Users and non-users of doctors — implications for self-care

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SUMMARY. Sixty patients who visited their general practitioner were matched with 60 patients registered with the same doctor, who were of the same sex and in the same ten-year age group, and who had not visited the doctor for at least one year, but had recently experienced symptoms similar to those presented by the attending patients.

Comparison of the 60 pairs revealed the following differences, all substantial although not all statistically significant. The patients who visited the doctor perceived themselves as less healthy, fewer had attempted self-treatment, more reported serious personal problems, and fewer reported obstacles to visiting the doctor.

Differences between the pairs were negligible for total number of current ailments, effectiveness of self-treatment, if used, optimism about the healing powers of doctors, and fear of troubling their doctor with trivia.

Introduction

THE Panel on Self-Care in England has stated that self-care is an essential part of the total health care system and that research is needed to determine its nature, content, and outcome (Fry et al., 1973).

The study carried out by Wadsworth and his colleagues (1971) of working class families in London, England, supported the results of earlier studies in finding that self-treatment with non-prescribed medicines and home remedies is extremely common. There have, however, been few investigations of the extent to which

self-care is a substitute for care by the doctor. Jefferys and her associates (1960) had evidence from their study of working class families in 1954 that self-care was used in addition to rather than as a substitute for the doctor's care. In a more recent study of a national population sample, Dunnell and Cartwright (1972) found lower consulting rates among people who reported selfmedication. The opposite findings of these two investigations may reflect changes in patient behaviour over a span of 20 years, as well as differences in behaviour among social classes. Kessel and Shepherd (1965) attacked the question by comparing three distinct categories of patients: those who had recently visited their general practitioner, and those who had not attended for two years, and for ten years. They found that all three groups of patients had experienced the same amount of illness in the preceding month, and all had used self-medication extensively. This suggested that factors other than self-care determined the desire for the physician's services. Only three such factors were revealed: the recent attenders were more often young, female, and perceived themselves as being less healthy. Because their data were collected between 1949 and 1958, it seemed desirable to re-investigate the question with a contemporary sample of patients.

Our approach was similar to that of Kessel and Shepherd, except that we aimed at greater refinement in the comparison of attenders and non-attenders by ensuring that both had experienced similar ailments.

Method

The study was designed to identify age and sexmatched pairs with the following characteristics:

- 1. Both members of the pair had suffered a similar complaint in the past two weeks.
- 2. One member (user) had consulted the doctor for the complaint.
- 3. The other member (non-user) had not consulted the doctor for the complaint, nor for any other reason in the past year.

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The last part of the third characteristic was stipulated in order to compare users of physicians with fairly persistent non-users.

Ten general practitioners in the Greater London area collaborated in the study. Users in each practice were identified by randomly selecting 100 patients who had attended the doctor in the previous fortnight. Each user was matched with the first non-user of the same sex and five-year age group in the doctor's age-sex register or case files. This procedure was the first stage in obtaining matched pairs with the desired characteristics.

The next stage was to interview in their homes all the persons selected who could be located and who consented to the interview. Many non-users could not be located, refelecting the lag in the system of correcting a doctor's list. The interview enabled us to classify users according to the recent complaint for which they visited the physician, to identify non-users with recent complaints, and to classify the complaints of the latter.

The final stage in the pairing process was to find for each user an age and sex-matched non-user who had had a recent similar complaint. By 'similar', we mean that the symptom affected the same bodily system and interfered to at least the same degree with work, other activities, or sleep.

From 685 persons interviewed, 60 pairs (120) were found in which the complaint of the user and non-user were similar, both were registered in the same practice, were of the same sex and in the same ten-year age group. Our analysis was based on these 60 pairs. Three interviewers were employed, all of whom were trained to use the structured questionnaire during a pilot series of interviews. Of the 60 pairs of patients, 38 had the same interviewer. All three interviewers were distributed almost equally among users and non-users in the remaining 22 pairs.

Refusal to be interviewed was not common and occurred in only nine of 377 users and ten of 308 non-users. Most of the interviews were carried out in the second half of 1974.

Results

1. Demographic characteristics of users and non-users

The users and non-users were compared in terms of social class, marital status, and household composition (Table 1). Differences between them were negligible but this is not surprising in view of the fact that they were matched for sex, age, and physician's practice.

2. Systemic categories of matched complaints
The presenting complaints of the users to which the
complaints of the non-users were matched are shown
in Table 2. Nearly two-thirds of the complaints were
classed as upper respiratory, musculoskeletal, gastrointestinal or cutaneous.

Table 1. Demographic comparisons of users and non-users.

Social class differences between user and non-user	Number of pairs
No difference	15
User of higher social class	23
Non-user of higher social class	22
Total	60

Household composition ¹	Users	Non-users
Living alone	3	1
Adults only	1	0
Adults and one-two children	11	15
Adults and 3+ children	7	8
Unknown	2	0
Total	24	24

Distribution of 21 pairs that differed

Marital status ²	Users	Non-users
Married	10	11
Single, widowed or divorced	11	<u>10</u>
Total	21	21

¹ 36 pairs had the same composition.

Table 2. Categories of matched complaints in pairs of users and non-users.

Category	Number of pairs
Upper respiratory	13
Musculoskeletal	15
Gastrointestinal	7
Emotional	6
Skin	4
Allergic, endocrine or	
metabolic	4
Genitourinary	3
Headache	2
Nervous system	2
Cerebrovascular	2
Trauma	2

3. Total number of complaints in the past two weeks

Our hypothesis was that users consulted the physician because they had more complaints and were thus less able to cope. This hypothesis was not borne out by the data shown in Table 3. The number of pairs in which the user's ailments exceeded the non-user's was small and not statistically significant.

² 39 pairs had the same status.

Table 3. Total number of current ailments in past two weeks.

Difference between user and	
non-user	Number of pairs
No difference	11
User had more ailments	29
Non-user had more ailments	20
(Paired $x^2 = 1.31 p < 0.30$;	not significant)

4. Duration of the matched complaint

For acute complaints, it was reasonable to suppose that users visited the doctor because their symptoms had lasted longer. For the 40 pairs in which the matched complaints were acute in nature, we compared the duration of symptoms from onset to consultation in the user with that from onset to recovery in the non-user.

Contrary to our expectations, the duration of the complaint was longer for the non-user in 25 pairs and longer for the user in only 15 pairs. Although this difference is not statistically significant, it suggests that users visit the doctor because they are less prepared to wait for their symptoms to remit. This would be particularly likely if users are less inclined to engage in self-treatment.

5. Self-treatment of matched complaints Table 4 shows that significantly more of the non-users engaged in self-treatment.

For those who self-treated, the effectiveness of their treatment was judged by a panel of general practitioners. Approximately two-thirds of the self-treaters used fully effective or partially effective treatments. This was true of both users and non-users.

6. Sickness certification as a reason for consultation

We considered the possibility that the need for a sickness certificate brought many of the users to the doctor. In only five of the 60, however, was a certificate issued, and of these only one person stated that this was the main reason for the visit.

7. Influence upon users of being under routine care by the doctor

Another hypothesis was that many users brought their presenting complaint to the doctor because they were visiting him regularly for the care of chronic conditions.

Among users, only 12 (20 per cent) said that the presenting complaint was mentioned to the doctor in the course of a routine visit for another condition. Nevertheless, since 29 users (48 per cent) were under regular care for a chronic condition it is possible that such a continuing relationship made them less hesitant in seeking the doctor's services.

Table 4. Self-treatment of matched complaint.

Difference between user and	
non-user	Number of pairs
Both self-treated	20
Neither self-treated	12
Only user self-treated	5
Only non-user self-treated	23
(Paired $x^2 = 10.32$	p < 0.01)

8. Reasons for consulting or not consulting the doctor

In Table 5, we have summarized the reasons given by users for consulting their doctor and the reasons given by non-users for not doing so. The discomfort of the symptom was the most commonly reported reason for consultation. The reasons put forward by the non-users indicate more tolerance of symptoms, and different expectations of the help that would be provided by a doctor.

9. Self-perception of health

All subjects were asked to categorize their health over the past year as very good, good, fair, or poor. Table 6 shows that pairs in which the user perceived himself as less healthy were significantly commoner than pairs in which the non-user perceived himself as less healthy.

10. Perceived problems in visiting the doctor Questions about the following problems were asked in the interview:

a) Time spent in travelling to the doctor's office.

Table 5. Reasons for consulting/not consulting.

Users' reasons for consulting	
Discomfort*	52
"To satisfy the family"	2
Anxiety	2
More treatment	1
Interference with sleep	1
Return visit	1
Certificate	1
Non-users' reasons for not consulting	
Symptoms were not severe enough	26
Previous consultation unsatisfactory	11
Recognized the symptom	
and weren't worried	11
Didn't think doctor could help	6
Own treatment adequate	4
Fear of treatment	1
Don't know	1

^{*} Anxiety also mentioned in 11 cases.

Table 6. Perception of health in past year.

Difference between user and	
non-user	Number of pairs
No difference	15
User perceived self as healthier	11
Non-user perceived self as	
healthier	34
(Paired $x^2 = 10.75$	o < 0.01)

- b) Time spent in waiting for the doctor.
- c) Cost of travel to the doctor's office.
- d) Loss of wages involved in visiting the doctor.
- e) Difficulty in leaving house or children to visit the doctor.
- f) Dislike of doctor's appointment system.
- g) Dislike of doctor or receptionist.

Table 7 shows that there was a significant number of pairs in which only the non-user perceived one or more of these problems as discouraging a visit to the doctor.

- 11. Awareness of symptoms of serious illness
 The patients were presented with six symptoms which
 because of their potential seriousness should be taken
 promptly to a physician. The symptoms were:
- 1. Painful swelling in the calf.
- 2. Recent onset of constipation.
- 3. Blood in the urine.
- 4. Chest pain after exercise.
- 5. Thirst accompanied by increased frequency of urination
- 6. Cough with fever and pain on breathing.

For each symptom they were asked whether they would visit the doctor within a day, within a week, within a month, after more than a month, or not at all. The lowest score was given for the last two replies.

In 28 pairs, the non-user scored lower than the user, whereas in only 17 pairs did the user score lower. Although this difference is not statistically significant,

Table 7. Perceived problems in visiting the doctor.

Difference between user and	
non-user	Number of pairs
Neither perceived problems	17
Both perceived problems	12
Only user perceived problems	8
Only non-user perceived	
problems	23
(Paired $x^2 = 6.32$	p < 0.02)

Table 8. Mean scores on two Catell personality factors.

	Somatic anxiety	Self-sufficiency
Users	2.21	4.07
Non-users	1.82	4.42
T (paired T test)	1.39	1.90
p	>0.10	<0.10

one interpretation might be that non-users are less aware of the need to see a doctor about potentially serious symptoms.

12. Optimism about doctor's healing powers

The patients were presented with a list of six illnesses, chosen because they can be ameliorated but not cured by present therapeutic methods. The illnesses were: rheumatism, recurrent winter bronchitis, depression, diabetes, adult asthma, and high blood pressure. The patients were asked whether they thought each illness could be cured, helped, or not helped at all by doctors. An optimism score was calculated by subtracting the number of 'not helped at all' replies from the number of 'cured' replies. In 20 pairs the user had a higher optimism score than the non-user, and in 24 pairs the non-user had the higher score. Thus we were unable to distinguish users from non-users in terms of their faith in the healing powers of doctors.

13. Personality factors

We attempted to explore the influence of personality factors upon a patient's readiness to consult the doctor. Two factors, somatic anxiety and self-sufficiency, were chosen from Cattell's Sixteen Personality Factor Questionnaire (Cattell et al., 1970). The shortened versions of the scale were used for both factors.

The results are shown in Table 8. Users had a higher score on somatic anxiety and a lower score on self-sufficiency. Neither of the differences was statistically significant, although for self-sufficiency the p value is only marginally beyond the five per cent level.

14. Perception of doctor's attitudes toward trivial complaints

We thought it possible that many of the non-users were reluctant to visit their doctor because he, or previous doctors, had made them feel that they bothered him with too many trivial complaints. Only 29 of the 120 patients said that this was the case, and there was no difference between users and non-users.

Life stress

Since it is widely believed that patients under stress are more likely to visit their doctor, each patient was given a list of life problems and asked to indicate which, if any, pertained to him or her at present. If a problem was checked as currently applicable, the patient was asked if the problem bothered him a lot, a little, or very little. The list included family illness or death, marital difficulty, problems with children, friends or neighbours, job difficulties, financial, and housing problems.

When problems of all degrees of severity were considered together, users differed little from non-users. However, for problems causing considerable concern, there were 16 pairs in which only the user, and five pairs in which only the non-user, reported one or more such problems. This difference was statistically significant (paired $x^2 = 4.76$ p < 0.05).

Discussion

A number of interesting differences have been found between users and non-users, although not all the ones that we had hypothesized. We have confirmed the observation of Kessel and Shepherd that infrequent users of doctors perceive themselves as healthier than do frequent users, in the absence of any difference between them in recent morbidity.

Non-users differed from users in ways that reflect a desirable capacity for self-care; they more frequently treated themselves, and appeared more willing to wait for their treatments to take effect. This behaviour is in accord with their higher scores on self-sufficiency. On the other hand, the non-users displayed less inclination to obtain medical care for potentially serious symptoms and perceived more practical obstacles to visiting the doctor. These tendencies are disquieting because they could lead to underuse of medical care. If self-care is to be encouraged, it is important that it be done through a doctor-patient relationship that fosters health education.

Whether or not users could be taught to emulate the desirable habits of non-users remains to be discovered. This would depend upon the extent to which basic personality factors govern the patient's use of his doctor. Our study has offered tentative evidence that personality factors are involved, but does not permit any estimate of their magnitude.

The observed influence of stress upon the propensity to visit the doctor is important. While promoting self-care for minor ailments, we should remember that patients may go to the doctor because their morale has been worn down by the stresses of daily life. Patients would need to be encouraged to mention such problems openly to their doctor or to seek help from other suitable counsellors in the community.

The fact that two-thirds of the patients who treated themselves used reasonably effective treatment shows that there is a foundation of knowledge upon which instructed self-care could be built.

The interface between patients and available services can be influenced by many personal and organizational factors. Although we have noted some of these, there are many others to be investigated. Our report, coupled with the earlier one of Kessel and Shepherd, shows that much more work is necessary on the subject of utilization of health services by the public.

Medical resources are becoming increasingly expensive everywhere and must be used with care. There are now major differences in utilization rates between a 'free' National Health Service, as in the UK, and other systems with mixtures of fees for services and medical insurance cover. In countries with a comparable social structure patients tend to use health services similarly. The question that has to be asked is: how much use is reasonable or unreasonable? Should some of the heavy users be educated to be more self-reliant in order to reduce their demands on the health system?

We have confirmed that patients differ in their use of primary care services in the British NHS. Further studies are necessary to decide what are necessary and unnecessary consultations and how the overusers can be educated to different patterns of behaviour.

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