Kinship and friendship networks and women's demand for primary care

ANNETTE SCAMBLER, B.SC, GRAHAM SCAMBLER, B.SC,
DONALD CRAIG, MA, BM, DMJ

SUMMARY. Women's perceptions of illness are examined and the effects of lay consultations and social networks on the use of general practitioner services are explored.

A sample of 79 women aged 16-44 from a new estate in London completed six-week health diaries and were subsequently interviewed. Symptoms were recorded in the diaries one day in every three, and the ratio of medical consultations to symptom episodes was 1:18. Nearly three quarters of the symptom episodes that precipitated a medical consultation during the diary period were discussed first with someone who was non-medical. There was an average of 11 lay consultations for every medical consultation. Married women were most likely to consult with their husbands, and single and separated or divorced women with their mothers. The second most popular category of lay consultant, regardless of marital status, was female friends. Type of symptom seemed to have little effect on who was consulted.

Large, active kinship networks appeared to predispose women to consult their general practitioners; large, active friendship networks seemed to have an opposite, if less decisive, effect. We speculate that discussions of symptoms with kin may be intense and protracted and lead to kin referrals to general practitioners. On the other hand, discussions with friends may be more casual and result in symptoms being redefined as unimportant and less in need of medical attention.

Annette Scambler, Research Fellow, Department of General Practice, Guy's Hospital Medical School; Graham Scambler, Lecturer in Sociology, Academic Department of Psychiatry, The Middlesex Hospital Medical School; Donald Craig, Senior Lecturer in General Practice, Department of General Practice, Guy's Hospital Medical School.

Introduction

PREVIOUS studies have shown that people tend to discuss their symptoms with other lay persons before deciding whether or not to consult a doctor (Suchman, 1965). Indeed, it has been claimed that 'lay referral networks' can exercise a considerable influence both on how people interpret symptoms and on whether or not they seek medical help (Freidson, 1970). It has generally been assumed that large or substantial networks tend to reduce demand on the health services. There have, however, been few systematic studies of lay referral networks, and those that have been conducted have produced apparently contradictory findings. For example, McKinlay (1973) found that an extensive network of contacts was correlated with a reduced use of antenatal care services, but Baker (1976) found that non-users of general practitioner services had less expansive networks than users. Kessel and Shepherd (1965) found that non-users also resorted to non-medical advice and help less frequently than users.

Aims

Our first aim was to examine the nature and frequency of the symptom episodes and of medical and non-medical consultations recorded by 42 women writing health diaries. Our second aim was to determine whether various characteristics of the women's social networks were correlated with their use of general practitioner services during the preceding year. Thirdly, we wished to pay special attention to the possibility that kinship and friendship networks exercised independent and different effects on service use. These analyses form the background to a continuing study which explores links between lay referral, consulting behaviour and menstrual disorders. However, the present paper is about all symptoms, not just menstrual symptoms.

Methods

The study was undertaken in a new estate on the eastern fringes of London. The estate population is predomi-

Table 1. Symptom episodes and medical consultations recorded in the health diaries.

Main types of symptoms recorded	Number of symptom episodes	Percentage of total number of symptom episodes	Mean length of symptom episodes (days)	Number of occasions on which symptom episode precipitated medical consultation	Ratio of medical consultations to symptom episodes
Headache	180	*20.9*	1.3	3	1:60
Changes in energy, tiredness	109	*12.6*	1.4	0	—
Nerves, depression or irritability	74	*8.6*	1.7	1	1:74
Aches or pains in joints, muscles, legs or arms	71	*8.2*	1.6	4	1:18
Women's complaints like period pain*	69	*8.0*	1.7	7	1:10
Stomach aches or pains	45	*5.2*	1.5	4	1:11
Backache	38	*4.4*	1.6	1	1:38
Cold, flu or running nose	37	*4.3*	4.1	3	1:12
Sore throat	36	*4.2*	2.4	4	1:9
Sleeplessness	31	*3.6*	1.5	1	1:31
Others	173	*20.0*	1.9	21	1:8
Totals	863	*100.0*	1.7	49	1:18

*Stomach aches and pains and backache were classified as period pains if so defined by the women themselves.

nantly young and working class. Two separate samples of women aged 16-44 were drawn from patients registered with the two local health centres. The sample from health centre A was taken at random from those living in the oldest part of the estate; the sample from health centre B was taken from those living in a more recently constructed part. The reason for using two distinct samples was that one, from health centre A, could be expected to contain established social networks, and the other, from health centre B, to contain networks still in embryonic form. One hundred and twenty-six women were approached, and 45 from health centre A and 46 from health centre B agreed to participate in the study. Seventy-nine of these 91 women went on to complete all aspects of the research (37 from A, 42 from B). Thus, 63 per cent of those who were asked to take part both consented to do so and did all that was required of them.

The women were visited twice in their homes. On the first occasion they filled in a general health questionnaire, and were given and introduced to a 42-day health diary requesting daily information on the following: any disturbance in their health; any conversations held with non-medical persons concerning their health; and any action taken as a result of disturbances in their health, including medical consultations. A second visit was arranged at the conclusion of the health diary period, and the women were then interviewed in depth about their entries in the health diary, aspects of lay consultation and their social networks. They were also asked about their perceptions, and past and present experiences of menstrual disorders and any medical treatment received for them, and they completed two questionnaires: a menstrual distress questionnaire and a questionnaire designed to find out which menstrual symptoms they would advise women to take to a doctor.

Results

Symptom episodes

Symptoms were recorded on an average of 13.6 days per 42-day health diary, which is slightly less than on one day in three. When the same symptom was entered on consecutive days this was defined as one 'symptom episode', the episode ending on the day on which it was last recorded. Occasions when a symptom was entered on one day only were also defined as symptom episodes. In all, 863 symptom episodes were recorded by the 79 diarists. The mean symptom episodes per diary was 10.9; the mean length of these episodes was 1.7 days. Only one diarist, a married woman aged 28, reported no symptoms. The 10 most frequently recorded symptoms are presented in Table I, which also shows how many times these 10 symptoms precipitated medical consultations and the ratio of medical consultations to symptom episodes. Headaches and changes in energy or tiredness accounted for 33 per cent of all the symptom episodes, but precipitated only 6 per cent of the total of 49 medical consultations. At the other extreme, rashes, itches and skin problems accounted for only 1 per cent of all the symptom episodes, but were responsible for 26 per cent of the medical consultations. Overall, there was one medical consultation for every 18 symptom episodes. These findings are strikingly similar to those obtained by Morrell and Wale (1976) in their compara-

Table 2. Marital status by categories of lay consultant approached at least once during the health diary period.

Lay consultant approached	Married (n=58,* mean age 33)		Single (n=11, mean age 19)		Separated/ divorced (n=9, mean age 31)	
	Per cent	n	Per cent	n	Per cent	n
Mother**	*25*	11/44	*90*	9/10	*57*	4/7
Husband	*97*	56	—	—	*33*	3
Female relative	*22*	13	*27*	3	*33*	3
Female friend	*52*	30	*73*	8	*44*	4
Others	*10*	6	*27*	3	*33*	3

*59 women in the sample were married, but one reported no symptoms in the health diary and has therefore been omitted from this table.

**The mothers of 17 women—of whom 14 were married, one single and two separated or divorced—were either dead or had not been seen by the women for a number of years. Allowance is made for this in the table.

ble study of women aged 20-44, but it ought to be borne in mind that symptom episodes that are not presented to the general practitioner may well be less severe than those which are presented (Ingham and Miller, 1979).

Lay consultations

It was apparent from the subsequent interviews that the women often failed to note occasions on which they had discussed their symptoms with other non-medical persons during the diary period. Nevertheless, it was reported in the health diaries that 71 per cent of the 49 symptom episodes that precipitated medical consultations were discussed with a lay person before contact was made with a doctor. Over the health diary period as a whole, an average of 11 lay consultations was registered for every one medical consultation. Of the 547 lay consultations recorded, 50 per cent were with husbands, 25 per cent with female friends, 10 per cent with mothers, 8 per cent with female relatives other than mothers and 7 per cent with various others (for example, fathers or boyfriends). Table 2 shows the percentages of married, single and separated or divorced women who discussed their symptoms at least once during the diary period with members of these five categories of lay consultant. It can be seen that almost all the married women consulted their husbands; about half of them consulted female friends. Single women and women who were separated or divorced were most likely to have consulted, firstly, their mothers and, secondly, female friends. Interestingly, the type of symptom had little effect on who was consulted.

Social networks and use of general practitioner services: kinship versus friendship

The measure of use employed in the study was derived from the general pracitioner notes. Women in the sample who consulted their general practitioner less than five times during the year before the study began, excluding consultations for birth control or ante-natal care, were defined as 'low users'; women who consulted five times or more were defined as 'high users'. Forty-one were low users and 38 were high users. The mean consultation rate for the year preceding the study was 5.94. This compares well with the estimated mean annual rate of 5.38 calculated on the basis of the women's medical consultations during the six-week health diary period. Moreover, high use in the year prior to the study was positively associated with medical consultations during the diary period ($Q = +.47$; $p = < .05$).

The women's social networks were analysed in numerous different ways, for example in terms of their size, composition and location. However, the most convincing links with use involved the women's active networks. A woman's active network was defined as comprising everyone aged 16 or more with whom she either met or spoke on the telephone at least once a week. The numbers ranged from 2 to 19; the mean was 8.2. Although there was no association between size of active network and service use, when the active network was divided into active kinship and friendship networks, a rather different picture emerged. Large, active kinship networks were associated with high use ($Q = +.45$; $p = < .05$) and large, active friendship networks were associated with low use ($Q = -.45$). These results are presented in full in Table 3. There was no association between the sizes of active kinship and friendship networks, which suggests that these two variables acted independently. Table 4 summarizes the combined effects of the sizes of the two active networks.

Evidence for the differential effects on use of the sizes of the two networks is supported by the health diary entries about lay consultations. There was a strong positive association between the number of consultations with kin during the diary period and service use during the year prior to the study ($Q = +.67$; $p = < .01$). Thus, 76 per cent of the 29 women who consulted their kin frequently were high users, compared with 38 per cent of the 50 who consulted their kin infrequently or not at all. There was a small negative association between the number of consultations with friends during the diary period and service use in the previous 12 months ($Q = -.21$). Neither association could be explained by the number of symptom episodes recorded in the diaries.

Two other factors were significantly associated with use. The first was the number of symptom episodes registered in the diaries: the larger the number registered, the greater was the likelihood that women were high users in the previous year ($Q = +.50$; $p = < .05$).

Table 3. Sizes of active kinship and friendship networks by service use in the year prior to the study.

	Size of active kinship network*				Size of active friendship network**			
	Small (0-3)		Large (4+)		Small (0-2)		Large (3+)	
Use during the previous year	Per cent	n	Per cent	n	Per cent	n	Per cent	n
Low (0-4 consultations)	*61*	22	*37*	16	*32*	8	*56*	30
High (5+consultations)	*39*	14	*63*	27	*68*	17	*44*	24
Totals	*100*	36	*100*	43	*100*	25	*100*	54

*Q = +.45; $\chi^2 = 4.48$; d.f. = 1; p = <.05.
**Q = −.45; $\chi^2 = 3.79$; d.f. = 1; N.S.

Table 4. Size of active kinship network by size of active friendship network by use in the year prior to the study.

	Size of active networks							
	Kinship—large Friendship—small		Kinship—small Friendship—small		Kinship—large Friendship—large		Kinship—small Friendship—large	
Use during the previous year	Per cent	n	Per cent	n	Per cent	n	Per cent	n
Low (0-4 consultations)	*23*	3	*42*	5	*43*	13	*71*	17
High (5+consulations)	*77*	10	*58*	7	*57*	17	*29*	7
Totals	*100*	13	*100*	12	*100*	30	*100*	24

The number of symptom episodes had no effect on the positive association between size of active kinship network and use, but it did have some effect on the negative association between size of active friendship network and use: as the number of symptom episodes increased, the negative association weakened and ultimately, for women recording 16 or more episodes, disappeared. On the basis of this finding it is perhaps reasonable to suggest that the more ill a woman is, the more likely it is that she will consult a doctor, regardless of how many friends she has.

The second factor was the length of time the women had lived on the estate: the shorter the time, the greater the likelihood that a woman would be a high user (Q = −.54; p = < .01). Length of time on the estate was not associated either with the number of symptom episodes recorded in the diaries, or with the sizes of active kinship or friendship networks. However, there was a positive association between length of time on the estate and size of local network, which was defined in terms of the number of people aged 16 or more who lived on the estate and with whom a woman had personal or telephone contact at least once a month (Q = +.50; p = < .05). In this sense, as predicted, women attending health centre A were most likely to have established networks, and women attending health centre B to have embryonic networks; as already implied, however, there was no association between size of local network, or of local kinship or local friendship networks, and use.

Discussion

We tested the association we had uncovered between the sizes of active kinship and friendship networks and service use by controlling for the influence of socio-demographic variables—for example age, educational attainment, social class and employment status. All our attempts to show that the associations were spurious failed. How, then, are they to be accounted for? We would venture two hypotheses at this stage. The first is that women who enjoy a high rate of contact with kin routinely have highly focussed, and sometimes protracted, discussions about their health problems with them, and that what Zola (1973) has called 'sanctioning' (that is, pressure from others to consult a doctor) is a common product of such dialogues. In short, kin consultations about health problems tend to lead to kin referrals to general practitioners and produce a higher rate of use. It is crucial to recall in this connection that a large, active kinship network, as we have defined it, is not a matter simply of relatives living nearby: the importance of the telephone in helping members of extended families to keep in touch with each other has been well documented (Rosser and Harris, 1965). We found that women who had large, active kinship and friendship networks were rather more likely to have telephones in their homes than women with small, active networks (74 and 76 per cent, compared with 69 and 64 per cent respectively).

Our second hypothesis concerns the less pronounced

influence of large, active friendship networks on service use, and is more tentative. It is that consultations with friends are generally less routine and more casual and unfocussed than those with kin, and tend to prompt women, because they typically lead them to compare and contrast their symptoms with those of their friends and of other mutual acquaintances, to redefine their health problems as less serious than they had hitherto supposed. Interestingly, there was no evidence in this study that loneliness led to a higher consultation rate.

Although there was some qualitative support for these two hypotheses, it must be admitted that they are speculative and highly generalized. We claim only that they may help to explain the contrary effects of active kinship and friendship networks on the level of consultation for symptoms most commonly experienced by women aged 16-44 in a particular kind of material and cultural milieu. There is a clear need for additional studies of specific types of symptom occurring in both similar and dissimilar sample populations. The associations and hypotheses generated in this way may differ from study to study, yet may still be theoretically consistent. In the same vein, the studies of McKinlay (1973), Baker (1976) and Kessel and Shepherd (1965) may appear contradictory only because of their different populations, methodologies and foci. We intend to write a second paper which will build on the findings presented here by analysing the links between menstrual symptomatology, social networks and consulting behaviour in the same sample of women.

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Acknowledgements

We would like to thank both the general practitioners and the women diarists and interviewees whose co-operation and goodwill made the study possible. We would also like to thank Professor Peter Higgins and Michael Curwen for their constructive advice and criticism. The study was funded by the S.E. Thames Regional Health Authority.

Address for reprints

Graham Scambler, Academic Department of Psychiatry, Middlesex Hospital Medical School, London W1P 8AA.