

Feasibility and usefulness of family record cards in general practice

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SUMMARY. *In order to determine the feasibility of family record cards in general practice a research secretary created cards for 1825 households from a practice of 10 600 patients. The capital cost was £108 and the time taken by the secretary was 1638 hours, which is equivalent to a wage of £1330 for a maximum grade secretary, assuming a 70% rebate paid by the family practitioner committee. Approximately six and a half hours of receptionist/secretarial time are needed each week to maintain the system. The doctors spent a mean of three minutes checking and completing the initial update of each card.*

Before the cards were introduced, most information about families was held in the doctors' heads, and little was written in the records even though the doctors considered family information relevant in 33% of consultations. After the introduction of family record cards the doctors had access to reasonably complete information about the family at 98% of consultations and the cards were used at 95% of consultations. The doctors believed the information was useful for establishing rapport, identifying patients' concerns, obtaining relevant history, forming diagnostic hypotheses and managing the present complaint. Trainees and locums found the cards more useful than principals.

Introduction

IT has always been accepted that family factors influence the illness of patients, but in recent years family therapy¹ has highlighted the interactions between the patient and his family and pointed to the fact that the family can frequently provide the key to understanding the patient's illness and implementing management plans.^{2,3} In general practice doctors talk about knowing their patients and their families, together with their social backgrounds, but seldom take routine family histories. A suitable definition of family which covers most current forms of family pattern is a group of two or more people often but not necessarily related by blood, marriage or adoption with a commitment to live with or care for one another over time.

There is increased emphasis on the relevance of the family⁴⁻⁶ but there is evidence that doctors keep only a small amount of information about each family in their heads and that records are inadequate.⁷⁻⁹ Knowledge of the rest of the family is important if general practitioners are to understand and help individual patients.¹⁰⁻¹⁵ Traditionally general practitioners have acquired their knowledge of families in an informal way over a period

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of time. A formal and positive method is needed so that important information about the family is acquired, recorded and made available to other members of the primary care team.

Some practices have attempted to solve the problem by family filing and by making the whole family's notes available at all consultations.¹⁶ However, several record envelopes or A4 folders on the desk at the same time tend to be ignored. Kuenssberg¹⁷ created a family book which was useful for research but could not be available for every consultation in a partnership. In the USA some practices have created family record cards which incorporate a family tree and a list of family problems but not all of them include a record of continuing patient contacts from day to day and their value has not been assessed.¹⁸⁻²⁰ Patient questionnaires completed on registration with the practice²¹ can be used as a starting point but these have their limitations. They will often be absent from children's notes and it is not easy to ensure that they are updated.

In an attempt to make the recording process simpler, more convenient and more comprehensive a family record card was designed for use in the National Health Service. Continuation sheets can be added as necessary. The card fits the standard medical record envelope and can be enlarged to suit A4 records. It is based on households and allows for different family patterns, for example nuclear, extended, single parent or step-families. The card provides the dates of birth and death of children, parents and grandparents; major problems and past history in physical, psychological and social terms of all members of the household; major illnesses and causes of death of three generations; the occupation and continuing health of members of the household; and occasional comments on the dynamics of the family.

The cards were made available to all doctors and health visitors for all consultations. Doctors also had access to the files for emergencies outside surgery hours.

This paper evaluates the cost and time involved in creating and maintaining family record cards in a general practice. An assessment is made of the value of the cards to the doctors and the patients; the extent to which patients think information about the family is relevant to their health care; the extent of doctors' knowledge of the families before the introduction of the cards; the doctors' opinion of the value and relevance of family knowledge, before and after their introduction; the completeness of the information on the cards; and the use made of the cards after their introduction.

Method

The study was carried out in 1984/85 in a teaching practice of 10 600 patients with four full-time doctors, two part-time doctors and a vocational trainee doctor.

The family record cards have three parts: a family tree of at least three generations; a list of current and past problems of household members together with space for details of the extended family; and a record of every contact between any member of the family and any doctor in the practice.

Feasibility of family record cards

Administration. The format of the card and the abbreviations used were agreed by the partners. A research secretary, who is

a state registered nurse (J.M.), created the family tree and completed the list of current problems and past history. The cards were created for families in which two or more members lived in the same household — married couples with no resident children were not included. The information was obtained from problem-oriented notes which often included a questionnaire completed by most patients on registering with the practice.²² Newly created record cards were marked with a metal tag and when a tagged card was presented to the doctor, the medical record envelopes of all the family were also presented. The card was completed with the help of a member of the household and the tag was not removed until the doctor had had an opportunity to correct and complete the information. Subsequently, the card was presented to the doctor at every doctor-patient contact and the doctor was responsible for entering the nature of the complaint or problem and the date on the continuation sheet.

Assessment. A record was kept of the time taken by the research secretary to create the cards and a note was made of the capital costs and the time taken by each receptionist to collect 12 cards.

Eighteen months after the start of the scheme the percentage of cards from which the metal tag had been removed was determined and an audit was made of 100 consultations to check whether the family record card was made available to the doctor.

Doctors were asked to estimate the approximate time required to make the initial update of the card and an estimate was also made of the time required each week by the secretary to keep the system updated.

Usefulness of family record cards

Before the introduction of family record cards. A medical student scrutinized the medical record envelopes of 50 families and summarized the information recorded about these families. The five doctors of these families were asked what further information about the families they remembered. At the same time the records of 50 families were examined and a note was made of standard information which was available from the records or from the doctor's memory.

Five doctors were interviewed by N.I. at the end of a surgery and asked about 173 randomly selected patients they had seen during that surgery. He ascertained whether a family factor was considered to be relevant to the consultation. He also determined whether the family factor had been identified for the first time at that consultation.

Five doctors were asked to record whether they considered pre-recorded information about the family might have been useful after each of 10 consultations.

An attempt was made to discover whether patients thought that information about family matters was relevant to their care. One hundred patients were asked to complete a questionnaire asking about the relevance of 14 items of information about themselves and the health of their families, including their past marital history and the health of their parents.

After the introduction of family record cards. One hundred family record cards were scrutinized by the research secretary for an estimate of the completeness of family information recorded on the cards.

In the audit of 100 consultations to determine in what proportion of consultations doctors were presented with family record cards, the proportion of consultations in which the doctors made an entry on the card was also determined. If an entry was made this was taken as an indication that the card was used and possibly valued.

At the end of a consulting session the research secretary asked the seven doctors to complete a questionnaire about the 203

patients they had just seen and for whom family record cards were available. The questions asked about the usefulness of the cards to the doctors.

Results

Feasibility of family record cards

The research secretary identified 1825 households and created cards for them — this took 1638 hours. If this task was carried out by a maximum grade secretary earning £2.70 an hour, assuming 70% reimbursement of the salary was paid, the cost to the practice would be £1330. The capital cost of the cards was £108 and the annual maintenance would cost about £600. It took the receptionists a mean of 2 minutes 45 seconds to collect 12 cards. The doctors saw a mean of 603 patients each week and therefore the receptionists would spend 2 hours 18 minutes collecting records and a similar time refiling them.

Eighteen months after the start of the scheme 15% of the cards were still tagged and thus were regarded as incomplete by the doctor. However, some of the cards had only just been created. Cards were presented to the doctors in 98% of possible doctor-patient contacts.

Doctors spent approximately three minutes on average making the initial update of each card and it was estimated that it would take the secretary two hours each week to keep the system updated.

Usefulness of family record cards

Before the introduction of family record cards. It was found that one doctor did not recall any additional information about the 50 families in question. The remaining four doctors remembered information which they had not recorded in the notes for 36 out of the 50 families. Some of this information was important, for example, marital problems or divorce and conditions such as subarachnoid haemorrhage or termination of pregnancy.

The following standard information was available from the records of the 50 families examined or from the doctor's memory: marital status in 16% of cases, children mentioned in 2% of men's notes, children mentioned in 70% of women's notes (mainly obstetric records) and grandparent's health or death mentioned in 36% of cases.

The five doctors' opinions as to the relevance of family factors in 173 randomly selected consultations were as follows: in 58 consultations (34%) family factors were thought to be relevant, in 47 (27%) they were thought to be irrelevant and in 68 (39%) they had not been considered. In 19 consultations (11%) new family factors were identified.

From the five doctors asked whether pre-recorded information might have been useful after 10 consultations it was found that in 26 of the 50 consultations the doctors thought that such information about the family might have been useful.

The results of the questionnaire given to 100 patients asking them how relevant and important they thought information about themselves and the health of their families might be to their care are shown in Table 1.

Table 1. Patients' opinions about the relevance of items of information to their care (percentage of patients, $n = 100$).

Item of information	Very important	Important	Relevant	Irrelevant
Health of rest of household	38	33	26	3
Past marital history	18	21	34	27
Parents' health	17	33	35	15

Table 2. Helpfulness of family record cards at different stages during 203 consultations for different doctors and the number of occasions on which the different sections of the card were considered helpful.

Family record cards helpful	Number (%) of consultations			Number of occasions when section helpful		
	Principals (145 consultations)	Trainees and locums (58 consultations)	Total (203 consultations)	Family tree	Problem list	Consultation pattern
In establishing rapport	18 (12)	29 (50)	57 (28)	48	13	4
In identifying patients' concerns	25 (17)	20 (34)	42 (22)	4	22	24
In obtaining relevant history	15 (10)	19 (33)	34 (17)	8	30	13
In forming diagnostic hypotheses	16 (11)	22 (38)	38 (18)	9	21	10
In management of present complaint	15 (10)	19 (33)	34 (17)	5	16	16
In management of previous problems	7 (5)	6 (10)	13 (6)	0	10	6
In health promotion	8 (5)	6 (10)	14 (7)	2	8	4

After the introduction of family record cards. From the examination of 100 family record cards it was found that the information concerning spouses and children was reasonably complete. Information about four grandparents was available on 42 cards, about three on five cards, about two on 10 cards and about one on 15 cards. On 28 cards no information about grandparents was available.

The audit of 100 consultations showing that receptionists presented doctors with family record cards on 98% of occasions also showed that 95% of the cards presented had an entry made by the relevant doctor.

The seven doctors completed questionnaires about the 203 patients they had just seen in a consulting session. In 119 consultations (59%) the doctor looked at the family record card before the consultation, on 19 occasions (9%) the card was looked at during the consultation, on 15 occasions (7%) it was looked at after the consultation, on 25 occasions (12%) the card was not looked at at all and for 25 consultations (12%) the doctor did not respond. The helpfulness of the family record card at different stages of the consultation and for different doctors is shown in Table 2. Family record cards appeared to be of more help in the consultations of trainees and locums than in those of principals. The doctors also specified the ways in which the different sections of the family record cards were most useful (Table 2).

Of the 203 consultations knowledge gleaned from the family record card was considered to have definitely changed the course of the consultation or the management plan in 45 (22%) cases and probably in a further 18 (9%) cases. This was the case for more trainees and locums (48 consultations) than partners (15 consultations).

When the doctors were questioned about the 203 patients it was found that one partner had withheld information from two cards because it was thought to be too confidential to record. In addition one item was wrongly inserted and five were thought to be incomplete.

Discussion

The time and cost of introducing family cards has been documented. Time is a particularly important resource in general practice. It was estimated that the doctors spent between one and five minutes during a consultation making the initial update and amendment of each card. While the doctors showed great commitment to the scheme, this is a considerable cumulative burden for general practitioners who are already

under pressure. The priority given by general practitioners to a family approach to patient care will determine whether time will be found for the creation and maintenance of the cards.

It is evident that relevant information about families was highly valued by the participating doctors. Before the cards were introduced the doctors estimated that they would be helpful in up to 50% of cases. These estimates were found to be justified; the cards contributed to many aspects of the consultation and provided information which altered the course of the consultation in as many as 22% of consultations and probably in a further 9%. Although the doctors were committed to the project it is still significant that the cards were used in a high proportion of consultations — entries were made on 95% of occasions, although the doctors claimed not to have looked at the cards on 12% of occasions.

The replies to the doctors' questionnaire show that each of the three sections of the card were useful and that the cards make a valuable contribution to many different aspects of the consultation. In assessing the results of the questionnaires the subjectiveness of individual doctors' judgements must be taken into account. Table 2 shows the different value attached to family record cards by different doctors and in particular the difference in response of principals and locums and trainees. This difference is understandable and indicates the potential value of family cards in training practices.

Of the many examples which could be given demonstrating the direct value of the family record cards in consultations, the following is typical: a mother was consulting one doctor about a disease resembling ulcerative colitis, while her 18-year-old son was consulting another doctor about persistent diarrhoea — the connection did not become apparent to either doctor until the introduction of family record cards.

Family record cards may create ethical problems. The initial collection of information about the current family presents little difficulty. The informant can also be asked about his or her family or origin, but asking about the spouse's family or origin is more difficult and inaccurate information may be obtained. It is the policy of one doctor in the practice (P.T.) to share the information on problem cards with most patients²³ and this agrees with current trends towards greater access to information. However, it would not be ethical to show the family record card to individuals as it might contain information about other family members of which they were unaware.

The most important finding of the study was that family record cards were considered to make a significant contribution in about 30% of consultations. In addition the majority of patients questioned thought that family information was relevant to their care.

There are strong arguments for the use of family record cards in general practice and their value as research material could also be exploited. Individual practices will want to weigh up the costs against the benefits, but it seems likely that in future the cards may be considered useful in non-teaching practices, and essential in teaching practices. This practice will continue to maintain and use the cards.

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Family record cards may be obtained from General Practice Supplies, 314 St Albans Road, Watford, Herts WD2 5BD.

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