

The health and health care of doctors

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SUMMARY. A postal survey of 1,500 doctors who had qualified between 1935 and 1959 and were in active practice in Great Britain elicited 988 replies (a 66 per cent response rate). Nine hundred and thirty-two of the replies were suitable for analysis. There were few differences between hospital doctors and general practitioners in reported medical histories: respiratory tuberculosis had occurred more often among hospital doctors; other respiratory diseases were slightly more common among general practitioners, as were diseases of the digestive tract.

The view held by some members of the profession that doctors receive poor medical care was not confirmed. There is, however, cause for disquiet at the possible consequences of self-treatment and the financial implications of illness.

Introduction

IN 1886 Ogle showed that doctors were especially at risk from cirrhosis, accidents and poisoning. Ninety years later, this still holds true. The 1970-72 Decennial Supplement (Registrar General, 1978) revealed that the three major diseases from which doctors are more likely to die than the general population are still the same: suicide (standard mortality ratio (SMR) 335), cirrhosis (SMR 311) and accidents (SMR 180). The SMR for all causes was 81, slightly exceeding that for Social Class I as a whole (SMR 76).

The few studies undertaken in the intervening years include the work of Doll and Hill (1964a, 1964b) on smoking and carcinoma of the bronchus, Court Brown and Doll (1958) on the hazards of ionizing radiation and, more recently, Doll and Peto (1977) on the mortality of doctors in different occupations. Mortality from diseases relating to smoking, such as lung cancer, chronic bronchitis and heart disease, was found to be greater among general practitioners than hospital physi-

cians. Morris and his colleagues (1952) showed that in the early post-war years general practitioners were twice as likely as other British doctors to develop a myocardial infarct. However, Doll and Peto (1976) have now shown that doctors under 54 years are now less likely to die of ischaemic heart disease and myocardial degeneration than the general population, a trend shared with other occupations in Social Class I (Registrar General, 1978). Other hazards persist, such as an increased risk of tuberculosis among pathologists (Harrington and Shannon, 1975) and an apparently increased incidence of spontaneous abortion and congenital anomalies among anaesthetists and their families (Tomlin, 1979). Murray (1978), in a comprehensive review, highlighted problems relating to alcohol, drugs and mental illness.

Among women doctors, Craig and Pitts (1968) found a fourfold excess of suicide compared with the general population. Bond (1975), commenting on the work of Reynolds (1975) and using records from the Medical Sickness Society, found a substantial excess of disability in female doctors.

From time to time a more general anxiety has been that doctors, because of their attitudes towards their own illnesses and their relationships with their colleagues, endanger their own and their families' health. The present survey tried to find out if these worries are well founded and, in particular, whether there are any differences in health between general practitioners, hospital doctors and a third group made up of community and occupational physicians and those in academic posts. We also wanted to investigate the possible adverse effects of delay in seeking advice and of self-treatment, and the financial implications of illness.

Methods

The sample

The main survey, preceded by a pilot survey, was carried out in 1977. It included only doctors who were in active medical practice, resident in England, Scotland or Wales, and who had qualified between 1935 and 1959. We chose these years because we thought that the older members of the profession were more likely to have had health problems. A systematic random sample was taken from the 1976 Medical Register. In addition, a

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Table 1. Characteristics of the respondents. Number (per cent).

	Men			Women		
	Hospital	General practice	Other	Hospital	General practice	Other
Number of respondents	293	358	94	68	53	66
Average age	50.9	52.9	54.9	51.6	50.7	52.6
Number born outside UK	75 (25.6)	74 (20.7)	17 (18.1)	17 (25.0)	10 (18.9)	12 (18.2)
Number more than 30 per cent overweight	29 (9.9)	51 (14.2)	13 (13.8)	9 (13.2)	7 (13.2)	9 (13.6)
Number of present smokers	88 (30.0)	126 (35.2)	23 (24.5)	15 (22.1)	11 (20.8)	13 (19.7)
Number who consume alcohol nearly every day	127 (43.3)	141 (39.4)	38 (40.4)	19 (27.9)	18 (34.0)	17 (25.8)
Number taking vigorous physical exercise	147 (50.2)	185 (51.7)	45 (47.9)	18 (26.5)	18 (34.0)	15 (22.7)
Last chest x-ray over three years ago (or never)	152 (51.9)	192 (53.6)	49 (52.1)	40 (58.8)	40 (75.5)	40 (60.6)
Last blood pressure check over three years ago (or never)	110 (37.5)	106 (29.6)	28 (29.8)	26 (38.2)	17 (32.1)	31 (47.0)
Last urine check over three years ago (or never)	157 (53.6)	130 (36.3)	37 (39.4)	37 (54.4)	26 (49.1)	38 (57.6)
Number holding private medical insurance	132 (45.1)	266 (74.3)	33 (35.1)	17 (25.0)	17 (32.1)	7 (10.6)
Number who had reviewed cover in the last two years	64 (21.8)	115 (32.1)	24 (25.5)	17 (25.0)	14 (26.4)	5 (7.6)
Number in favour of an occupational health service	190 (66.4)	225 (64.8)	78 (85.7)	41 (62.1)	24 (46.2)	35 (56.5)

total of 65 names were sampled at random from the lists of the Colleges of Obstetricians, Psychiatrists, Radiologists and Anaesthetists, a procedure which ensured fuller representation of these specialties. The names were chosen regardless of sex. From the information shown in the Medical Register, it was believed that the final sample of 1,500 doctors was made up of 917 general practitioners, 480 hospital doctors of all specialties and 103 others (community physicians, academics and so on).

The questionnaire

The questionnaire contained sections about the personal details and careers of the doctors, their medical histories and current arrangements for medical care. Those who in the last three years had had either an illness resulting in a week's absence from work, or a chronic illness requiring continuing treatment or follow-up, were asked to complete further sections about how they obtained medical care, from whom, the effect of their illness on their work and their colleagues and the financial implications of the illness. The questionnaire also asked for the respondent's consent for the researchers to obtain details of the sick doctor's periods of certified sickness absence from his or her employer and of any payment from private health insurance schemes. Finally, general comments on the care of sick doctors were sought from respondents and their spouses.

To ensure confidentiality, the questionnaires were identified only by a serial number which was linked to the name of the doctor through a register held by an independent body, the Royal College of General Practi-

tioners. The questionnaire was sent to the selected doctors by mail through the College; the completed questionnaires were returned direct to the researchers. Non-responders were sent reminders on two further occasions. A telephone survey of the latter was also attempted but, because of difficulties over confidentiality, this proved impracticable. Copies of the questionnaire are available from the authors on request.

Results

Response

Of the 1,500 questionnaires, 56 of those returned had to be excluded either because the doctor had died or had retired from medical practice. This left 932 questionnaires for analysis (65 per cent of the 1,444 eligible). Of these, 321 (34.4 per cent) reported a significant illness, 209 (65 per cent) of whom consented to their employing authority being asked for details of certified sickness absence; 136 (42.4 per cent) agreed to an approach to their insurance companies concerning sickness benefit. Although, in this event, this avenue of enquiry could not be followed because of difficulties in maintaining confidentiality, it does give some indication of the trust shown by the respondents.

Characteristics of the respondents

The 932 respondents were 361 hospital doctors, 411 general practitioners and 160 others (Table 1). Of the general practitioners 73 (17.8 per cent) worked in solo practice, 133 (32.4 per cent) in partnerships and 178

Table 2. Medical history by selected diagnoses. Number (rate per 100 doctors).

	Men			Women		
	Hospital	General practice	Other	Hospital	General practice	Other
Entire medical history						
All episodes	445 (151.9)	593 (165.6)	177 (188.3)	148 (217.6)	91 (171.7)	125 (189.4)
Respiratory TB	19 (6.5)	9 (2.5)	5 (5.3)	4 (5.9)	0 (—)	2 (3.0)
Other respiratory diseases	40 (13.7)	78 (21.8)	16 (17.0)	17 (25.0)	8 (15.1)	5 (7.6)
Digestive episodes	100 (34.1)	139 (38.9)	36 (38.3)	14 (20.6)	10 (18.9)	12 (18.2)
Hypertensive heart disease	6 (2.0)	20 (5.6)	5 (5.3)	4 (5.9)	—	2 (3.0)
Accidents, poisoning, violence	35 (11.9)	49 (13.7)	10 (10.6)	10 (14.7)	8 (15.1)	7 (10.6)
Illness causing week's absence within last three years						
All episodes	60 (20.5)	91 (25.4)	23 (24.5)	23 (33.8)	14 (26.4)	13 (19.7)
Infective and parasitic	2 (0.7)	6 (1.7)	2 (2.1)	3 (4.4)	—	1 (1.5)
Circulatory system	4 (1.4)	1 (0.3)	1 (1.1)	1 (1.5)	1 (1.9)	—
Digestive system	5 (1.7)	17 (4.7)	2 (2.1)	1 (1.5)	2 (3.8)	1 (1.5)
Chronic illness within the last three years	51 (17.4)	66 (18.4)	23 (24.5)	19 (27.9)	11 (20.8)	13 (19.7)
Self-treated illness within the last three years	84 (28.7)	142 (39.7)	27 (28.7)	22 (32.3)	18 (34.0)	19 (28.8)
Number of respondents	293	358	94	68	53	66

(43.3 per cent) in a group practice. In all, 363 (88.3 per cent) had more than 10 years' experience as general practitioners. Of the hospital doctors, 336 (93 per cent) had had more than 10 years' hospital experience. In all, 873 (93 per cent) respondents were registered with a general practitioner and in over half he or she was a personal friend; of the general practitioners, 276 (70.2 per cent) were registered with colleagues in their own practices. There were few differences between general practitioners and hospital doctors. Compared with general practitioners, however, hospital doctors were less likely to have had a recent urine check and fewer had private medical insurance.

Medical history

Table 2 lists those episodes of disease considered by doctors to be important and the numbers suffering from illnesses causing a week's absence from work, chronic illness and self-treated illness within the previous three years. The most striking difference between the groups was in respiratory tuberculosis—23 cases (6.4 per cent) among hospital doctors and 9 (2.2 per cent) among general practitioners. Two pathologists (of 19 respondents) and one chest physician had also suffered from the disease. In over half the cases the age at onset of the disease was between 21 and 30 years and in only two was there any recorded relapse. Because of the sampling method, these findings, as do all findings from this survey, relate only to the older members of the profession.

Amongst male doctors, there was a small increase in the incidence of respiratory disease in general practitioners when compared with the hospital group. This supports the view that minor upper respiratory infections are common among general practitioners (and

paediatricians), perhaps because of the known high incidence of these infections in young children. There was more digestive trouble among general practitioners than hospital doctors. This difference was more marked in illnesses which caused absence of a week or more from work. An unexpected finding in 28 doctors reporting recent digestive disease was that eight had had previous episodes of mental illness.

There was little difference between the male and female illness rates among general practitioners, or between male rates for hospital and general practice doctors. However, female hospital doctors reported substantially more disease than male hospital doctors. Self-treated illnesses were more common among general practitioners. An analysis of the self-treated illness showed that they were of great variety, and that not all of them were minor. But, bearing in mind that the patients are of a special group with knowledge and skills and access to treatment not available to the general public, it was possible to distinguish only 12 cases where self-treatment was clearly contra-indicated: 11 reported mental illness and one alcoholism. Of the 321 significant illnesses, 135 (42.1 per cent) were initially self-treated, a strategy which was especially common among general practitioners.

Treatment and effect of illness

Of the 321 doctors who had been ill, 149 (46.4 per cent) delayed seeking help (Table 3). Among males, more general practitioners than hospital doctors considered that they had delayed longer than was prudent. Slightly more hospital doctors than general practitioners sought help directly from a consultant. General practitioners were again more likely than hospital doctors to have

Table 3. Treatment and consequences of illness among 321 doctors. Number (per cent).

	Men			Women		
	Hospital	General practice	Other	Hospital	General practice	Other
Delayed seeking help	38 (43.7)	62 (49.2)	12 (35.3)	17 (54.8)	12 (60.0)	8 (34.8)
Delayed longer than prudent	24 (27.6)	47 (37.3)	3 (8.8)	10 (32.3)	3 (15.0)	5 (21.7)
Delay adversely affected outcome	10 (11.5)	13 (10.3)	2 (5.9)	3 (9.7)	1 (5.0)	1 (4.3)
Sought help from consultant direct	42 (48.3)	53 (42.1)	12 (35.3)	18 (58.1)	7 (35.0)	4 (17.4)
Initial self-treatment	28 (32.2)	64 (50.8)	12 (35.3)	10 (32.3)	10 (50.0)	11 (47.8)
Moderate or considerable financial loss	10 (11.5)	21 (16.7)	5 (14.7)	5 (16.1)	4 (20.0)	3 (13.0)
Number of respondents	87	126	34	31	20	23

attempted self-treatment initially, and more considered that their illness had resulted in moderate or considerable financial loss.

Opinions of the respondents

Although it is impossible to summarize the views of the 561 doctors who made open comments, anxiety about the provision of locums predominated among the general practitioners. This is hardly surprising, since over 25 per cent of general practitioners respondents were either single-handed or had only one partner. Furthermore, although most of the general practitioners carried private insurance which would provide an income if they were ill, only a minority had sufficient cover to meet the cost of a locum.

Hospital doctors were more concerned about the need for the formal management of illness, routine medical examinations and an occupational health service. Some 64 per cent of all respondents considered that such a service was necessary, and most considered that it should be available equally to doctors and other staff. Other anxieties which were expressed included the danger of delay in seeking medical help, the effect of workload on the family and colleagues, drugs and alcohol, and privacy for doctors as patients.

Discussion

In interpreting our findings, the inherent limitations of a cross-sectional postal survey must be considered. Because we knew that the medical care of doctors is a highly sensitive subject, both to individuals and to the sponsoring organizations, the questionnaire was designed to avoid a negative response. Furthermore, some rather unusual restrictions were imposed upon us which, taken together with a complicated system which we evolved to maintain confidentiality, may have affected the response rate, which was nonetheless 65 per cent. In other research projects involving doctors where postal questionnaires have been used, a response rate of between 70 and 80 per cent has been obtained (DHSS, 1972; Johnson, personal communication). It might well have been better had we appreciated at the outset that a

project of this size required a full-time field worker to ensure that momentum was maintained at critical periods.

The key to the credibility of this survey lies in the experience of the non-responders. Clearly it would have been preferable to supplement the postal questionnaire with face-to-face interviews, as was done in the recent enquiry into overseas doctors in the health service (Smith, 1980). However, this was made impossible by the confidentiality restrictions imposed on us and by lack of resources—a project whose total cost was £2,084 could not be that ambitious.

The question which has to be answered is “Was it worthwhile?”. We believe that it was. The project was the first systematic attempt to investigate the health care of doctors, where previously there had only been speculation, albeit often authoritatively expressed. Such cross-checks that we were able to do supported the view that the experience of the respondents was expressed honestly and reflected that of their peers. This opinion was strengthened by the abundance and range of the information provided.

There appeared to be few differences between hospital doctors and general practitioners in the age group we examined, in either their medical history or their medical care, and only eight doctors of the 321 who reported a significant illness said they had any difficulty in getting help from a colleague. Our findings give little support to the strong views of those doctors whose influence secured the implementation of this survey. It was their belief, based upon personal experience, both as patients and physicians, that doctors were often bad patients and poorly cared for. However, whilst the more extravagant claims which appear from time to time in the medical press concerning the increased morbidity of practising doctors appear to be unfounded, the design of this survey precluded any comparison of the health of doctors with that of the general population.

In the management of illness there are some causes for disquiet which may point to more serious problems, in particular self-treatment and the inadequacy of follow-up of chronic diseases. That 561 doctors of the 932 participating in the survey made open comments on varying aspects of medical care, only 33 of which were

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purely complimentary, suggests that, for the older members of the profession at least, the health of doctors is a problem upon which they have considered opinions and anxieties.

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Words our patients use

"Your looks don't pity you"—you don't look as bad as you should be from this description of your symptoms (Suffolk).

"I feel unked" (or 'unkid', or 'hunkid')—I don't feel well at all (Gloucestershire).

"I'm a right mardy-bum"—(self-deprecatingly) I feel really miserable at the moment (South Yorkshire).

'Lunk'—vulva (Worcestershire).

'Maggotty'—irritable (Worcestershire).