

Primary care

Shared help seeking behaviour within families: a retrospective cohort study

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Abstract

Objective To examine the extent to which the family influences individual use of general practitioner care.

Design Retrospective cohort study of all consultations in one calendar year. Multilevel modelling was used to analyse contact frequencies of individuals within families within practices.

Setting General practice in the Netherlands.

Participants 42 262 families with children aged 2-21 years registered in 96 practices.

Main outcome measures Family influence on individual frequency of contact with general practice and correlation in frequency of contacts between parents and children.

Results After correction for patients' age and sex, analysis of siblings indicates that 22% of the variance in frequencies of contact can be ascribed to influence of the family. This means that contact frequencies of family members within families resemble each other, whereas differences in contact frequencies exist between families. Almost 6% of the variance refers to differences between practices and 73% of the variance refers to individual differences. The strongest correlations were found between mothers and children and between children.

Conclusions The extent of shared help seeking behaviour within families has considerable implications in the context of the practice.

Introduction

The propensity of some families to use more health services than others may be attributed to predisposing factors such as family composition, health beliefs, and social structure. Family members show similar help seeking behaviour with regard to morbidity over time¹ and morbidity and attendance,² while consultation patterns within the family are even transferred to succeeding generations.³ It is therefore important to consider patients' social contexts with a view to prevention, diagnosis, and treatment in general practice.

Research on the role of the family, however, mostly dates from the 1970s and 1980s and the family is scarcely mentioned thereafter, let alone used as a unit in analysis. Have individualisation theory, evidence based medicine, and a patient centred approach suppressed the ideas of family medicine?

The individualisation hypothesis suggests that attitudes and behaviour are increasingly based on personal choice and are less dependent on tradition and social connections.⁴ This has reduced the impact of the family: families are less cohesive and members are more autonomous, while parenting has become less controlling than some decades ago. Children now have a more active role in their interaction with adults and understand more about concepts of health and illness than presumed.⁵ Evidence based medicine is also characterised by an individualistic approach, and this differs from the systems theory, in which family science is rooted.⁷ Furthermore, the structure of families has changed; one parent families are now more common in the Netherlands, and in two parent families, one parent more often is not the biological parent, and both parents more often have paid jobs. On the other hand, family influence on consultation rates may have increased because in smaller families each child gets more attention, and only 20% of families now have more than two children.

We examined the extent to which families continue to influence individual use of general practitioner care.

Method

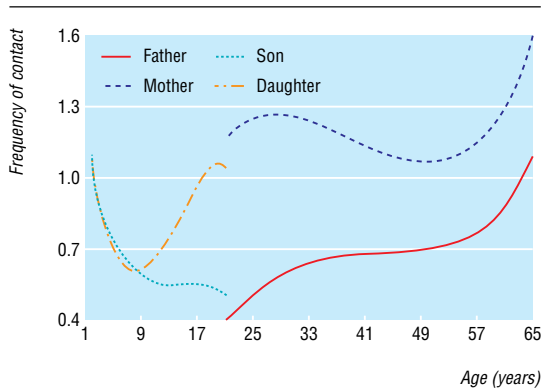
We used data from the second Dutch national survey of general practice. The survey recorded all consultations in 2001 for 104 general practices in the Netherlands, comprising 195 general practitioners serving 385 461 patients.⁸

We selected for analysis families with one or more children aged 2 to ≤ 21 years and consultations for new problems. We excluded eight practices from the analysis, mainly because of technical problems with registration. Excluded practices did not differ from the others in terms of size and type of practice or degree of urbanisation.

We considered three contexts in the analysis: the individual level, the family, and the practice. Using multilevel analysis we calculated the variance in frequencies of contacts due to differences between individuals, differences between families, and differences between practices. Accordingly, the total variance



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Relation between frequencies of first contacts and patients' age and sex, corrected for influences of family and practice

is the sum of the variance on three levels: individual, family, and practice.

We identified the family impact by the amount of variance in the frequency of first contacts with the general practice at family level. Greater impact of family background should result in more variance at family level. We calculated the variance when all family members were included in the analysis and then carried out a second analysis in which only siblings were included. We further described the family impact by correlation coefficients to evaluate the magnitude of the family impact in relationships between parents and children.

Frequency of contacts also differs by age and sex (figure). To capture the non-linear relation between age, sex, and frequency of contacts, we modelled age as a separate effect for four groups (father, mother, son, daughter).

Results

We included over 42 000 families with children aged 2-21 years living at home (160 926 people in total). Almost 18% were one parent families, and about 1% comprised parents of the same sex, three generations in one home, or a compound family structure. The average number of children per family was two, with a maximum of 11 (see bmj.com).

Corrected for patients' age and sex, 6% of the variance in frequency of contacts clustered on practice level, suggesting that similarities in contact frequencies within families differ between practices. About 18% of the variance can be ascribed to family influence and 76% to individual differences.

When we excluded the parents from the analysis, the family accounted for about 22% of the variance in contact frequencies, the practice for 6%, and individual differences between siblings for 73%. This means that more than a fifth of the variance in contact frequencies relates to shared help seeking behaviour within families.

The strongest correlations were between contact frequencies for mothers and children and between children (table). The association between contact frequencies for fathers and children was about the same as the association between parents: somewhat lower but still substantial. The association between parents shows that resemblances in contact frequencies

between family members cannot be ascribed to genetic factors alone.

Discussion

Almost all non-institutionalised Dutch citizens are registered with a general practice and family members are usually registered with the same practice. General practices therefore provide good information about frequency of contacts within families. Our study provides empirical support for regarding families as important social contexts for use of health care. Illnesses at the individual level still account for most variance in contact frequencies, but a substantial amount of the variance can be attributed to the context in which the individual functions. We argue in favour of putting the family back on the agenda in current healthcare research.

Possible mechanisms

Why do frequencies of contacts in general practice cluster within families? We identified three possible mechanisms: selection, socialisation, and shared circumstances. Selection refers to homogeneity of background characteristics of family members, such as children's inheritance of (vulnerability to) illnesses and responses to stress. There is also a tendency for healthy people to select healthy partners.⁹

Socialisation refers to a more gradual process of resemblance. The people most likely to influence whether adults consult a general practitioner are their partners.¹⁰ Children learn their parents' attitudes, beliefs, and values through direct teaching and observation. Parents also learn from their children and adjust their parenting accordingly.^{11 12} As a consequence, attendance is partly learnt behaviour, and similarities in contact frequencies between siblings are probably greater than similarities between parents because both genetic selection and socialisation play a part in siblings.

Finally, the members of one family share a collective context. Common physical, economic, and social circumstances in daily life may lead to specific family behaviour with accompanying harms or improvements to health. Families with children share the same living arrangements, for example, and infections can easily be transmitted from one family member to another. Furthermore, parents and children usually also share another context—that is, the general practice. General practitioners differ in the patients they attract, and they influence their patients' help seeking behaviour, which may explain part of the variance at practice level.

Taking account of context

We focused on describing the relation between individual, family, and practice contact frequencies. To our knowledge, our methods of analysis have not been

Correlations in frequencies of first contacts with general practice within families, according to sex, corrected for age and sex (n=160 926)

	Father	Mother	Son
Mother	0.30	—	—
Son	0.32	0.46	—
Daughter	0.30	0.49	0.48

What is already known on this topic

Family background influences help seeking behaviour

Recent studies of help seeking behaviour do not take the family into consideration and society has changed profoundly

What this study adds

Similarities in consulting behaviour within families continue to exist despite profound changes in society, such as an increasing focus on individuality and changes in parenting and family composition

In practice, the concepts of selection, socialisation, and shared circumstances can serve as a framework for a family case history

Research on use of health care will profit from adding a family level as a unit of analysis

used before in relation to this subject. The impact of individual variation will be over-rated if context is not included. Although the influence of the practice may be minor compared with the influence of the family, this does not imply that general practitioners cannot influence frequencies of contact.

Family medicine

The identified mechanisms (selection, socialisation, and shared circumstances) can serve as a framework for a family case history; the context of the family may shed a different light on strategies for prevention, treatment, or recovery. The main problem is integrating biomedical knowledge with a family approach as family theory and health care have developed from two different traditions.⁷⁻¹³ Training, additional services or applications within the medical record that

would draw the general practitioner's attention to striking consultation behaviour on an aggregated (family) level, for example, could all be helpful. In countries with free access to specialists, general practitioners will usually have fewer opportunities of obtaining insight into family patterns of illness and help seeking behaviour, which may lead to less effective treatment strategies.

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