

# An analysis of lay medicine: fifteen years later

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**SUMMARY.** Five hundred patients were asked what advice they had received before attending the doctor's surgery. The results were analysed and compared with an identical survey carried out in 1970. There have been few changes in the frequency and nature of lay advice over the last 15 years, with women still being the chief source of informal advice; the advice from men was generally to go to the doctor. Pharmacists play an increasing role and television is mentioned three times more often as a source of information in 1985 than 1970. Home doctor books are more up to date and are used more frequently. Self-care and lay advice remain important sources of medical care, suggesting that health education is a matter of priority.

## Introduction

THE work of Horder and Horder,<sup>1</sup> Butterfield<sup>2</sup> and Wadsworth<sup>3</sup> has shown that only about 16% of sick people actually see a doctor — 64% treat themselves and 20% receive no treatment. In 1970 the author conducted a survey of 1000 patients attending the surgery to determine how much previous advice they had received, what the sources of this advice were, and how good or bad it was.<sup>4</sup> A questionnaire was used to assess variations in relation to age, sex, social class, domicile and other factors.

In 1970 a patient received on average approximately two items of advice before seeing the doctor, the chief sources being friends, spouses and other relatives, with significant contributions from chemists, the media and those with nursing or other professional training. Most practical advice came from women, whereas men usually advised going to the doctor. A similar survey carried out by Pederson in Denmark<sup>5</sup> showed almost identical results.

Since 1970 there have been many changes in attitudes and customs of both patients and doctors, summarized by Williamson and Danaher,<sup>6</sup> so it was decided to repeat the project in 1985 using the same questionnaire and identical methods to find out if these changes were reflected in the patterns of self-care.

## Method

The survey was carried out on 500 patients attending a doctor's surgery in Northampton. The age and sex of patients was recorded but, because of the development of housing estates since 1970, figures for domicile or social class were not comparable. Adults accompanying children were counted as patients.

Every fifth patient who presented with a new problem was asked what advice he or she had received before coming to the doctor and the doctor completed a questionnaire with the patient. The type of advice was classified as: 'go to the doctor', other advice, medicine or home remedy. The soundness of advice was recorded as: complete, good, slightly helpful, harmless and harmful, with marks from +3 to -1. The results were transferred to coded cards which were mechanically sorted by the Department of Statistics of Oxford Regional Health Authority. Differences between the 1985 and 1970 surveys were tested using the chi-square test.

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## Results

### Age-sex distribution

Table 1 shows the age-sex distribution of the respondents from the present survey and the 1970 survey. The population had shifted slightly towards the older age groups, probably because the doctor himself was older, but otherwise the distributions in 1985 and 1970 were similar.

**Table 1.** Age-sex distribution of the respondents in the 1985 survey compared with the respondents in 1970.

	No. (%) of respondents	
	1985 (n = 500)	1970 (n = 1000)
<i>Age (years)</i>		
1-10	0 (0)	(0.4)
11-20	47 (9.4)	(10.9)
21-30	105 (21.0)	(26.5)
31-40	98 (19.6)	(24.1)
41-50	95 (19.0)	(14.0)
51-60	56 (11.2)	(10.0)
61-70	53 (10.6)	(10.0)
71+	46 (9.2)	(3.7)
<i>Sex</i>		
Male	161 (32.2)	(34.2)
Female	339 (67.8)	(65.8)

n = number of respondents.

### Sources of advice

Table 2 shows the sources of lay advice used by the patients in 1985 and the comparison with 1970. In 1985 the 500 patients admitted to receiving advice from a total of 983 sources, giving an average of 1.9 items of advice for each patient (compared with 1.8 in 1970, when 'self-treatment' is excluded). Twenty-three patients (4.6% compared with 3.5% in 1970) sought advice from five or more sources. Fifty-nine patients (11.8% compared with 12.2%) received no outside advice.

**Relatives.** Of the 500 patients 437 received advice from 409 relatives, a similar proportion as in 1970 (Table 2). More advice was received from husbands than wives because more of the patients were married women consulting for themselves or their children and would expect to get advice from their husbands. However, if those who advised their spouses to go to the doctor are excluded, only 28.8% of husbands gave practical advice about the illness compared with 50.5% of wives. Similarly, 52.8% of female relatives overall gave practical advice compared with only 29.8% of male relatives. These figures were almost identical in 1970. It was unusual for males to receive advice from other males: in only 10 cases was advice sought from other men whereas advice from females was sought in 122 cases; these figures too were similar in 1970.

**Professionals.** On average 16.4% of patients consulted pharmacists about their illness, a significant increase since 1970, when the figure was 10.8% (Table 2) ( $\chi^2 = 9.33$ , 1 df,  $P < 0.01$ ). There was a small increase in the proportion of patients consulting nurses on a casual basis compared with 1970 (Table 2).

**Table 2.** Sources of lay advice: number and percentage of respondents receiving advice from each source in 1985 and comparison with percentage in 1970.

	No. (%) of respondents	
	1985 (n = 500)	1970 (n = 1000)
Friend	259 (51.8)	(49.8)
Spouse		
Husband	132 (26.4)	(25.3)
Wife	85 (17.0)	(19.3)
Total	217 (43.4)	(46.6)
Other relative		
Mother	97 (19.4)	(17.6)
Daughter	29 (5.8)	(5.1)
Sister	22 (4.4)	(5.1)
Father	17 (3.4)	(2.7)
Others	55 (11.0)	(4.6)
Total	220 (44.0)	(35.1)
Chemist	82 (16.4)**	(10.8)
Nurse		
Casual advice	68 (13.6)	(10.2)
Professional advice	20 (4.0)	(5.2)
Impersonal source		
Home doctor books	42 (8.4)**	(4.2)
Television	29 (5.8)***	(1.9)
Women's magazines	20 (4.0)	(4.4)
Newspapers	15 (3.0)	(2.6)
Other magazines		
incl. comics	8 (1.6)	(0.9)
Radio	2 (0.4)	(0.2)
Other	1 (0.2)	(1.2)
Total	117 (23.4)***	(16.2)
No advice received	59 (11.8)	(12.2)

n = total number of respondents.

\*\*P<0.01, \*\*\*P<0.001 versus 1970.

**Impersonal sources.** This category included the media and 'home doctor' books or medical dictionaries. Between 1970 and 1985 there was a significant increase in the use of impersonal sources of advice ( $\chi^2=11.2$ , 1 df,  $P<0.001$ ) (Table 2), especially home doctor books ( $\chi^2=10.9$ , 1 df,  $P<0.01$ ) and television programmes ( $\chi^2=16.00$ , 1 df,  $P<0.001$ ). Slightly more patients owned home doctor books in 1970 than 1985 but the difference was not significant; the books were more up to date in 1985 than 1970, however, with a mean age of 16 years compared with 27.5 years in 1970.

#### Harmfulness of advice

Sixty-seven (6.8%) items of advice were considered to be harmful or potentially harmful, a similar proportion as in 1970 (6.6%). This fell into four categories: causing excessive anxiety (40 cases), leading to incorrect treatment (25), leading to harmful delay before seeing the doctor (1) or incurring unnecessary expense (3). Harmful advice was obtained most often from impersonal sources; 18% of advice from these sources was rated harmful.

#### Self-treatment

Self-treatment was practised by 55.4% of patients, a similar proportion as in 1970 (52.0%); 23 of them had decided on this treatment without seeking advice from other sources. Self-treatment was used more by the widowed and separated than married or single patients, as in the 1970 survey.

#### Home remedies

These were remedies originating from the garden or kitchen and did not include items such as aspirin or calamine. Home remedies accounted for 11.2% of the 983 items of advice in 1985 as opposed to 16.1% of advice in 1970, a significant decrease ( $\chi^2=10.5$ , 1 df,  $P<0.01$ ). Thirty-two people treated themselves with home remedies without seeking outside advice; the most common source of information from others in 1985 was friends — 33 cases. The 1970 survey showed home remedies were more often recommended by the elderly and teenagers. This was not reflected in the 1985 survey, when home remedies were more often advised by the 21–60 years age group. More female (15.5%) than male relatives (3.1%) recommended home remedies.

#### Discussion

The survey has shown that there has been little change in patterns of lay advice and self-care over the last 15 years. Before coming to the surgery a patient still receives advice from on average around two sources, the most important being their spouse, relatives and friends, with chemists, nurses, books and television making lesser contributions. Over 50% of patients treat themselves before going to the doctor.

The assessment of soundness of advice is partly subjective and the two surveys could not be compared statistically in this respect because of likely shifts in attitudes of both patients and the doctor making the assessment. The differences were in fact few. The figures for advice rated as harmful emphasize the amount of anxiety which is caused by inappropriate or misinterpreted advice. Cancer and heart disease remain the chief sources of worry caused by information from others but in 1985 anxiety about smoking, oral contraceptives, cot deaths and legionnaire's disease were mentioned. A case history will illustrate the problem:

**Case 122.** A single girl aged 23 years noticed discolouration of one foot. Her mother said it was a sign of cancer and her grandmother advised her to go to the doctor. A nursing friend told her it was bad circulation because she smoked and added 'You could die of thrombosis'. A newspaper article mentioned it in a list of the first signs of cancer. The patient presented to the doctor with acute anxiety and was reassured that she had neither cancer nor thrombosis but the slight discolouration was due to very cold weather. The matter of smoking was not made an issue on this occasion.

In both the 1970 and 1985 surveys nurses and other professionals were not consulted as often as friends and relatives. However, advice from pharmacists increased between 1970 and 1985 and this may be partly due to the lower accessibility of general practitioners. This aspect of the pharmacist's role is currently under review. The Nuffield report<sup>7</sup> has recommended that pharmacists should be more involved in giving advice to patients about drugs and health in general, something which most pharmacists do already.

The media was not recognized as a major source of advice by patients in either survey. Impersonal sources, however, have assumed increased importance since 1970. More people use home doctor books and these are more up to date. In the media there has been a striking increase in the impact of television, although radio was mentioned only once, which is surprising since many people, housewives especially, listen to the radio while they are working.

Home remedies were mentioned less often in 1985 but still account for 11.2% of advice. In 1970 they were more often

recommended by the elderly and teenagers, but this was not found to be so in 1985. This is probably because the 60-year-old of 1970 will now be a 75-year-old giving advice in a different age category. It suggests that traditional home remedies are slowly dying out with the older generation. Very few 'magical' or extravagant home remedies were mentioned in 1985. In 1970, for example, wedding rings were used to treat styes, urine for chilblains and raw meat for warts. Now home remedies are more modest, with honey, lemon, milk and blackcurrent being the most popular ingredients. Yoghurt has gained in popularity and tea bags are used in place of cold tea. Some unusual remedies mentioned were chewing nutmeg for Bell's palsy, eating sunflower seeds for alopecia and applying cucumber to the eyes for conjunctivitis. Many patients still use treatment traditional in their family but, as would be expected, it seems that the media and other factors lead to increased use of advertised products which are thought to be more 'scientific' although they are not necessarily more effective.

*Case 19.* A married woman aged 63 years attended the surgery with a sore throat. Her husband had advised her to go to the doctor and three friends had recommended Gee's Linctus, lemon and honey and a blackcurrent mixture. A chemist had suggested Mac throat tablets and a television programme had recommended 'extra strong mints'. The patient finally selected the remedy which she used to take as a child, namely hot fresh lemon juice with sugar.

Self-care remains the chief source of care for the sick and should be encouraged because it is part of community and family life and costs the NHS nothing. There is, however, a continued need for sensible education perhaps at school level and through the media. In the Beveridge report<sup>8</sup> it was stated 'The restoration of the sick person to health is the duty of the State and the sick person'. It is time that more attention was paid to the role of the sick person and the lay people who dispense advice about medical care.

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