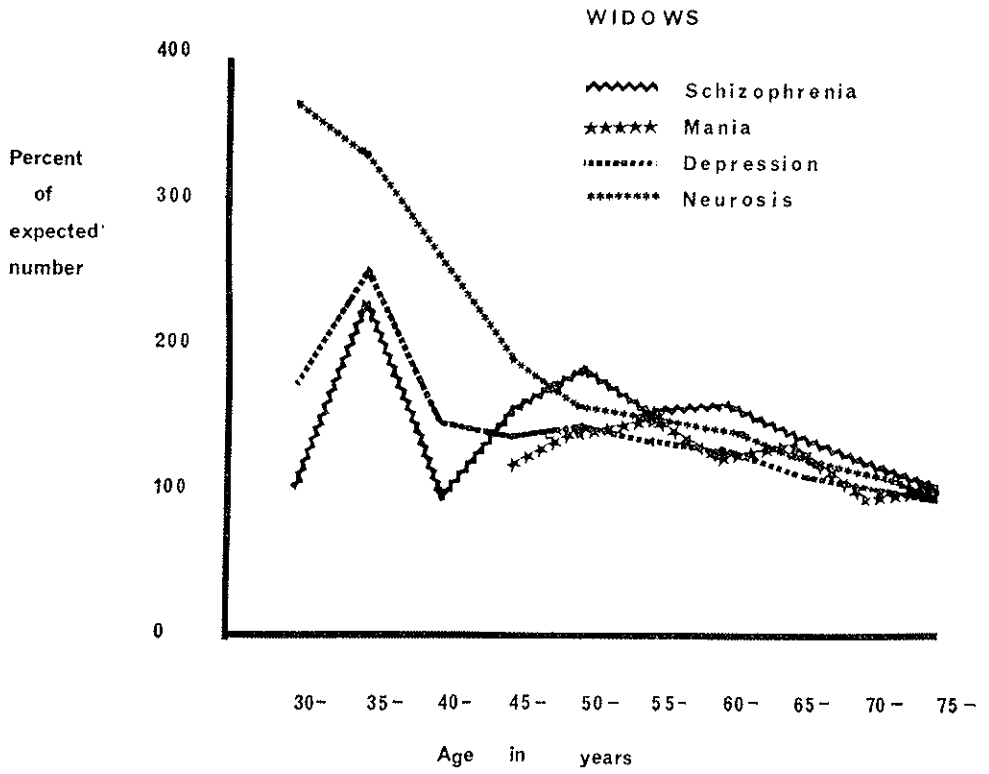

FIG. 5.—Female patients widowed and not remarried at the time of first admission to National Health Service psychiatric beds in England and Wales during 1965 and 1966 expressed as a percentage of the expected number (calculated from the proportion widowed in the general population).

PROPORTION SEPARATED

This category of patient includes those who are separated, divorced, or living apart, and who have not yet remarried. Unfortunately we have no control data with which to compare them. It is possible to make a comparison between diagnostic groups, and this reveals an odd contrast between schizophrenia and manic-depressive psychosis (Figure 7). Whereas for the manic-depressives the proportion separated falls steadily with age, for the schizophrenics it rises steadily to a peak at age 50–55 and then declines. The difference occurs for both sexes. Interpretation of this odd finding is difficult.

SOURCES OF BIAS

The reliability of the psychiatric data has not been assessed. It is not unlikely that a proportion of unmarried patients with children describe themselves as married on admission to hospital. Misreporting of census returns is less probable because it is known that the Registrar General is in a position to check the census information against marriage certificates. The net result of any bias arising from this source would be to reduce the excess of unmarrieds found among the psychiatric population.

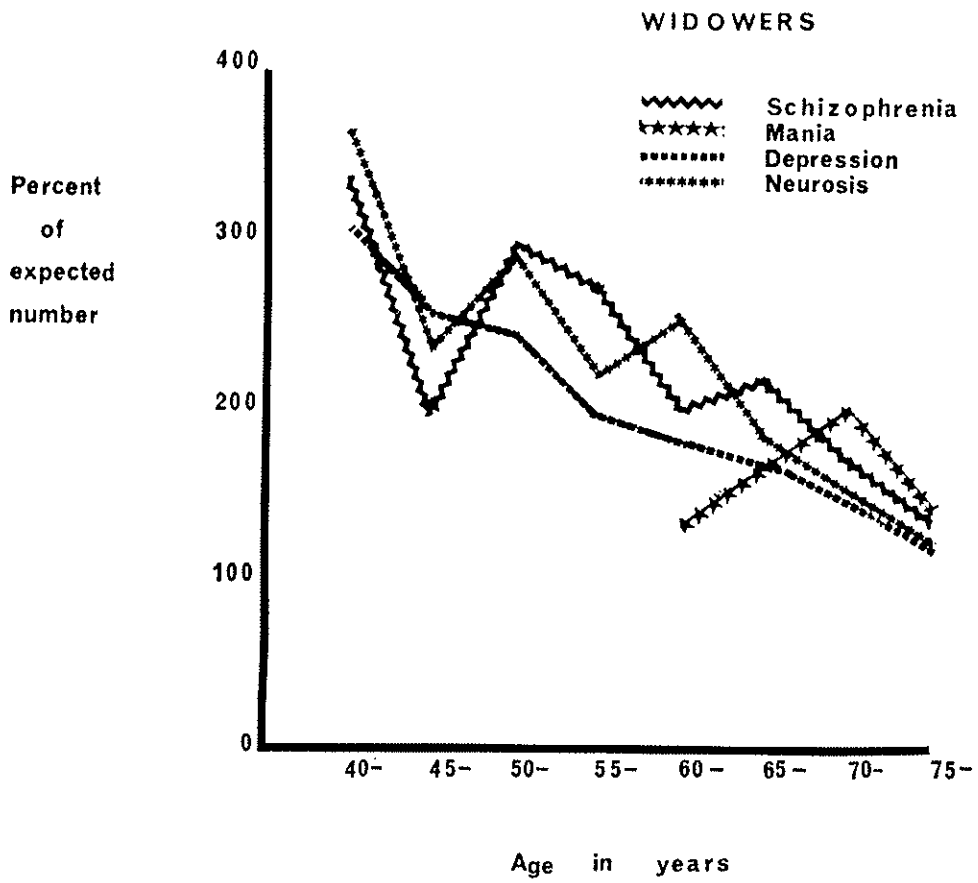

FIG. 6.—Male patients widowed and not remarried at the time of first admission to National Health Service psychiatric beds in England and Wales during 1965 and 1966 expressed as a percentage of the expected number (calculated from the proportion widowed in the general population).

In planning the work, we considered the possibility of a correlation of both region and marital status with diagnosis, so that, for instance, if immigrants tend to be more often unmarried and more often diagnosed as schizophrenic, an excess of unmarrieds among the schizophrenics would be found. We therefore requested separate tables for the Birmingham region, which has a high proportion of immigrants; and also for the Liverpool region, which has a high proportion of Roman Catholics. The Birmingham region yielded 4,575 male patients with a marital

status distribution extremely close to the national distribution, and 7,407 female patients with about 5% excess of marrieds between the ages of 30 and 50, but otherwise not differing from the national distribution. The 2,686 male and 4,045 female patients in the Liverpool region closely followed the national distribution of marital status by age. The result of the small difference among the Birmingham females would tend, if anything, to reduce the excess of unmarrieds among the schizophrenic patients.

It should be mentioned in relation to sources of bias that the female neurotic patients, whom one would expect from previous work to be nearest in their marital status to the general population, do in

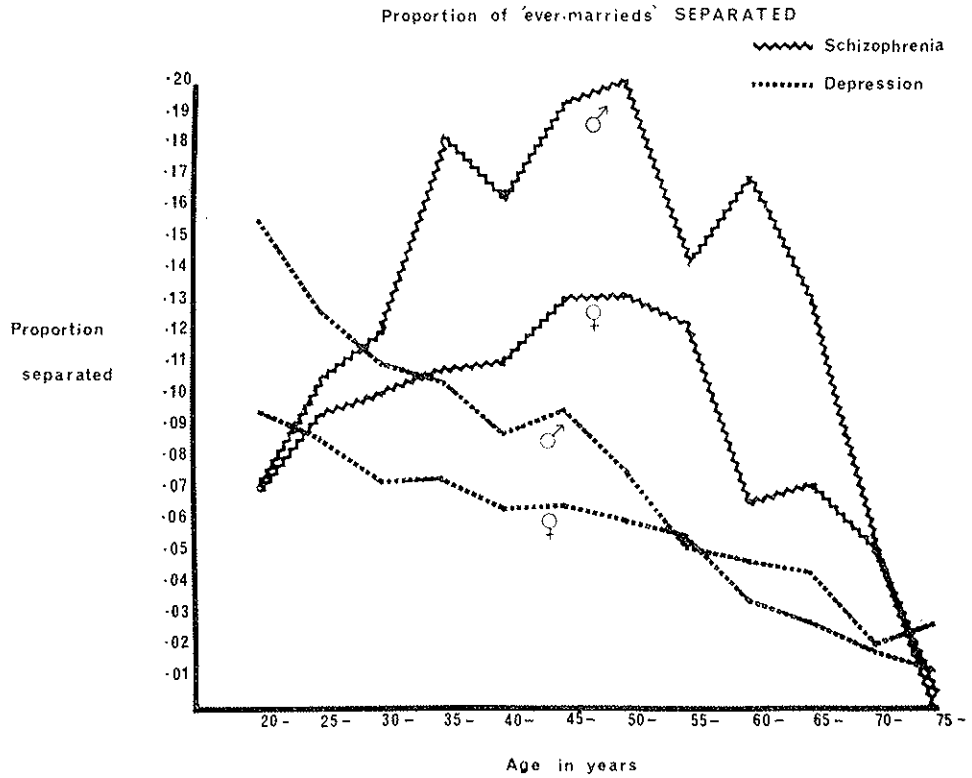

FIG. 7.—Patients with broken marriages at the time of first admission to National Health Service psychiatric beds in England and Wales during 1965 and 1966 expressed as a percentage of all married patients in the same age, sex, and diagnostic group.

fact show a distribution very close to that of the national distribution for females (Figure 4). The female neurotics are very slightly less married at all ages from 20 to 60 and the differences are significant since the numbers are large. It may be that this small difference represents some systematic bias due to the different ways in which the information on the psychiatric and control populations was gathered. However, in comparison with this small difference for female neurotic patients, the other differences found were large.

INTERPRETATION

The possible causes of the association between marital status and mental illness

have been discussed by Lewis (1958). They are:

1. People with a constitutional tendency to mental illness are less likely to marry; and previous episodes of illness for which hospitalization was not required, together with the duration of the present illness before hospitalization, may also have served to reduce the chances of marriage. This explanation is favored by Lewis and Ødegaard.
2. Marriage may act as a protection against the development of mental illness. This explanation is emphasized by Dayton (1940).
3. For an equal severity of illness, single patients may be more liable to hospitalization than married patients. Some support for this explanation comes from the report on first admissions to mental hospitals in the United States in 1933 (U.S. Bureau of the Census, 1936). The standardized percentages of married patients admitted with senile dementia were 39.7 for males and 36.5 for females, compared with corresponding percentages for all psychiatric admissions of 41.0 and 48.5. Clearly, a predisposition to senile dementia is not likely to reduce the chances of marriage, nor is marriage likely to act as a protection against senile dementia. In this case, therefore, it is likely to be the lack of a spouse to care for the patient which necessitates admission. Senile dementia is of course an extreme case, since there is an extreme requirement for care and supervision; but the same influence could well be important with the functional psychiatric illnesses.

It seems likely that all three causes are playing some part, and the purpose of this discussion is merely to draw attention to the possibilities of interpretation, since our data shed no new light on their analysis.

SUMMARY

The marital status of patients having their first admission to a psychiatric bed in England and Wales during 1965 and 1966 has been compared with the estimates of the marital status of the population of England and Wales during those years by the Registrar General. On the whole the findings confirm similar studies in the United States and Norway.

There was an appreciable excess of single patients in all diagnostic categories of both sexes except for alcoholism in females and neurosis in females, in which latter case the distribution of proportion single by age adhered closely to that of the general population of females. There was a greater excess of single patients in the category of mania than in that of depression.

The proportion of married patients who had been widowed and who had not remarried at the time of admission was raised for all diagnoses and both sexes, more so for males than females. The excess of widowers over expectation comprised 2.9% of male admissions and that of widows 2.7% of female admissions. Some of this excess is probably due to an association between predisposition to mental illness and failure to remarry after widowhood, so that the overall figure of 2.8% of all first admissions must be considered an upper limit of the estimate of the proportion of mental illness due to widowhood.

Schizophrenia and depressive psychosis showed a marked contrast in the shape of the distribution of broken marriages by age.

ACKNOWLEDGMENTS

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