SICK LEAVE EXPERIENCE OF CIVIL SERVANTS IN THE GOVERNMENT OF NORTHERN IRELAND DURING 1958

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In the absence of any completely satisfactory morbidity statistics comparable to the Registrar General's mortality records, covering the whole population, reports on the sickness experience of relatively small groups of people are available from time to time. Such groups are commonly select sections of the population for which figures have been specially compiled for one reason or another; the following are representative examples in this field.

Barr (1960) reported in some detail on the sickness absence of the nurses of a Regional Hospital Board. Spratling (1957) described that of the employees of London Transport Executive in a most comprehensive way. Chiesman (1957) reported "sick rates" for various grades of post office staff and his data has been used by many workers for the purpose of special studies into the incidence of ischaemic heart disease and the like in various grades of post office employment (Morris, 1957; Reid, 1957). The morbidity experience amongst the staff of local authorities has been reported by Moss (1959) and Warren (1960).

On a national scale data derived from the administration of the National Insurance Schemes are available for Great Britain and Northern Ireland on a sample basis. While there are limitations in this material, a broad picture of sickness occurring in a large section of population between the ages of 15 and 65 is available for study (Park and Kidd, 1958; Jones, 1959; Kidd and Park, 1959; 1960, a, b).

It is important that consideration should be given to morbidity studies from all possible sources in an endeavour to obtain information of value in piecing together the pattern of community sickness; in what follows reference is made to the sickness experience of a relatively small population (about 7,000), comprising the non-industrial staff of the Civil Service of the Government of Northern Ireland.

A survey of sick leave among civil servants in Northern Ireland was prepared from information received from Government Departments in respect of all spells of sick leave taken by their staffs during 1958. There were no serious epidemics during that year and, indeed, amongst insured persons in the Province, the average number absent from work during 1958 was the lowest since the inception of the National Insurance Schemes in 1948. A factual account of the results of this survey was given in a previous study, published elsewhere, by Kidd and Park (1960b). As established civil servants have to pass a medical examination before appointment, they are in a way selected lives and a different pattern of sickness from that of the rest of the insured working population in the Province would be expected. The survey revealed that civil servants did have on average more spells off work but that these spells were of shorter duration and in terms of days lost per head during the year amounted to about half that for the rest of the insured population in Northern Ireland. This experience may be unique to the civil service or, on the other hand, it may be typical of office staff generally. It is notable that, while the influence of occupation on mortality has been studied for many years, little is known of the influence of occupation on morbidity. Unfortunately no breakdown by occupation of the morbidity data from national insurance records in Northern Ireland is available.

Spratling (1957) suggested a way of comparing the recorded sickness absence of a particular occupational group with the amount of sickness absence that would have been recorded if the experience of the group under examination had been the same as that of the relevant London Transport group during the years 1949–52. The most appropriate of their groups for comparison with Northern Ireland civil servants were, for men, the clerical and technical

staff, and for women, the clerical staff (unmarried women)—there are no married women in the Northern Ireland civil service.

The civil service data were available for only one year (1958) and, unlike the London Transport data, included spells lasting more than 6 months although the small numbers of such cases should not seriously affect the comparison. It was only possible to make the comparison for the number of days of sickness because of the method of compiling the figures for uncertificated leave (spells of less than 3 days' duration) in the civil service.

As can be seen from Table I, the number of days taken by male civil servants of all ages was 3 per cent. higher than expected from the London Transport data, but the differences between observation and expectation varied quite appreciably between age groups. This variation did not suggest any formal relationship with age. Amongst unmarried women, civil servants had 6 per cent. fewer days' absence than expected and at ages up to 25 this difference was appreciable.

TABLE I

COMPARISON OF ACTUAL CIVIL SERVICE EXPERIENCE DURING 1958 WITH EXPECTED EXPERIENCE ACCORDING TO TABLES FOR LONDON TRANSPORT CLERICAL AND AND TECHNICAL STAFF, 1949-52

Employment	Sex	Age Group (yrs)	No. of Staff in Post	Days of Sickness Absence		
				Actual	Expected	Actual as Percentage of Expected
Clerical and Technical	Males	Up to 19	88	203	299	68
		20-24	259	1,366	1,344	102
		25-29	280	1,200	1,552	77
		30-34	379	2,783	2,605	107
		35-39	742	7,391	6,444	115
		40-44	680	5,360	5,883	91
		45-49	488	4,777	4,514	106
		50-54	406	5,172	4,316	120
		55-59	387	5,050	5,508	92
		Total	3,709	33,302	32,465	103
Clerical	Single Women	Up to 19	533	2,681	5,421	49
		20-24	776	7,476	8,949	84
		25-29	437	5,547	5,233	106
		30-34	340	4,391	3,380	130
		35-39	370	4,552	3,633	125
		40-44	235	2,831	3,143	90
		45-49	202	2,591	2,473	105
		50-54	220	3,074	3,077	100
		55-59	157	2,897	2,842	102
		Total	3,270	36,040	38,151	94

In order to investigate the difference between civil servants and the rest of the insured population in Northern Ireland in more detail, arrangements were made to analyse the national insurance sickness records for days lost during the year ended May 31, 1959, by age and diagnosis for men and single

women. The expected number of days of sickness taken by civil servants, men and women separately, was calculated from the insurance data for each age group separately, the "all ages" figure being an age-standardized ratio; Table II (opposite) shows the percentage ratio of the observed to the expected number of days absent (hereinafter called the "absence ratio") for some of the main diagnostic groups of the International Statistical Classification of Diseases (50 list).

The age-standardized absence ratio for all diagnoses was about 50 per cent. for both men and single women, but there were appreciable differences between the diagnostic groups. For men the absence ratio for the common cold was over 200 for all ages except 20 to 29: for tonsillitis the absence ratio was over 100 except for ages 15 to 19, and was over 400 for ages 40 to 44, and over 900 for ages 55 to 59; for all other respiratory diseases the absence ratio was well below 100 up to age 24, was nearer 200 for ages 25 to 44, and fell below 100 for ages 45 to 54, rising to 103 for the age group 55 to 59; for diarrhoea and enteritis the absence ratio was below 100 up to age 29, but it was more than 100 for all other age groups, being especially higher (509) for the 35 to 39 age group. The age-standardized absence ratio for men was less than 50 for tuberculosis, psychoneurosis, heart disease, diseases of the veins, bronchitis, arthritis, and rheumatism.

For single women the absence ratio for the common cold was only less than 200 for three age groups (20 to 24, 35 to 39, and 40 to 44), and it was particularly high after age 45; for tonsillitis the absence ratio was 60 for ages 15 to 19, and 64 for ages 55 to 59, but it was over 100 for all other ages, being particularly high (419) in the 40 to 44 age group as in the case of men; for diarrhoea and enteritis the absence ratio was less than 100 for ages 40 to 44 and 55 to 59, was 159 for ages 35 to 39, and over 200 for all other age groups, being as high as 616 for the ages 30 to 34 and 760 for ages 50 to 54; for other diseases of the digestive system the absence ratio was particularly high for ages 35 to 44. The age-standardized absence ratio for single women was less than 50 for tuberculosis, psychoneurosis, heart disease, hypertensive disease, diseases of the veins, arthritis, and rheumatism, and other diseases of the bones.

The diagnoses in which the civil service figures were greatly in excess were normally those leading to short durations of absence, such as the common cold and tonsillitis, and this probably accounts for the apparent paradox of civil servants having more spells off work but fewer days lost per head per annum.

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TABLE II

COMPARISON OF ACTUAL EXPERIENCE OF CIVIL SERVANTS DURING 1958 FOR CERTAIN DIAGNOSES WITH THAT EXPECTED ACCORDING TO DATA FOR THE REST OF THE INSURED POPULATION OF NORTHERN IRELAND

I.S.C. No.	Diagnosis	Sex	Actual Total Days of Sickness	Absence Ratios* Age Groups (yrs)									Age- Standardized Absence Ratio
				15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	
1	Tuberculosis ...	Males ... Single Women	1,867 586	— —	52 29	— —	62 61	198 —	— —	— —	— —	— —	47 12
19	Psychoneurosis ...	Males ... Single Women	1,772 2,561	— 16	103 42	13 47	36 9	32 38	53 10	33 10	5 33	12 16	32 26
25	Heart disease ...	Males ... Single Women	1,407 87	— —	— —	— 22	— —	9 —	5 17	83 —	69 1	31 —	45 4
26	Hypertensive disease	Males ... Single Women	608 170	— —	— —	— —	— —	24 —	36 —	— —	67 6	50 17	50 8
27	Diseases of the veins	Males ... Single Women	395 270	— —	— 100	— 26	153 48	52 1	15 29	— 43	38 31	89 —	48 22
28	Common cold ...	Males ... Single Women	712 1,143	250 225	193 188	58 272	248 423	295 193	322 193	523 383	341 969	429 488	316 265
29	Tonsillitis ...	Males ... Single Women	1,294 1,631	90 60	110 134	142 128	337 168	115 152	418 419	150 162	197 261	932 64	216 129
30	Influenza ...	Males ... Single Women	3,184 4,057	63 44	111 95	56 112	96 136	55 125	67 100	100 77	86 162	106 232	80 105
32	Bronchitis ...	Males ... Single Women	2,293 2,517	8 56	32 136	24 120	107 38	67 105	41 50	53 29	57 80	32 91	46 76
34	All other respiratory diseases ...	Males ... Single Women	1,208 1,201	21 90	14 86	174 120	117 100	176 125	165 67	80 39	30 500	103 175	111 104
35	Diseases of the stomach ...	Males ... Single Women	2,027 909	50 32	33 71	14 122	28 32	69 27	78 66	63 29	42 20	30 66	52 50
38	Diarrhoea and enteritis ...	Males ... Single Women	535 711	— 200	50 280	29 316	107 616	509 159	158 63	100 217	156 760	191 73	204 229
40	Other diseases of the digestive system ...	Males ... Single Women	616 574	900 46	71 148	39 95	91 158	132 1,611	61 837	50 45	566 142	113 18	149 149
46	Arthritis and rheumatism ...	Males ... Single Women	1,537 1,533	— 20	— 52	11 106	38 65	61 65	24 73	36 29	24 9	16 5	28 30
47	Disease of the bones	Males ... Single Women	734 219	— 18	113 112	55 14	141 5	21 5	46 7	139 —	49 49	34 —	58 21
All Diagnoses ...		Males ... Single Women	30,115 28,679	23 46	55 71	39 75	62 60	79 46	53 43	52 33	49 32	35 36	51 46

*Figures represent the ratio of actual days of sickness in the year to the expected number in percentage form

Even within the civil service there were wide variations between grades, and Table III (overleaf) shows the ratio between the actual and expected days of sickness for a selected number of diagnoses and three grades for men. (All those in the grade Junior Staff Officer and above would be earning £1,000 per annum or more). The expected number of days was calculated from the figures for all non-industrial civil servants, which covers the general service grades and professional and technical staff for each age group separately, the "all ages" figure being an age-standardized ratio.

Although the number of days in some of the age and diagnostic groups was small, the general impression from Table III is that the distribution of sickness differs between grades. The higher-grade staff had relatively fewer days off work than others because of psychoneurosis, bronchitis, diseases of stomach, arthritis, and rheumatism, but had more days off because of heart disease. Messengers, on the other hand, had more days off than expected for bronchitis, arthritis, and rheumatism, and less for heart complaints than the rest of the civil service. Among clerks the age standardized ratio

TABLE III

COMPARISON OF ACTUAL EXPERIENCE FOR MALE GRADE FOR CERTAIN DIAGNOSES WITH THE EXPECTED EXPERIENCE ACCORDING TO DATA FOR THE CIVIL SERVICE MALE NON-INDUSTRIAL STAFF DURING 1958

I.S.C. List No.	Diagnosis	Grade	Actual No. of days of Sickness	Absence Ratios*									Age Standard- ized Absence Ratio
				Age Group (yrs)									
				15- 19	20- 24	25- 29	30- 34	35- 39	40- 44	45- 49	50- 54	55- 59	
19	Psvchoneurosis ...	Junior Staff Officer and above	30	—	—	—	—	5	—	—	300	—	11
		Clerks	597	—	286	925	18	197	202	7	680	218	188
		Messengers	99	—	—	—	—	210	162	225	—	—	152
25	Heart diseases ...	Junior Staff Officer and above	675	—	—	—	—	—	270	217	260	240	
		Clerks	264	—	—	—	—	700	—	208	86	116	
		Messengers	46	—	—	—	—	—	—	—	148	51	
30	Influenza ...	Junior Staff Officer and above	545	—	—	303	110	94	93	139	131	100	113
		Clerks	805	93	135	475	125	184	114	103	72	164	137
		Messengers	112	—	—	—	283	69	58	185	35	6	85
32	Bronchitis ...	Junior Staff Officer and above	149	—	—	—	36	70	59	11	23	35	35
		Clerks	480	150	78	400	60	111	189	65	170	127	127
		Messengers	446	—	—	—	467	211	178	563	306	369	366
35	Diseases of the stomach ...	Junior Staff Officer and above	121	—	—	—	—	10	56	—	86	—	34
		Clerks	687	150	53	50	43	112	343	212	234	113	195
		Messengers	155	—	—	—	—	165	70	283	57	292	170
46	Arthritis and rheumatism ...	Junior Staff Officer and above	92	—	—	—	129	41	33	—	57	—	33
		Clerks	530	—	—	—	64	199	214	367	850	269	205
		Messengers	278	—	—	—	700	—	40	342	—	367	366

* Figures represent the ratio of actual days of sickness in the year to the expected number in percentage form.

was always greater than 100 and was around 200 for diseases of the stomach, arthritis, and rheumatism.

There are relatively few women in the higher grades of the civil service in Northern Ireland with the result that the numbers are confined to a comparatively shorter salary range than men. The opportunity has been taken in this study to compare the sickness experience of permanent with temporary female officers of a similar grade, viz. Clerical Assistant Grade I. There are roughly the same numbers in each category, about 280, although the members of the temporary staff are relatively younger. The expected number of days for each 5-year age group was calculated from the experience of all women in the Civil Service, and as before the ratio of actual to expected days off was calculated for each age group. For ease of reference only the age-standardized ratios for each diagnosis are quoted in Table IV. Apart from tonsillitis, the ratio for the permanent staff was appreciably lower than that for the temporary staff for this grade in the main diagnostic groups quoted. The experience of one year only and the relatively small numbers in some age groups makes one hesitate to draw conclusions from these figures.

TABLE IV

COMPARISON OF ACTUAL EXPERIENCE OF PERMANENT AND TEMPORARY FEMALE CLERICAL ASSISTANTS (GRADE I) ACCORDING TO DATA FOR THE CIVIL SERVICE FEMALE NON-INDUSTRIAL STAFF DURING 1958

I.S.C. List No.	Diagnosis	Female Clerical Assistants (Grade I)			
		Actual Number of Days of Sickness		Absence Ratios*	
		Perma- nent	Tempo- rary	Perma- nent	Tempo- rary
19	Psychoneurosis ...	239	810	54	365
28	Common cold ...	114	165	64	145
29	Tonsillitis ...	338	243	150	129
30	Influenza ...	534	869	83	208
35	Diseases of the stomach ...	113	141	72	147
46	Arthritis and rheumatism ...	131	252	52	196

* Figures represent the age-standardized ratio of actual days of sickness in the year as a percentage of the expected number.

SUMMARY

(1) The sickness experience of civil servants in Northern Ireland during 1958 has been examined in some detail and compared with data derived from National Insurance records and London Transport Executive statistics.

(2) The results confirm the impression gained from a previous study that, for all causes of absence combined, civil servants have relatively fewer days off work because of sickness than the rest of the insured population in the Province, but that for some of the short-term illnesses they actually have more days off than would be expected from the insurance data.

(3) The age-standardized ratio suggests that the civil service experience is not appreciably different from that of the clerical staff of the London Transport Executive, and it is possible that other office staffs in Northern Ireland have a sickness experience more akin to that of the civil service than to that of industrial workers.

(4) Within the civil service the sickness experience of men in the higher grades is different from that of clerks; messengers differ from administrative and clerical staff and have relatively more days off work through bronchitis, arthritis, and rheumatism than the rest of the civil service.

We are indebted to Dr. E. A. Cheeseman, Department of Social and Preventive Medicine, Queen's University of Belfast, for his advice and help, and to the Director of Establishments, Ministry of Finance, for permission to publish this paper.

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