Patient Education and Counseling xxx (2015) xxx–xxx

Contents lists available at ScienceDirect

Patient Education and Counseling

journal homepage: www.elsevier.com/locate/pateducou

Family physician–patient relationship and frequent attendance of primary and specialist health care: Results from a German population-based cohort study

Andreas Dinkel[a,*], Antonius Schneider[b], Gabriele Schmutzer[c], Elmar Brähler[c,d], Winfried Häuser[a,e]

[a] Department of Psychosomatic Medicine and Psychotherapy, Klinikum rechts der Isar, Technische Universität München, Munich, Germany
[b] Institute of General Practice, Klinikum rechts der Isar, Technische Universität München, Munich, Germany
[c] Department of Medical Psychology and Medical Sociology, Universität Leipzig, Leipzig, Germany
[d] Department of Psychosomatic Medicine and Psychotherapy, University Medical Center, Johannes Gutenberg Universität Mainz, Mainz, Germany
[e] Department of Internal Medicine I, Klinikum Saarbrücken, Saarbrücken, Germany

ARTICLE INFO

Article history:
Received 22 August 2015
Received in revised form 9 February 2016
Accepted 12 February 2016

Keywords:
Family medicine
Family physician
Medical specialists
Frequent attenders
Health-care utilization
Physician–patient relationship
General population

ABSTRACT

Objective: To investigate the association between the quality of the family physician–patient relationship and frequent attendance of primary and specialist health care.
Methods: Cross-sectional survey of a representative German population sample ($N = 2.266$). Family physician–patient relationship was assessed with the Patient Doctor Relationship Questionnaire (PDRQ-9). Determinants of frequent attendance were analyzed using logistic regression.
Results: Frequent attendance of family physicians was associated with lower income (OR 1.43, 95% CI 1.02–2.00), not being in paid work (OR 1.58, CI 1.08–2.30), psychological distress (OR 1.14, CI 1.07–1.22), somatic symptoms (OR 1.07, CI 1.04–1.11), and physical comorbidity (OR 1.54, CI 1.36–1.74) in the multivariate analysis. Frequent attendance of specialists was related to psychological distress (OR 1.12, CI 1.04–1.20), somatic symptoms (OR 1.08, CI 1.04–1.11), and physical comorbidity (OR 1.69, CI 1.48–1.93) in the multivariate analysis. Quality of the relationship was associated with frequent attendance only in the univariate analyses. A stronger relationship with the family physician was not associated with reduced contact with specialists.
Conclusions: The quality of the family physician–patient relationship is not independently associated with frequent attendance.
Practice implications: Family physicians should be aware that need factors, i.e. symptom burden and physical comorbidities, are main drivers of frequent attendance.

1. Introduction

A strong alliance between the physician and the patient is an essential part of the treatment and the interventions delivered by psychotherapists [1] and family physicians [2]. Family medicine's main characteristics are to understand problems presented by the patient within a biopsychosocial context, to establish a trustful physician–patient relationship, and to coordinate the treatment of specialists [3]. The physician–patient relationship shares some similarities with the helping alliance in psychotherapy, i.e. high levels of trust, helpfulness, empathic understanding, and interpersonal openness [4]. Previous research showed that a strong physician–patient relationship is associated with better treatment adherence and higher global patient satisfaction [5,6].

So called frequent attenders of primary and specialist health care are cost-intensive [7] and have been identified irrespectively of the type of the health care system [8]. Frequent attenders of family physicians and medical specialists were characterized by high levels of anxiety, depression and (medically unexplained) somatic symptoms, as well as by physical comorbidity and female gender [9–15]. Furthermore, psychological characteristics, like lack

* Corresponding author at: Department of Psychosomatic Medicine and Psychotherapy, Klinikum rechts der Isar, Technische Universität München, Langerstr. 3, 80686 Munich, Germany. Fax: +49 89 41404845.
E-mail addresses: a.dinkel@tum.de (A. Dinkel), antonius.schneider@tum.de (A. Schneider), gabriele.schmutzer@medizin.uni-leipzig.de (G. Schmutzer), elmar.braehler@medizin.uni-leipzig.de (E. Brähler), whaeuser@klinikum-saarbruecken.de (W. Häuser).

http://dx.doi.org/10.1016/j.pec.2016.02.009
0738-3991/

of mastery and illness behavior contribute to continuing frequent attendance [16].

The impact of the quality of the physician–patient relationship on the use of primary and specialist health care resources has rarely been studied. As the presence of medically unexplained symptoms is among the most powerful predictors for frequent attendance [17], and as these patients are characterized by difficult doctor–patient relationships [18], one might assume an association among lesser quality of the family physician–patient relationship and higher attendance, reflecting a continuing need for reassurance and pathological help-seeking [18].

However, the few available empirical results mainly show the opposite, i.e. that higher attendance rates are associated with a positive family physician–patient relationship. Cross-sectional studies from the Netherlands [19] and Australia [20] showed that a better family physician–patient relationship and higher satisfaction with physician communication, respectively, were uniquely associated with more visits to the family physician. In a prospective US cohort study, higher patient satisfaction with the physician–patient relationship was associated with higher overall health care use [21]. Only one study explicitly focused on the quality of the family physician–patient relationship of frequent attenders. This cross-sectional Slovenian study found that high satisfaction with the family physician was independently and positively associated with frequent attendance of family practice [14].

Even fewer studies studies investigated whether a strong family physician–patient relationship is associated with the utilization of medical specialists. This question is particularly relevant in health care systems with no formal gate-keeping role for family physicians and thus unlimited access to medical specialists [22]. However, even in such systems a strong family physician–patient relationship could enhance the informal gate-keeping role of the family doctor and thus reduce frequent attendance of medical specialists. We are aware of only two studies that report results on the association between the quality of the family physician–patient relationship and utilization of specialists. In a cross-sectional Norwegian study, participants who reported that their family physician had a poor understanding of their problems and that their family physician did not take the patient seriously indicated a higher number of visits to specialists [23]. The longitudinal study by Little et al. [24] from the UK showed that referrals were less frequent if patients felt they had a personal relationship with their family physician. These results suggest that a good family physician–patient relationship might be protective against the frequent use of specialist care.

Ambulatory health care in Germany is mainly provided by private for-profit providers. In 2012, 46% of all statutory health insurance-accredited physicians were practising as family physicians and 54% as specialists [25]. The density of physicians is slightly above the European average. Germany shows the highest number of visits to ambulatory care in Western Europe. The workload of family physicians in Germany is twice as high as in most other European countries (250 patient contacts per week) [25]. Health insurance is mandatory for citizens and permanent residents, either through statutory health insurance (SHI; 85%) or private health insurance (PHI) [25]. PHI has no effect on the number of consultations in ambulatory health care, but leads to shorter waiting times for an appointment [25,26]. Payment of physicians by the SHI is made from an overall morbidity-adjusted capitation budget paid by sickness funds. In the case of PHI, payment is on a fee-for-service basis using the private fee scale [25]. In Germany, patients have free choice of physicians, and there is no formal gate-keeping role of family physicians.

In light of these structural characteristics of the German ambulatory health care system, the aim of the current study was to assess the impact of the quality of the family physician–patient relationship on frequent attendance in a sample representative of the general German population. We expected that female gender, psychological and somatic symptom burden, and physical comorbidity would be associated with frequent attendance of family physicians and medical specialists. Furthermore, we investigated whether a strong family physician–patient relationship was associated with frequent attendance of family doctors and with reduced attendance of medical specialist.

2. Methods

2.1. Study design and participants

The current cross-sectional study was part of the annual representative general population surveys conducted by the University of Leipzig. These surveys assess political and religious attitudes as well as health topics. A representative sample of the German population was selected with the assistance of a demographic consulting company (USUMA, Berlin, Germany).

The random selection was based on multistage sampling. First, 258 sample point regions were randomly drawn from the last political election register, covering rural and urban areas from all regions in Germany. The second stage was a random selection of households using the random route procedure (based on a starting address). The third stage was a random selection of household respondents with the Kish selection grid [27]. The sample was aimed to be representative in terms of age, gender, and education of the German population. The inclusion criteria for the study were age at or above 14 and the ability to read and understand the German language. All subjects were visited by a study assistant and were informed about the investigation. Subjects received various self-rating questionnaires. The assistant waited until the participants answered all questionnaires, and offered help if persons did not understand the meaning of questions [28]. The study and procedure were approved by the institutional ethics review board of the University of Leipzig.

2.2. Measures

2.2.1. Sociodemographic data

Age, gender, partnership status, educational level, employment status and net household income per month were assessed via a standardized questionnaire that was used in previous German health surveys [29].

2.2.2. Quality of the family physician–patient relationship

The Patient–Doctor Relationship Questionnaire (PDRQ-9) was developed as a short assessment of the relationship between the primary care physician (PCP) and the patient from the patient's perspective [30]. It adapted an existing instrument from psychotherapy research on therapeutic alliance, the Helping Alliance Questionnaire (HAQ) [31], for use in primary care and public health research. The PDRQ-9 assesses by nine questions on a five-point Likert scale (from "1 = not at all appropriate" to "5 = totally appropriate") how the patient experiences different aspects of the relationship with his family doctor (e.g. time available, understanding, openness). A high mean score corresponds with a strong therapeutic alliance with the family doctor [30]. Studies conducted in the Netherlands [30], Spain [32], Turkey [33], the US [34], and Germany [28] demonstrated favorable reliability and validity. We used the validated German version of the PDRQ-9 [28].

2.2.3. Somatic symptom burden

The Giessen Somatic Symptom Check List (GBB-24) captures how much people are currently bothered by bodily symptoms (0 = "no" to 4 = "very strongly"). Data from a representative sample

Please cite this article in press as: A. Dinkel, et al., Family physician–patient relationship and frequent attendance of primary and specialist health care: Results from a German population-based cohort study, Patient Educ Couns (2016), http://dx.doi.org/10.1016/j.pec.2016.02.009