Certification of unfitness for work

A mining area practice

J. E. LUNN, M.D., Ph.D., D.P.H., D.P.A.

Department of preventive medicine, University of Sheffield

J. G. RIDER, M.B., Ch.B., M.R.C.G.P., D.R.C.O.G.

W. H. R. Waters, M.B., Ch.B., M.R.C.G.P., AND R. B. CHARNOCK, M.B., Ch.B. Hatfield and Dunscroft

TWO previous studies in this practice (Rider et al 1969, Lunn and Waters 1969) suggest that certification of unfitness for work has an effect on the workload of the practice. This paper attempts to pursue the subject further.

Method

Details of every consultation were recorded for five separate 'runs' of one week's duration between January and September 1969. The information recorded consisted of age, sex, diagnosis and day of consultation. In addition it was noted whether the consultation took place in the surgery or the home, and if in the surgery, whether it was by appointment or not.

All National Insurance Certificates (Form Med 3) of unfitness for work were recorded and the procedure used by Carne (1969) was adopted; namely of referring to them as though they were of the older type; 'first', indicating N I certificates issued at the beginning of an episode; 'intermediate', an open-ended N I certificate not issued at the beginning of an episode; and 'final', an N I certificate issued at the end of an episode.

The data were transferred to Hollerith cards for sorting and analysis. Since the study is primarily concerned with workload in relation to employment and illness, the figures quoted exclude all consultations by persons aged 0–14 years and 65 or over and all consultations due to pregnancy, unless otherwise stated.

Findings

A total of 3,265 consultations (male 1,849, female 1,416) took place. The number of certificates and prescriptions given were 1,657 and 2,427 respectively. Details are shown in table I. Males received certificates at 77 per cent of consultations and prescriptions at 69 per cent of consultations. Age appeared to have little effect on these figures. The type of certificate given was affected by age, the proportion of 'intermediate' certificates (implying longer absence from work) increasing steadily from 24 per cent in the youngest age group to 57 per cent in the oldest age group. These findings are in line with the 1965 report on an enquiry into the incidence of incapacity for work (M.P.-N.I. 1965). Women received certificates and prescriptions at 16 per cent and 81 per cent of consultations respectively. The proportion of certificates has little significance over the various age groups because no information is available about the numbers of women employed. Presumably the relatively high rate (31 per cent) in the 15-21 years group indicates simply that a high proportion of these women were unmarried, or without families and therefore able to work. As with the men, the proportion of 'intermediate' certificates issued to women increased with increasing age. The proportion of prescriptions issued to women showed little change with age.

Table II shows details of certificates and prescriptions given by type of consultation and sex. Certificates were issued most frequently at 'open' (non-appointment) surgeries

J. ROY. COLL. GEN. PRACTIT., 1970, 19, 215

and least frequently at home visits. The relatively low proportion of prescriptions issued to men at 'open' surgeries (66 per cent) is associated with the highest proportion of certificates issued (86 per cent).

Table III shows the type of consultation by occupation and sex. Men and women used appointments for 25 per cent and 44 per cent of their consultations respectively. Division of the consultations by men into those by miners and those by non-miners

	,		Number	s.		Rates				
Age (years) Males	First and final certifi- vates	Inter- mediate certifi- cates (a)	All certifi- cates (b)	Pre- scriptions (c)	Total consul- tations (d)	Intermediate certificates % $\frac{a}{b} \times 100$	Certificates total cons b × 100	Prescriptions total cons %		
15-24 25-34 35-44 45-54 55-64	174 228 204 172 107	56 92 123 129 139	230 320 327 301 246	205 263 309 267 241	305 409 420 390 325	24 29 38 43 57	75 78 78 77 76	67 64 74 68 74		
Total	Total 885 539 1,424		1,424	1,285	1,849	38	77	69		
Females 15-24 25-34 35-44 45-54 55-64	93 27 23 18 12	22 9 12 9	115 36 35 27 20	276 305 225 188 148	365 377 278 223 173	19 25 34 33 40	31 10 13 12 12	76 81 81 84 86		
Total	173	60	233	1,142	1,416	26	16	81		

TABLE II
PRESCRIPTIONS GIVEN BY TYPE OF CONSULTATION AND SEX

		Numbers		R	Rates	
	Certificates (a)	Prescriptions (b)	Total consultations (c)	$\frac{\textit{Certificates}}{\textit{total cons}} \%$ $\frac{a}{c} \times 100$	$\frac{Prescriptions}{total\ cons} \%$ $\frac{b}{c} \times 100$	
Males Appointment surgeries Open surgeries Home visits	247 1,104 73	314 849 122	424 1,280 145	58 86 50	74 66 84	
Total	1,424	1,285	1,849	77	69	
Females Appointment surgeries Open surgeries Home visits	78 140 15	417 569 156	538 697 181	14 20 8	78 82 86	
Total	233	1,142	1,416	16	81	

27

424

538

39

1,280

697

6

145

181

Unemployed etc.

Total

Females

8

8

13

		INADEQU	ATELY DE	SCRIBED OR UNKN	IOWN)		_
		Nı	umbers		Rat	tes	
	Appoint- ment surgeries (a)	Open surgeries (b)	Home visits (c)	All consultations (d)	$\frac{Appt\ cons}{All\ surg\ cons} \%$ $\frac{a}{a+b} \times 100$	Home visits total cons $\frac{c}{d} \times 100$	
Males Miners Non-miners	161 236	678 563	57 82	896 881	19 30	6	

72

1,849

1,416

41

25

44

TABLE III
Type of consultation by occupation (miners, non-miners and unemployed, inadequately described or unknown)

showed that appointments were used in 19 per cent and 30 per cent of consultations respectively.

Table IV shows certificates and prescriptions issued by occupation. Miners received certificates at 90 per cent of all consultations and non-miners at 67 per cent. The proportion of 'intermediate' certificates was higher amongst miners (41 per cent) than non-miners (31 per cent) implying that their illnesses kept them off work longer. The equivalent rate for females was 26 per cent $(\frac{66}{233})$. The small number of consultations by men who were unemployed or whose occupations were inadequately described or unknown showed a high proportion of 'intermediate' certificates (93 per cent) and indicated a group where continuing disability made the previous type of employment irrelevant and the present possibilities for employment enigmatic.

Table V shows consultations by occupation, sex and day of the week. The largest workload occurred on Monday and was followed by a 'tailing off' over the week. The extent to which the workload tailed off was most marked in the miners, less marked in the non-miners and least marked in the women. The small workload on Saturdays is due to the restriction of surgery hours to the morning only.

Table VI shows the number of certificates and prescriptions given by day of the week, occupation and sex. The numbers of certificates issued to women over the five working days of the week were fairly constant but the numbers issued to men start at a high level on Monday and tailed off steeply during the week. The pattern is illustrated in figure 1. This high demand for certificates on Mondays, tailing off during the week is to be seen both in the miners and non-miners, but the pattern is more marked in the case of the miners (figure 2).

The number of prescriptions issued to women over the five working days of the week were fairly constant apart from a small peak on Mondays. The pattern for men showed a much larger peak on Mondays and rather fewer prescriptions on Fridays (figure 3). Figure 4 shows the pattern for men divided into miners and non-miners. The non-miners show a small peak on Mondays and a fairly constant demand for prescriptions on the remaining working days, in other words, a pattern which corresponds closely to the female pattern. The miners, however, show both a peak demand for prescriptions on Mondays and a drop in demand on Fridays.

Discussion

Unfortunately it has not been possible, as yet, to assemble an occupation census of the practice. The most recent figures applicable to the area come from the 1951

TABLE IV

TYPE OF CERTIFICATE AND PRESCRIPTIONS GIVEN BY OCCUPATION
(Miners, non-miners and unemployed, inadequately described or unknown)

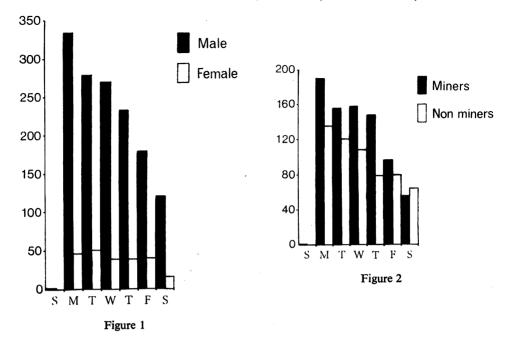
			NUMBERS				RATES	
Occupation	First and final certificates	Intermediate certificates (a)	All certificates (b)	Prescriptions (c)	Total consultations (d)	Intermediate Certificate $\frac{a}{b} \times 100$	$\frac{\textit{Certificates}}{\textit{total cons}} \%$	$\frac{\textit{Prescriptions}}{\textit{total cons}} \%$
Miners Non-miners Unemployed etc.	476 407 2	330 184 25	806 591 27	617 612 56	896 881 72	41 31 93	90 67 38	86 88 87
Total	885	539	1,424	1,285	1,849	38	77	69

TABLE V
CONSULTATIONS BY DAY OF THE WEEK AND OCCUPATION
(Miners, non-miners, unemployed, inadequately described or unknown)

				_	F										
-	-	MAL	MAL	MAL	ES.						•		E	FEMALES	S
Surg Home Total Surg Home Total	Total Surg	Surg		non-min Home	ã ″	s Total	Une Surg	Unemployed etc. Jurg Home Toto	etc. Total	Surg	All males Surg Home	Total	Surg	Home	Total
0	0	0		3		3	0	0	0	0	7	7	0	13	13
9 213 164	4	4		22		186	20	_	71	388	32	420	257	4	298
8 172	148	148		15		163	∞	0	∞	320	23	343	201	32	233
161 11 172 141 12	141	141		17	٠.	153	14	7	16	316	22	341	227	23	250
14 160 126	126	126		Ξ	~	139	6	7	=	281	53	310	235	76	261
5 109 131	131	131		=	7	143	14	_	15	249	18	267	220	74	244
99 9			68		2	94	-	0	-	150	=	191	95	77	117
839 57 896 799 82	662 968	799		82		881	99	9	72	1,704 145	145	1,849	1,235	181	1,416

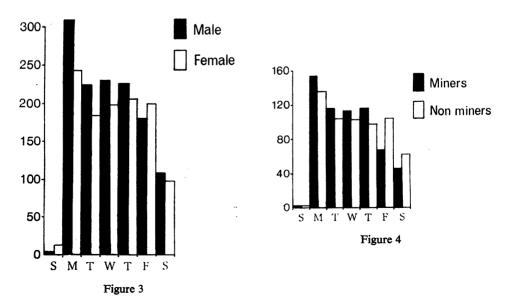
TABLE VI
CERTIFICATES AND PRESCRIPTIONS GIVEN BY DAY OF THE WEEK AND OCCUPATION
(Miners, non-miners, unemployed, inadequately described or unknown)

FEMALES	Certificates Prescriptions	13	244	184	198	506	199	86	1,142
FEM	Certificates	1	47	51	39	38	4	91	233
20/20	rescriptions	4	309	225	231	526	181	109	1,285
all mala	Certific	-	335	280	271	234	181	122	1,424
oto poss	Certificates Prescriptions	0	17	S	14	=======================================	∞	-	56
Human lond ato	Certificates I	0	6	m	4	7	4	0	27
MALES	nuners Prescriptions	2	138	<u>\$</u>	103	86	105	62	612
MA	Certifi	0	136	121	109	62	8	99	591
	icates Prescriptions	2	154	116	114	117	89	46	617
;)	Certificates	-	190	156	158	148	76	26	908
	na)	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total



census and show that 41 per cent of the men were employed in mining at that time. Structural changes in the mining industry have reduced the number of miners considerably over the past few years and a change in the pattern of housebuilding in the area over the same period has increased the number of non-miners considerably. Consequently we can say that the miners, constituting much less than 40 per cent of the population, required 48 per cent of the consultations and received 48 per cent of the prescriptions and 57 per cent of the certificates issued.

The number of certificates issued to males was high compared with other studies. Males aged 15-64 years received certificates at 77 per cent of consultations or at 55 per cent of consultations if all age groups are considered (1,431 certificates at 2,597 consul-



tations). Women aged 15-64 years received certificates at 16 per cent of consultations. or at nine per cent if all age groups are considered (235 certificates at 2,179 consultations). This rate of nine per cent remains unchanged by the addition of the 412 consultations arising out of pregnancies (246 certificates at 2,590 consultations). Backett et al (1954), reporting on a practice situated in a north-west London borough found at least one certificate was given for every 4.5 consultations and only about half were for official purposes. His figure agrees fairly well with our figures for women but is much lower than our figure for males. Grossmark and Sharer (1967) reporting on another northwest London practice found that about 18 per cent of patients requested certificates and that equal numbers of men and women requested certificates. They do not make it clear whether they refer to National Insurance certificates alone and whether or not their rates apply to all consultations or only those by people of working age. Nevertheless, it is obvious that the demand for certificates by men in the Hatfield Dunscroft practice is high by comparison. Similarly our rate is high by comparison with Handfield-Jones' (1964) certificates rate of 10.5 per cent out of 1,000 consecutive surgery consultations. Scott et al (1960) reported that certificates were given at 13 per cent of all consultations in the Edinburgh University General Practice Teaching Unit over a period of one year. Two thirds of these were N I certificates. Carne (1969) issued certificates at 17.4 per cent of all consultations and at 26.2 per cent of consultations for patients aged 15-64 years. He reported that 33.1 per cent of N I certificates issued to males were of 'intermediate' type and that the equivalent rate for females was 28.9 per cent. These rates for the proportion of 'intermediate' certificates issued are in line with the Hatfield Dunscroft rates of 31 per cent for non-miners and 26 per cent for females but are lower than the rate for miners (41 per cent).

The issue of certificates pattern by day of the week follows that reported by Taylor (1969) at a Shell oil refinery. Taylor showed a high demand on Mondays tailing off over the rest of the working week. This pattern was more marked for 'day labour' than 'day staff'. The Hatfield Dunscroft pattern was more marked for miners than non-miners.

Why should the miners in this study have such a high demand for certificates? It is obvious that in relation to their work they are, or they feel disabled. It is of interest to record that 258 out of 896 consultations by miners (29 per cent) were for certificates alone. The equivalent rate for non miners was 24 per cent (208 out of 881).

The extent to which the nature of men's work influences the demand for medical services has already been measured in the practice by the two previous studies. These studies raised the likelihood that certification was playing a considerable part in this demand. This study confirms that much of the demand is related to the certification of unfitness for work, particularly in respect of the miners.

Summary

This paper examines the issue of certificates and prescriptions by occupation, sex and day of the week in a mining area practice. The numbers of certificates issued were high amongst men, and in particular amongst men employed in coal mining. The proportion of 'intermediate' certificates issued to the miners was also high, implying that they spent longer off work. The proportion of 'intermediate' certificates issued increased with increasing age. This effect was noted for all males, whether miners or non-miners and for females. The small number of consultations by men who were unemployed or of inadequately described or unknown occupations showed a high proportion of 'intermediate' certificates indicating a group where continuing disability made the previous type of employment irrelevant and the present possibilities for employment enigmatic.

The largest workload occurred on Monday and was followed by a tailing off over the week. The extent to which the workload tailed off was most marked in the miners, less marked in the non-miners and least marked in the women. The numbers of certificates issued to women over the five working days of the week were fairly constant but the numbers issued to men started at a high level on Monday and tailed off steeply during the week. This pattern applied to both the miners and the non-miners but was more marked in the former group.

The day of the week pattern for the issue of prescriptions differed to some extent from the certificates pattern. The numbers of prescriptions issued to women over the five working days of the week were fairly constant apart from a small peak on Mondays. This pattern corresponded closely with the pattern for non-miners, but differed from the miners, prescription issue pattern which showed a peak demand on Mondays and a drop in demand on Fridays.

It is apparent that much of the workload in this practice is related to the certification of unfitness for work, particularly in respect of the miners.

Acknowledgements

We are indebted for clerical help to Mrs M. Julian, S.R.N., Mrs L. Holgate, S.R.N., Mrs P. Holgate, S.E.N., Mrs N. Outram, S.R.N., and to Mrs K. Letton, S.R.N., secretary of the Dunscroft and Hatfield practice, and to Miss M. Beddard, Miss J. Pickering, Miss J. Rhodes and Mrs M. Tinsley of the Department of Preventive Medicine, Sheffield University.

REFERENCES

Backett, E. M., Heady, J. A., and Evans, J. C. G. (1954). British Medical Journal. 1, 109.

Carne, S. (1969). British Medical Journal. 1, 147.

Grossmark, F. B., and Sharer, P. (1967). Practitioner. 199, 354.

Handfield-Jones, R. P. C. (1964). Lancet. 2, 1173.

Lunn, J. E., and Waters, W. H. R. (1969). *British Journal of Preventive and Social Medicine*. 23, 225. Ministry of Pensions and National Insurance (1965). Report on an enquiry into the incidence of incapacity for work. Part II Incidence of Incapacity for Work in Different Areas and Occupations.

Rider, J. G., Waters, W. H. R., Charnock, R. B., and Lunn, J. E. (1969). Journal of the Royal College of General Practitioners. 17, 361.

Scott, R., Anderson, J. A. D., and Cartwright, A. (1960). British Medical Journal. 2, 293.

Taylor, P. J. (1969). British Medical Journal. 1, 144.

Care of the new born

Now many say that the child being washed and wrapped in his swaddling clothes, before he suckle the breasts, or takes any meate, must be laid by his mother, lying in her bed, on the left side, neare the heart first of all: For they think (as they are persuaded) that the mother doth attract and draw to her all the diseases from the child and that she doth expell and void again by the flux and issue of her womb, what evill soever she hath attracted, without any hurt to herselfe; for they thinke this thing doth preserve the childe from the falling sickness and the leprosie, through his whole life. They would have this to be done every day one hour while he abstaineth from meate and milke. But at that time often-times red coralls prepared, mixed with sugar and fresh butter are to be put into the mouth of the child, because they also doe preserve the aforesaid infant continually. Let also red corall and the seeds of pionie be hanged upon his necke and armes, for they do strengthen, comfort, and also make the childe merry and lively. And so much also concerning the first care and usage of a woman lately delivered and her child after birth.

The expert midwife, or an excellent and most necessary treatise on the generation and birth of man etc. 1637. James Rueff translated from the Latin.