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Why do people consult the doctor?

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Background. Symptoms are an everyday part of most peoples' lives and many people with illness do not consult their doctor. The decision to consult is not based simply on the presence or absence of medical problems. Rather it is based on a complex mix of social and psychological factors.

Objectives. This literature review seeks to explore some of the pathways to care and those factors associated with low and high rates of consultation.

Methods. The paper examines the impact of socioeconomic and demographic factors on consultation rates and, using a revised version of the Health Belief Model, it highlights the psychological factors which influence decisions to seek medical care. Barriers which can inhibit consultation are discussed, as the decision to seek care will only result in a consultation if there is adequate access to care.

Results and conclusions. Whilst poor health status and social disadvantage increase both "objective" medical need and in turn, consultation rates, a range of other social and psychological factors have been shown to influence consulting behaviour.

Keywords. Consultations, general practice, psychological factors, social factors, symptoms.

Introduction

There is no clear relationship between health need in the population and the workload of the general practitioner. Many people with illness do not consult their doctor, and consultation patterns are influenced by a range of social and psychological factors apart from the presence or absence of individual medical problems.

Symptoms are an everyday part of most people's lives, yet few are presented to general practitioners. Do different population subgroups demonstrate similar consultation patterns? What is the relationship between consultation rates and health status? This paper seeks to explore these questions and to identify from the literature those factors that increase and decrease the likelihood of consulting a general practitioner both at a macro level (socioeconomic and demographic variables), and at a micro level (individual and family variables). The paper sets out some of the pathways and barriers which lie between the experience of illness and consultation with a general practitioner, and identifies some of the social and psychological mechanisms that underlie differences in medical care use across different social groups. The literature review has been confined mainly to British work because of the different influences which may operate in different health care systems.

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The experience of symptoms: the "symptom iceberg"

There is widespread physical and psychological morbidity in the community: symptoms of ill health are a common part of the daily life of most people.[1–6] Self-reported longstanding illness is also common[7,8] with for example 40% of the English adult population reporting limiting longstanding illness, rising with age from about a fifth in those aged 16–24 to approximately two-thirds in those aged over 75.[9]

However, the universal experience of symptoms of illness does not translate automatically into demand for care. Only a small proportion of symptoms which people experience are presented to the general practitioner.[10–13] The large number of symptoms dealt without medical care has been termed "the illness iceberg"[14] or the "symptom iceberg".[15] For example, Banks *et al.*[10] concluded that only one in 37 new symptoms was reported to the general practitioner and Scambler and Scambler[16] found that one in 18 symptom episodes resulted in consultation with a doctor. Mothers of children under five report symptoms in their children on nearly 50% of days,[17] but Campion and

Gabriel[18] estimated that only one in 12 new symptoms in children resulted in consultation.

Socioeconomic, demographic and family factors and consulting patterns

In this section we review literature exploring the relationship between demographic variables (age, sex and ethnic minority groups) and socioeconomic variables (social class, unemployment and housing tenure) and family factors which have been found to increase the likelihood of consulting a general practitioner. For a number of these, we report data from the 4th National Morbidity Survey.[19] Carr-Hill and colleagues[20] have analysed data from the 4th National Morbidity Survey using different methods. These results and the ways in which they differ from those carried out by the Office of Population Censuses and Surveys are outlined in the Appendix.

Impact of demographic factors on consultation rates

Age and sex. Consultation rates show a U-shaped distribution with age, with children and the elderly consulting most frequently. The fourth National Study of Morbidity in General Practice[19] shows that annual general practice consultation rates for ages 0–4, 16–44 and over 74 were 5.1, 2.1 and 5.6 for males, and 4.8, 4.2 and 5.4 for females. This pattern is consistent with other surveys.[21,22]

In general women consult more than men.[9,19] They are more likely to be frequent attenders[5,23] and less likely to be very infrequent consulters.[3] The difference is greatest in the age band 16–44, where women consult more than twice as frequently as men.[19] This difference has also been found in the 16–34 age group by others.[9] This is partly explained by consultations for maternity care and contraception. However, whilst men have higher death rates at every age[24,25] women experience more illness than men.[26,27]

Ethnicity. Using data from the General Household Survey, Balajaran *et al.*[28] reported that Indians, Pakistanis and Afro-Caribbeans had higher consultation rates than Caucasians. The odds ratios for consulting (standardized for age and socio-economic group) reported in their study were: adult men 1.53, 2.82, 1.65, and adult women 1.23, 1.85, 1.17, respectively. In the Fourth National Morbidity Survey, (in which minority ethnic groups were somewhat under-represented), there was no overall increase in probability of consulting for minority ethnic groups. However, black children and adults from the Indian sub-continent were more likely to consult for serious conditions, which may reflect the increased mortality that exists among some minority ethnic groups, especially from cardiovascular disease and diabetes. Afro-Caribbeans and patients from the Indian sub-continent were more likely to consult for "symptoms, signs and ill-defined conditions", but, with the exception of elderly Afro-Caribbeans, less likely than Caucasians to consult for mental illness. This may reflect reduced recognition of mental illness in minority ethnic groups.[29]

Minority ethnic groups may experience particular barriers to access to primary care services.[30] They also experience barriers once they have got to see the general practitioner, including language barriers[31] and cultural differences in health perception.[32] Ahmad *et al.*[33] found that general practitioners held less positive attitudes towards Asian patients and Gillam and colleagues[34] found that Asian patients were less likely to receive follow-up appointments.

Impact of socioeconomic factors on consultation rates

Social class. Patients from social classes 4 and 5 consult more frequently for most types of problem.[19,35–37] The largest social class difference in consultation rates in the 4th National Morbidity Survey was for serious disorders, and for mental disorders. For example, the age adjusted odds ratios for young adults in social class 4 and 5 consulting, compared to social class 1 and 2, were 1.5 and 1.3 (men and women) for serious disease, and 1.8 and 1.6 (men and women) for mental illness. These high consultation rates are likely to relate in part at least to the increased morbidity and mortality experienced by the socially disadvantaged.[25,35,38]

However, whilst poorer health status and higher consultation rates are associated with lower social class, social classes 4 and 5 use preventative services less than higher social classes.[39] This is reflected in age adjusted odds ratios for consulting for preventive health care of 0.8 and 0.9 for young men and women in the 4th National Morbidity Survey. Given that lower social classes are at greatest risk of illness, this is consistent with preventive services being delivered to those at lowest risk.[40,41]

While social class does predict consulting behaviour, there are strong associations between consulting patterns and two other key socio-economic indicators, namely employment status and type of housing.

Unemployment. Among all socio-economic groups, those who are permanently sick have the highest consultation rates of all. Excluding the permanently sick, unemployed patients are more likely to consult than those in employment,[19] but this effect is particularly marked for those who have recently become unemployed.[20] This finding is consistent with Beale and Nethercott's findings of an increase in morbidity for significant medical problems following a factory closure.[42,43]

Interpretation of data on unemployment and use of medical care is difficult because some patients may

become unemployed due to illness. Unemployment has an adverse effect on health with the unemployed showing increases in both morbidity and mortality.[44-46] The increase in consulting behaviour seen among the unemployed is likely to be due both to an increase in illness and to decreased ability to cope with symptoms as a result of psychological stress and family breakdown.[47]

Housing tenure. Those living in rented accommodation are more likely to consult for a range of conditions[19] and have higher rates of consultation[20] than owner occupiers. The consultation patterns for those in rented accommodation are similar to those of low social class. However, when controlled for all other socio-demographic data available in the 4th National Morbidity Survey, housing tenure is a stronger independent predictor of consulting behaviour than social class.

Impact of family and social networks on consulting behaviour

Families are important in influencing how illness affects an individual patient and how he or she responds to that illness.[48,49] Individuals who respond to illness by consulting a general practitioner may be members of "sick families" with high overall rates of attendance.[50,51] Indeed, patterns of illness behaviour may be transmitted from one generation to the next.[52-54]

Lay referral networks involving family and friends have a major influence on consulting behaviour. Scambler and Scambler[16] reported that there were 11 lay consultations with family or friends for each consultation with a general practitioner. Women play a particularly important role as gatekeepers of family or household demand and are the primary source of informal advice prior to a consultation with a general practitioner.[55,56] Mothers in particular provide advice about defining and coping with illness, self-treatment and whether a general practitioner should be consulted, particularly for illness in children.

Social support networks are important predictors of both health and consulting behaviour. Patients with well developed social networks consult less frequently.[57-59] Blaxter[4] and Oakley[56] argue that close social support is a strong independent predictor of good health in addition to enabling people to cope better when they are ill.

The composition and structure of a household can also impact on consultation rates. Widowed and divorced adults consult more than those who are single and married,[23,60-63] perhaps through having less well developed social support networks. Others have found that children of single mothers are more likely to consult.[36,64] However, there is relatively little support for these findings from the 4th National Morbidity Survey: although the probability of consulting during the study year was increased for those who were widowed, separated or divorced,[19] Rice's analysis suggests that overall consultation rates for this group were not increased, and that children of single parents actually consulted less frequently than their peers.[20]

Psychological factors which influence demand for care

Decisions about seeking care can be explained in terms of individual psychological characteristics as well as socio-demographic factors. In this section, we review some of the psychological factors influencing decisions to seek medical care.

The Health Belief Model

One theoretical framework which has been used widely to explain responses to illness is the Health Belief Model.[65] This model identifies four key psychological characteristics as determinants of an individual's perception of his or her own health and health seeking behaviour. These are: perceived susceptibility and vulnerability to illness; perceived severity (of the symptoms); perceived costs (monetary and other) of different types of health seeking behaviour; and perceived benefits of action (including belief in efficacy of the doctor). In an individual situation the patient may be influenced by "cues to action" such as advice from others, previous illness in family or friend, and media reports or campaigns. The Health Belief Model can be applied to patients' use of primary care, and there is evidence for validity of the concepts within the Model.

Perceived susceptibility. Patients' perceptions of their own vulnerability to illness has been found to be an important determinant of health seeking behaviour.[65] High attenders usually perceive themselves to be both ill and vulnerable to illness.[3,12,21,66,67] Low users of primary care express less anxiety about their health, worry less about symptoms,[68,69] are more inclined to ignore symptoms[57] and usually perceive themselves to be healthy.[3] These results are consistent with perceived susceptibility to serious illness being one of the factors which influences patients in their decision to consult the doctor. A patient's perceived susceptibility to an illness may also be related to "locus of control", or the extent to which a person feels that he or she has personal control over his or her health. Ingham and Miller[62] concluded that general practice attendance rates are increased for patients who have no idea what has caused their ill health and/or who cannot understand their symptoms. Low users are more inclined to think about what has caused their symptoms and attribute them to things within their own control,[13] whereas in relation to locus of control, contact with a doctor has been found to be a mediating factor between experience of psychosocial distress and expressed beliefs about personal efficacy in health.[70] Perceived suscep-

tibility to illness has also been found to be a predictor of attendance at a health check.[71]

Perceived severity. In discussing perceived severity, it is important to distinguish between the actual severity of a condition (e.g. actual threat to life) and an individual patient's perception of severity. Courtenay[72] found that 67% of frequent attenders had a 'major' diagnosis. Indeed, the presence or absence of physical illness accounts for a large part of the variation in utilization of medical care, and high users usually have clearly defined illness,[5,61,73] evidence of psychological disturbance[74,75] or the existence of prolonged longstanding limiting symptoms/illness.[5,73]

Severity is a multi-dimensional concept, and may include the intensity of the symptom, its frequency, or the perceived probability of serious illness. One study has suggested that symptom severity accounts for a significant but fairly small (16%) proportion of the observed variance in consulting behaviour.[62] Martin and colleagues[76] concluded that the commonest reason for attending among 1000 patients consulting their general practitioner was "symptoms getting worse". The fear that symptoms are caused by internal physical causes has been found by others to be an important determinant of health seeking behaviour.[21,50,62,76]

The results of these studies are consistent with Blaxter's multidimensional model of health,[3] and suggest that in relation to severity, patients consult both because of the severity of their symptoms, and the effect of those symptoms on their life, but that an important additional factor is concern about serious disease.

Perceived benefits and costs from seeking medical care. The Health Belief Model proposes that the balance between risks and benefits from seeking care is an important determinant of health seeking behaviour. The benefits relate mainly to the person's belief in the effectiveness of the action which is likely to be proposed when medical care is sought, balanced against his or her perception of how effective self-care is likely to be. The costs of seeking care may be financial (prescription charges, transport costs, lost time from work) or physical (barriers to care such as access, as well as perceived negative physical outcomes from treatment, e.g. side effects of drugs).

Compared to low users of primary care, high users appear to have greater faith that the general practitioner's actions will be beneficial.[13,62,69,78] Low users are more sceptical/critical of general practitioners,[1] and have less faith in and feel less reliant on the general practitioner.[13,69] This sometimes results from an unsatisfactory past family experience or because the patient believes that the doctor will not be sympathetic.[69,79]

In addition to the concepts originally proposed in the Health Belief Model there are other factors which may be important and which might operate via the Health Belief Model. These include the need for information about health problems, reliance on self-care, and the influence of life events.

Knowledge about illness and information seeking behaviour. An individual's decisions about a given condition may be influenced by his or her knowledge and understanding of the illness either from personal experience or that of friends and relatives. Conditions which appear minor to the doctor may nevertheless cause anxiety by association with past illness in the family.[80]

In order to care for themselves, patients need to feel in control of their illnesses, and part of this involves having adequate information. The need to gain further information about a condition may be an important factor leading to consultation,[76,78] and people who cope with illness by seeking information tend to use more services when compared to those who tend to avoid information.[81,82] Finding ways of providing better information for patients may be an important way of helping them to deal with both acute and chronic illnesses.

Belief in the effectiveness of self care. A broad consensus has emerged linking consulting behaviour to those actions which emphasize what the patient can do for him or herself as opposed to seeking help from a professional.[83] Self-medication is often used as an alternative to seeing a general practitioner,[13,76] and patients who believe in the effectiveness of self treatment are more likely to treat themselves.[84] Patients who choose to use self-medication first are less likely to consult the doctor.[57,78,85]

Edwards and Popay[86] suggest that service providers will increasingly encourage people to rely not on formal services but rather to manage problems through informal networks. Given that many primary care consultations are for trivial or self-limiting conditions[87] and that the number of such presentations is increasing,[60] the promotion of self-care could have a significant effect on health care utilization.[88] Although simple educational materials can reduce the consultation rate for minor illness,[87] the efficacy of self-care relies upon appropriate and confident self-diagnosis of symptoms. Any moves to reduce access to the general practitioner runs the risk of patients overlooking potentially serious symptoms.

Stressful life events. In discussing stress in the context of consultation rates, it is important to distinguish between self-reported stress and stressful life events. Stressful life events are more common among consulting patients than non-consulting patients,[89,90] and negative life events are particularly likely to result in consultations.[3] However, it may be the individual's ability to cope with significant life events rather than the inten-

sity or frequency of the events themselves which triggers a consultation. Robinson and Granfield[57] have argued that frequent attenders experience fewer stressful life events but cope with them less well.

A correlation between consultation rates and a patient's perception of self-reported life stress has been supported by an analysis of data collected for the Health and Lifestyle Survey.[91] This suggested that there is a substantial effect of self perceived stress on the propensity to consult, for the same level of self-reported health. Generally, patients are more likely to consult if they experience a greater number of stressful life events or if they associate their stress with illness. These effects are of course in addition to any effect of stressful events in actually causing illness.

Consultation patterns and the organization of medical care

The decision to seek care will only result in a consultation if there is adequate access to care. In this section, we review some of the organizational factors which are associated with high and low rates of consultation.

Distance from surgery. There is clear evidence that distance from a health facility is negatively associated with utilization. People living in rural areas are less likely to consult than their urban counterparts.[28,35,60,92–94] Data from the fourth National Morbidity Survey suggest that rural populations are likely to have reduced rates of consultations for both serious and trivial conditions, though the effect was only statistically significant for men.[19]

Even within towns, those living near the general practitioner's surgery are more likely to consult than those living further away,[23,57,95,96] an effect which is seen for both acute and chronic conditions.[97] Elderly and disabled patients and those with transport difficulties in rural areas (lack of car or bus service) are particularly affected by reduced access.[35,96,97]

Appointment systems. Those with high expressed need and poor health, particularly those in social classes 4 and 5, may be less able to cope with appointment systems and may, therefore, be selectively disadvantaged in an organizational system that is over-rigid. Frequent attenders are more likely to attend without an appointment and more likely to default on their appointments.[98,99] Although access is unlikely to be denied outright, patients who have difficulty coping with appointment systems may suffer an additional disadvantage in that they are less likely to see their regular doctor if they have difficulty planning ahead.

Doctor initiated consultations. In this paper, we have discussed consultations as if they were all initiated by patients. However, many consultations are initiated by the general practitioner as part, for example, of planned follow up of a chronic disease. Up to half of consultations may be initiated by doctors,[76,100,101] and there may be little agreement between doctors and patients about the need for reattendance.[102] There is likely to be considerable variation between practices in the need for doctor initiated consultations, from practices with large lists of elderly patients on regular review for chronic disease, to practices with many children and young people, most of whose consultations may be reactive to new illness episodes.

Access to A&E. Primary care attendance may be influenced by the availability of other types of care. In urban areas, many patients attend A&E departments, particularly out of hours. A range of factors influence a patient's decision to attend an A&E department rather than consult a general practitioner. These include the patient's perception of the roles of hospital and primary care,[103,104] expectation of a long delay in receiving an out of hours consultation,[105] and the patient's perceived need for specialist treatment.[106] Some patients attend A&E because they either mistrust their general practitioner or lack confidence in his/her ability to treat them[104,107] or because they are not registered with a general practice. Campbell[108] concluded that an important factor in prediciting self-referral to A&E is the proximity of such a facility. In most cases patients have not attempted to consult a general practitioner before attending casualty.[104,106] A high proportion of homeless people attend A&E, including those who are registered with a general practice, as they tend to live far away from their general practitioner.[109]

Discussion

The decision to consult a general practitioner is based on a complex mix of physical, psychological and social factors. Figure 1 represents a conceptual framework of the steps between the experience of illness by an individual and contact with medical care, along with some of the factors which influence how different individuals travel down that pathway. Service utilization reflects not only morbidity in the community but also the availability of services and individuals' propensity to use them, although the experience of symptoms is the usual cue that some action is required.

The resultant pathway is determined first by demographic and socio-economic factors which influence both the likelihood of a person getting ill, and his or her response to illness. The second important set of influences on consulting behaviour are beliefs about the illness—perception of susceptibility and severity and benefits/costs of seeking care. Third, the progress of the illness—how it develops and how it responds to self

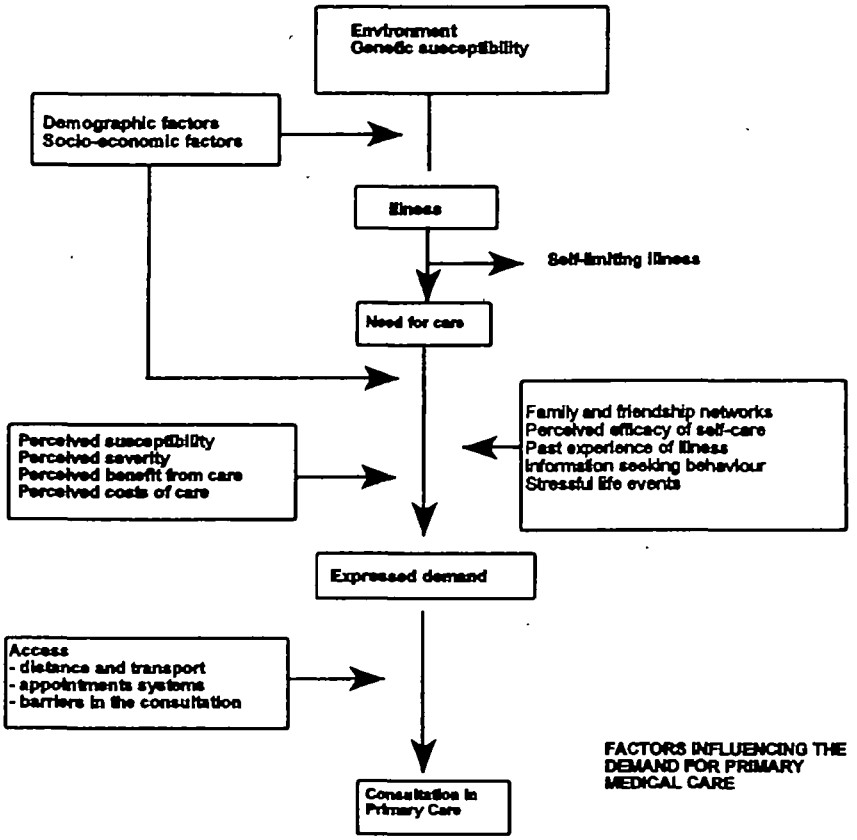

FIGURE 1 *Factors influencing the demand for primary medical care*

care determines the subsequent action taken. Fourth, the context of the individual is important, including social support and lay advice networks and the patient's knowledge and experience of the illness. Lastly, actual or perceived barriers will determine whether care is actually received.

The overall prevalence of symptoms in the community is not closely related to general practice consultation rates, and the consulting population is a selected population of those who are in need of medical care. The literature reviewed suggests that poor health status, social disadvantage, poor social support and inadequate coping strategies are associated with higher consultation rates. Some population sub-groups may experience particular barriers to seeking care.

The clear association between socio-economic factors and both illness and demand for care raises important questions for government policy. If people consult because they are ill then the surfeit of illness in social classes 4 and 5 emphasizes the importance of policy changes to improve health in this group. In particular there is a need to quantify and understand the underlying causes behind differentials in health status. If socially disadvantaged areas have higher consultation rates then this needs to be reflected not only by appropriate payments for deprived areas, but also by allocation of resources to health authorities in poorer areas. There is a particular difficulty in determining how to deliver preventive health services to those populations in greatest need, where patients are also least likely to attend for preventive care.

Socio-economic and demographic characteristics impact on both health status and consultation rates. The response of individuals to health problems depends on a wide variety of individual social and psychological factors. It is important to be aware of these when seeking to understand how primary care services are used.

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Appendix

Socio-economic factors and general practice consultations: an alternative approach to analysis of the 4th National Morbidity Survey data

In this paper, data have been presented from the 4th National Morbidity Survey.[19] A parallel analysis of the same data was commissioned by the Department of Health using different methodology.[20] In these analyses, the dependent variable was the number of times that an individual patient consulted (rather than the probability of the patient consulting at all), so the results relate more closely to general practitioner workload than the OPCS analysis. In addition, multilevel modelling techniques were used to avoid underestimates of the standard error of regression coefficients that can occur when applying conventional regression techniques to clustered data.[110,111]

In the analyses which were carried out by the Office of Population Censuses and Surveys, increased probability of consulting was found for the permanently sick, the widowed, divorced or separated, patients of low social class, those living in rented accommodation, the unemployed, patients from the Indian subcontinent (especially for serious disease), and those living in urban areas.[19]

In Rice's analysis, high consultation rates were found for the permanently sick, for women from the Indian sub-continent, for those living in rented accommodation, for the unemployed (especially those who became unemployed during the study year), patients of low social class, and patients living in urban areas. There was no consistent effect of marital status on consulting patterns for adults or children.[20]