Frequent attendance in general practice: patient characteristics, expectations and satisfaction

Research Internship Faculty of Medicine Academic Medical Centre / University of Amsterdam

J. Leen Student number: 6161596 Email: j.leen@amc.uva.nl

Dr. C.M. van der Heijde, PhD

Huisartsen Oude Turfmarkt / Bureau Studentenartsen Oude Turfmarkt 151 1012 GC Amsterdam Tel.nr: 020 – 525 5306 Email: c.m.vanderheijde@uva.nl

P. Vonk, MD

Huisartsen Oude Turfmarkt / Bureau Studentenartsen Oude Turfmarkt 151 1012 GC Amsterdam Tel.nr: 020 – 525 4772 Email: p.vonk@uva.nl

Prof. dr. H.C.P.M. van Weert, MD and PhD

Department of General Practice / Family Practice Academic Medical Centre Meibergdreef 9 1105 AZ Amsterdam Tel.nr: 020 – 566 7179 Email: h.c.vanweert@amc.uva.nl

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Summary

Introduction:

Frequent attendance is an important issue in general practice. Frequent attenders (FAs) form an extensive part of the workload of general practitioners. Some of these patients become a persistent frequent attender (pFA); a FA for three consecutive years or more. It is not fully clear what contributes to persistence of frequent attendance. Previous research has shown that FAs and pFAs more often suffer from chronic somatic diseases, psychiatric problems, medically unexplained physical symptoms (MUPS) and social problems. Persistence of frequent attendance might also be a sign of unmet needs and expectations. The aim is to study the expectations of (p)FAs.

Method:

This case control study took place at a general practice. All patients ≥15 years who were enlisted at the practice between 2014 – 2016 were eligible. Frequent attendance was defined as those patients whose attendance rate ranked nearest to the top 10%, adjusted for age and sex, during 1 or 2 years (FAs) or during 3 years (pFAs). Non-FAs were used as a reference group. This was defined as patients of whom the total number of contacts was equal to the average of this practice (adjusted for age and sex). Patient characteristics, morbidity, expectations and satisfaction were determined for each group. Questionnaires were used to measure expectations and satisfaction. A factor analysis was performed to identify different dimensions of expectations and satisfaction.

Results:

We included 1900 FAs, 281 pFAs and 1522 non-FAs. 2259 patients were approached for the questionnaire. The response rate of the questionnaire was 24%.

Characteristics: FAs and pFAs were older than non-FAs. pFAs were more often unemployed than FAs and non-FAs. Both FAs and pFAs were more often being treated by a medical specialist than non-FAs. The percentage of patients being treated by a psychologist was highest in pFAs. FAs had more visits to the out-of-hours practice compared to non-FAs.

Morbidity: The prevalence of chronic somatic diseases, psychiatric problems, MUPS and social problems was highest in pFAs and lowest in non-FAs.

Expectations: The factor analysis resulted in four different dimensions: doctor-patient relationship, medical care, information and support, and organisation of care. All three groups had highest expectations on doctor-patient relationship. FAs and pFAs had slightly higher expectations compared to non-FAs on all dimensions, but only the FAs scored significantly higher on the dimension 'doctor-patient relationship'. Both FAs and pFAs found 'continuity of care' more important than non-FAs. The regression analysis showed that expectations on the dimension 'continuity of care' had a significant relationship with frequent attendance.

Satisfaction: All three groups were most satisfied with 'doctor-patient relationship' and least satisfied with 'organisation of care'. There were no statistical significant differences between FAs, pFAs and non-FAs.

Conclusion:

The doctor-patient relationship is more important to pFAs and FAs than medical care, information and support, and organisation of care. Furthermore, continuity of care is more important to pFAs and FAs than to non-FAs. The regression analysis showed that expectations on the dimension 'continuity of care' had a significant relationship with frequent attendance. Further research should focus on the role of continuity of care in improving the wellbeing of pFAs and FAs and reducing the attendance rate.

Introduction

Some patients visit their general practitioner (GP) more often than others. In literature, the top 10th percentile of patients that visit the GP most frequent are referred to as frequent attenders (FAs). [1-3] Since the attendance rate rises with age and women are known to visit the GP more frequently than men, frequent attenders should be selected adjusted for sex and age. [1,3] FAs form a major problem in general practice. GPs spend a disproportionally amount of time on these patients: about 39% of the face-to-face consultations is spent on FAs and 8% is spent on persistent frequent attenders or pFAs (patients who are a FA during three consecutive years or more, 1.6% of all patients). [4] Not only do FAs and pFAs form an extensive part of the workload of GPs, this group also accounts for substantial health costs in primary and specialist care. Smits et al. [5] found that the mean 3-year costs in pFAs were three times as high as in non-FAs.

Frequent attendance is only a problem when care is inappropriately used [1,6,7]. Some patients need more care than others, e.g. due to their morbidity. FAs, and especially pFAs, more often suffer from psychiatric problems, medically unexplained physical symptoms (MUPS) and chronic somatic diseases compared to non-FAs. Social problems also contribute to frequent attendance; FA is higher in unemployed and divorced or single patients. [3,4] Most FAs frequently attend their GP for a short period of time. However, 15% of the patients that is a FA during one year will become a pFA. [4,8] Smits et al. [6] found that factors that attribute to persistence of frequent attendance are anxiety, negative life events, illness behaviour and lack of mastery.

Besides patient characteristics and morbidity, frequent attendance is also related to patient satisfaction. The EUROPEP group developed a questionnaire to assess patient satisfaction in general practice. [9] A subsequently large European study found that frequent attenders were more positive about their GP and the practice than non-FAs. [10] A Slovenian and a Danish study also found a positive association between patient satisfaction and frequent attendance. [11,12] Patient satisfaction is of influence on patient expectations. If patients' expectations are not met, this has a negative influence on patient satisfaction. [13-15] Persistence of frequent attendance might also be a sign of undiagnosed problems or unmet needs and expectations that are not recognized by the GP. [6,7] Little is known about the needs and expectations of FAs, although it is known that patients with MUPS more often seek emotional support than patients with medically explained symptoms. [16] Studies of expectations in the general population have shown that patients more often want information and support than medical treatment or examinations. [13,17]

The clinical relevance and reason of this study is twofold; on the one hand FAs form a burden on GPs and account for substantial health care expenditures, on the other hand frequent attendance might be a sign of unmet expectations. Little is known about the expectations of (p)FAs towards the GP. Therefore, the primary aim is to study the expectations of pFAs, FAs and non-FAs. Furthermore, we would like to investigate if expectations contribute to (persistence of) frequent attendance.

The main question of this project is: What do (persistent) frequent attenders expect from the general practitioner and the practice on several aspect of care, and are these expectations related to (persistent) frequent attendance?

In order to answer this question, we formulated several sub-questions:

- What are patient characteristics of FAs, pFAs and non-FAs? Is there a difference between FAs, pFAs and non-FAs?
- What is the morbidity of FAs, pFAs and non-Fas? Is there a difference between FAs, pFAs and non-FAs?

- What are expectations of FAs, pFAs and non-FAs towards their GP and the practice on several aspects of care? Is there a difference between FAs, pFAs and non-FAs?
- How satisfied are FAs, pFAs and non-FAs with their GP and the practice on several aspects of care? Is there a difference between FAs, pFAs and non-FAs?

Method

Setting

This study took place at the department of General Practice / Family Practice at the Academic Medical Centre of the University of Amsterdam. Data of a primary care practice / student health service were used. This practice is located in the centre of Amsterdam (Huisartsen Oude Turfmarkt / Bureau Studentenartsen). There are nine general practitioners working at this practice and 12,000 patients are enlisted. The practice is mainly focused on students; 7000 of the 12,000 patients are students or recently graduated.

Procedure

This is a case control study that used data from electronic files and questionnaires. The study took place during a period of 16 weeks between September and December 2017.

Electronic files

Data were extracted from the electronic files in OmniHis (Huisartsen Informatie Systeem). For each patient the following data were extracted: sex, patient number, date of birth, total number of contacts for each year of the study period (2014 – 2016), email address and ICPC codes. For the total number of contacts, only contacts with the GP were taken into account (face-to-face consultations, telephone contacts, e-consultations, house visits).

Questionnaires

All included patients who had an email address and were still registered at the practice received an invitation for the questionnaire by email. The email contained a link to the anonymous questionnaire, for which the program NETQ-PRO from Survalyzer was used. After giving their informed consent, patients could choose between a Dutch or English questionnaire. If a reply had not been received within one week, a reminder was sent. Returned questionnaires were stored and processed anonymously.

Sample

All patients \geq 15 years who were enlisted at the practice between 2014 – 2016 were eligible. Patients had to be enlisted at all three of these years. Three different subgroups of patients were defined: frequent attenders, persistent frequent attenders and non-frequent attenders.

Selection of FAs, pFAs and non-FAs

Frequent attenders were defined as those patients whose attendance rate ranked nearest to the top 10%, adjusted for age (15-30, 31-45, 45-60, 61+) and sex. We also included patients with no attendance. [1,3] For each of the years 2014, 2015 and 2016 the data were divided into eight files (four age categories per sex). For each subfile the frequent attenders were identified. This data were then combined into three different files: FAs in 2014, FAs in 2015 and FAs in 2016. The group of FAs consisted of patients who were FAs during one or two years (consecutive or non-consecutive) and the group of pFAs of patients who were FAs during all three years. [4]

Non-FAs were used as reference group. Non-FA was defined as patients of whom the total number of contacts was equal to the average of this practice (adjusted for age and sex). There is no consensus in literature on how to define non-FA. Smits et al. [4,5] used all patients who were never a frequent attender in the study period. We reasoned that this method might lead to a heterogenic group including both patients who were one visit short of being a FA and patients avoiding care or patients without complaints. A review by Vedsted et al. [3] described multiple methods, among which individual matching or using a fixed cut-off point (e.g. three contacts or less). Matching was not option since there are numerous variables to match on. Given the limited period in which this study had to be completed, matching was too much work. Using a fixed cut-off point was also not suitable for our study, since this method is mainly used when the definition of FA is based on an absolute threshold.

Variables

The variables age, sex and morbidity were obtained from the electronic files. The other variables were obtained through the questionnaire. Items on the questionnaire were (1) characteristics, (2) expectations towards the GP and the practice and (3) satisfaction with the GP and the practice. The English and Dutch versions of questionnaire are added in appendix 4 and 5.

Patient characteristics

Characteristics that were included are:

- Age.
- Sex.
- Highest educational qualification.
- Employment status.
- Marital status.
- Living situation.
- Treatment of a medical specialist / psychologist.
- Number of visits to the emergency room in the past year.
- Number of visits to the out-of-hours general practice in the past year.

Morbidity

Four main groups of morbidity were defined according to previous research that has shown that (p)FAs more often suffer from certain problems. [3,4] This resulted in the following groups:

- Chronic somatic diseases.
- Psychiatric problems.
- Medically unexplained physical symptoms (MUPS).
- Social problems.

We used the International Classification of Primary Care (ICPC) codes from the electronic files to determine morbidity. [18] Active problems and ICPC codes that were registered in the study period were extracted (e.g. the data sheet of 2014 contained the ICPC codes per patient that were registered in 2014). To define the different morbidity groups we used a list of ICPC codes provided by Smits et al. [4] We added HIV and AIDS to the list of chronic somatic diseases. ICPC codes that were not on the list were not used. See appendix 6 for the list of ICPC codes.

Satisfaction

The EUROPEP questionnaire was used to determine patient satisfaction. This is a validated measurement instrument that was developed in 2000 to assess patient satisfaction in general practice. [9] It was developed to provide an international comparison and has been validated in 16 European countries, including the Netherlands. The questionnaire consists of 23 items. Patients

were asked on their opinion of the general practitioner and/or the general practice on different items over the last 12 months. The chosen items on the questionnaire were based on a literature review to define patient priorities. [19] Items were rated on a 5-point scale from 'poor' to 'excellent'. We chose to use this questionnaire since it was developed to measure satisfaction in general practice and has been validated in the Netherlands.

A confirmatory factor analysis was performed to divide the 23 items of the EUROPEP questionnaire into different dimensions. This was done separately for 'expectations' and 'satisfaction'.

Expectations

To measure expectations that could be compared to satisfaction on the different aspects one-toone, we decided to extend the EUROPEP questionnaire. For each items two questions were asked: how satisfied are you with this item and how important is this item to you? Items were rated on a 5point scale from 'very unimportant' to 'very important'. Since this study was conducted in a large practice with nine different GPs, we decided to add questions on continuity of care.

Statistical analysis

SPSS version 24 was used to build the database and to perform the statistical analysis. Statistical significance was set at p < 0.05.

Characteristics and morbidity

The variables sex, educational level, work situation, marital status, living situation, treatment of a medical specialist and treatment of a psychologist were compared by the Chi-squared test. We performed three analyses: FAs vs. non-FAs, pFAs vs. non-FAs and FAs vs. pFAs.

The variables age, number of visits to the emergency room and number of visits to the out-of-hours general practice were compared using one-way ANOVA. The variables 'visits to the emergency room' and 'visits to the out-of-hours general practice' were non-normal distributed. We used one-way ANOVA, since this is robust to the normality assumption. Since the sample sizes differed among the groups, the Levene's test was used to test the assumption of homogeneity of variances. Post-hoc tests were used to assess the differences among the specific groups in case results of the one-way ANOVA were significant. If equal variances were assumed, Tukey's HSD test was used. If equal variances were not assumed, Games-Howell test was used.

Relative risks were calculated to describe the differences in morbidity between the groups. Both pFAs and FAs were compared to non-FAs.

Expectations and characteristics

A confirmatory factor analysis was performed to identify different dimension of the EUROPEP questionnaire for both 'expectations' and 'satisfaction'. Reliability coefficients (Cronbach's alpha) were calculated per dimension (see appendix 7 and 8).

Since we combined multiple Likert question responses per dimension, we regarded this as interval data. For each dimension the mean of the Likert scores were calculated. This data followed a fairly normal distribution and therefore one-way ANOVA was used to compare the means amongst the groups. Levene's test was used to test the assumption of homogeneity of variances and post-hoc tests were uses to assess the differences among the groups.

Correlation table

A correlation table with Pearson correlation coefficients was made to compare the different variables (see appendix 9). By using the date of birth we calculated the age of the patients on

December 1th 2017, the closure date of the questionnaire. We reduced the total number of variables by transforming some of the characteristics into dichotomous variables. This was done for the variables 'educational qualification', 'employment status', 'marital status' and 'living situation' (see appendix 9). For the variable 'continuity of care' we combined the questions 'How important is it to you to usually get an appointment with the same general practitioner?' and 'l prefer to get an appointment as soon as possible, even if this means that I don't get an appointment with the doctor that I prefer'.

Logistic regression

A logistic regression analysis was performed to assess the relationship between expectations and (persistent) frequent attendance. We separately analysed the influence of the different dimensions of expectations and the influence of the overall expectations (see appendix 10 and 11). We compared non-FAs to pFAs and FAs, and we compared pFAs to FAs. We corrected for the characteristics and morbidity groups named above and for satisfaction, since these factors are related to frequent attendance. [3,4,10-12]

Results

Sample

FAs, pFAs and non-FAs

A total of 11,656 patients were enlisted at the practice between 2014 – 2016. Of these patients 11,138 were 15 years or older in 2016. The group of frequent attenders consisted of 1900 patients, of whom 1347 (70.9%) were 1-year FAs and 553 (29.1%) were 2-years FAs. 281 patients were a persistent frequent attender, this is 2.4% of all patients enlisted between 2014 – 2016. The group of non-FAs consisted of 1522 patients.

Figure 1. Total number of patients and response on the questionnaire



- a. Frequent attenders (1 year and 2 year)
- b. Persistent frequent attenders (3 year)
- c. Non-frequent attenders

Response on questionnaire

All patients who had an email address and were still registered at the practice received a questionnaire. This resulted in 2259 patients, of whom 1253 FAs, 221 pFAs and 785 non-FAs. The total response rate was 24% (n = 540), with the response rate being the highest in the pFAs (31%). Of these 540 patients, 492 (91%) completed the questionnaire. This is also illustrated in figure 1.

Patient characteristics

Number of contacts

The mean number of contacts with the GP (face-to-face consultations, telephone contacts, econsultations, house visits) was highest in pFAs and lowest in non-FAs. One-way ANOVA showed statistically significant differences between all three group means (p < 0.001). Equal variances were not assumed (Levene's test, p < 0.001), therefore the Games-Howell post-hoc test was used to assess the differences between the specific groups. Both FAs and pFAs had significantly more contacts than non-FAs (p < 0.001 for both). Furthermore, pFAs had significantly more visits than FAs (p < 0.001). See table 1

Table 1. Number of contacts with the general practitioner

	FAs	pFAs	Non-FAs
	(n = 1900)	(n = 281)	(n = 1522)
No. of contact with the	15.5 (SD 7.79)	23.8 (SD12.88)	3.5 (SD 1.65)
GP (mean and SD) ^a			
One-way ANOVA ^b	p < 0.001		
Games-Howell ^c	p < 0.001 (vs. non-FAs)	p < 0.001 (vs. non-FAs)	
	p < 0.001 (vs. pFAs)		

a. Contacts with the general practitioner (face-to-face consultations, telephone contacts, econsultations, house visits)

- b. Means compared by one-way ANOVA, overall significance between the three groups
- c. Means compared by Games-Howell post-hoc test, significance between specific groups

Sex and age

All three groups (FA, pFA and non-FA) included more women than men. The percentage of women was highest in pFAs and lowest in non-FAs, but the differences between the groups were not significant (see table 2).

The majority of the patients was 30 years or younger and the mean age varied from 30.6 to 35.1 years, with the highest mean age in pFAs and the lowest in non-FAs. One-way ANOVA showed statistically significant differences between all three group means (p < 0.001). Equal variances were not assumed (Levene's test, p < 0.001), therefore the Games-Howell post-hoc test was used to assess the differences between the specific groups. Both FAs and pFAs were significantly older than non-FAs (p = 0.004 and p < 0.001, respectively). Furthermore, pFAs were significantly older than FAs (p < 0.001). This is also shown in table 2.

Table 2. Sex and age of FAs, pFAs and non-FAs

	FAs	pFAs	Non-FAs
	(n = 1900)	(n = 281)	(n = 1522)
Male / Female ^a	41.4 / 58.6	37.7 / 62.3	43.0 / 57.0
	p = 0.362 (vs. non-FAs)	p = 0.102 (vs. non-FAs)	
	p = 0.239 (vs. pFAs)		

Age, mean and SD ^b	31.8 years (SD 11.77)	35.1 years (SD 13.44)	30.6 years (SD 10.69)
One-way ANOVA ^c	p < 0.001		
Games-Howell ^d	p = 0.004 (vs. non-FAs)	p < 0.001 (vs. non-FAs)	
	p < 0.001 (vs. pFAs)		

15-30 years (%)	61.7	49.1	64.8
31-45 years (%)	23.9	29.9	23.3
46-60 years (%)	12.4	16.4	10.3
≥61 years (%)	2.1	4.6	1.6

a. Percentages compared by Chi-squared test (FAs vs. non-FAs, pFAs vs. non-FAs, FAs vs. pFAs)

b. Age on January 1th 2014, means compared by one-way ANOVA

c. Means compared by one-way ANOVA, overall significance between the three groups

d. Means compared by Games-Howell post-hoc test, significance between specific groups

Other characteristics

The percentage of patients with a higher degree, in a relationship and living together was highest in non-FAs and lowest in pFAs, but the differences were not significant. Unemployment was significantly higher among pFAs compared to non-FAs (p < 0.001) and compared to FAs (p < 0.001). The results are shown in table 3.

	FAs	pFAs	Non-FAs
Educational level	90.1	89.9	94.1
(% higher education) ^a	n = 302	n = 69	n = 169
	p = 0.134 (vs. non-FAs)	p = 0.251 (vs. non-FAs)	
	p = 0.958 (vs. pFAs)		
Work	10.3	31.9	7.1
(% unemployed)	n = 302	n = 69	n = 169
	p = 0.253 (vs. non-FAs)	p < 0.001 (vs. non-FAs)	
	p < 0.001 (vs. pFAs)		
Marital state	62.2	52.2	64.5
(% in relationship) ^b	n = 302	n = 69	n = 169
	p = 0.628 (vs. non-FAs)	p = 0.077 (vs. non-FAs)	
	p = 0.123 (vs. pFAs)		

Table 3. Characteristics of FAs, pFAs and non-FAs

Living situation	60.4	55.9	61.5
(% living together) ^c	n = 302	n = 68	n = 169
	p = 0.841 (vs. non-FAs)	p = 0.422 (vs. non-FAs)	
	p = 0.474 (vs. pFAs)		

Percentages compared by Chi-squared test (FAs vs. non-FAs, pFAs vs. non-FAs, FAs vs. pFAs).

- a. Lower educational level: primary school, high school or equivalent. Higher educational level: bachelor or master's degree, PhD.
- b. Married or in a relationship.
- c. Living with spouse, partner, family, friends or roommates.

Use of other health care services

FAs and pFAs made more use of other health care services compared to non-FAs. Both FAs and pFAs were more often being treated by a medical specialist compared to non-FAs (p = 0.008 and p < 0.001 respectively). Furthermore, pFAs were more often treated by a medical specialist compared to FAs (p < 0.001). The percentage of pFAs that received treatment from a psychologist was significantly higher than in FAs (p = 0.002) and in non-FAs (p < 0.001).

The mean number of visits to the out-of-hours practice was highest in pFAs and lowest in non-FAs. One-way ANOVA showed statistically significant differences between all three group means (p = 0.030). Equal variances were not assumed (Levene's test, p = 0.001), therefore the Games-Howell post-hoc test was used to assess the differences between the specific groups. FAs had significantly more visits to the out-of-hours GP practice than non-FAs (p = 0.037). There were no significant differences between pFAs and non-FAs (p = 0.085) and pFAs and FAs (p = 0.649).

The mean number of visits to the emergency room was also highest in pFAs and lowest in non-FAs. One-way ANOVA showed no statistically significant differences between all three group means (p = 0.121). Results are shown in table 4.

	FAs	pFAs	Non-FAs
Treatment of	31.2	56.7	19.8
medical specialist	n = 301	n = 67	n = 167
(%) ^a	p = 0.008 (vs. non-FAs)	p < 0.001 (vs. non-FAs)	
	p < 0.001 (vs. pFAs)		
Treatment of	17.7	34.8	12.0
psychologist (%) ^a	n = 300	n = 66	n = 167
	p = 0.105 (vs. non-FAs)	p < 0.001 (vs. non-FAs)	
	p = 0.002 (vs. pFAs)		

Table 4. Use of other health care services

No. of visits to out-	1.76 (SD 2.85)	2.14 (SD 3.2)	1.23 (SD 1.69)
of-hours GP past	n = 299	n = 65	n = 166
year (mean and SD)			
One-way ANOVA ^b	p = 0.030		
Games-Howell ^c	p = 0.037 (vs. non-FAs)	p = 0.085 (vs. non-FAs)	

No. of visits to the	0.18 (SD 0.47)	0.28 (SD 0.72)	0.13 (SD 0.44)
ER in past year	n = 299	n = 65	n = 165
(mean and SD)			
One-way ANOVA ^b	p = 0.121		

a. Percentages compared by Chi-squared test (FAs vs. non-FAs, pFAs vs. non-FAs, FAs vs. pFAs)

b. Means compared by one-way ANOVA, overall significance between the three groups

c. Means compared by Games-Howell post-hoc test, significance between specific groups

Morbidity

Table 5 shows the prevalences of the different morbidity categories in FAs, pFAs and non-FAs. The most important finding is that for all the categories the prevalence is highest in the pFAs and lowest in the non-FAs. The relative risks are especially high for chronic somatic diseases (RR 5.5) and social problems (RR 9.7) in pFAs.

Another important finding is the high percentage of psychiatric problems in especially the pFAs. During the processing of the data we noticed that there was a large proportion of patients coded with 'fear of venereal disease' in the category 'anxious feelings'. Table 5 shows two rows for 'psychiatric problems'. The upper row includes the ICPC-code 'fear of venereal disease', the lower row excluded this ICPC-code. After exclusion, the proportion of psychiatric problems was still considerably large in especially pFAs (81.4%).

Table 5. Morbidity of FAs and pFAs compared to non-FAs: prevalence (%) and relative risk	with
95% CI	

	FAs	pFAs	Non-FAs
	(n = 1900)	(n = 281)	(n = 1522)
Chronic somatic diseases	22.4	47.3	8.6
	RR 2.6 (2.2 - 3.1)	RR 5.5 (4.5 – 6.8)	
 Diabetes mellitus 	2.2	6.8	0.3
Cardiovascular disease	6.3	13.5	2.5
Respiratory disease	16.2	35.9	6.1
HIV / AIDS	0.9	2.5	0.1
Psychiatric problems ^a	48.4	86.1	24.1
	RR 2.0 (1.8 – 2.2)	RR 3.6 (3.2 – 4.0)	
 P-codes ^b 	38.5	77.9	16.6
Anxious feelings	25.5	54.1	12.7
Depressed feelings	9.9	28.8	3.7
Addiction	4.9	13.9	1.4
Psychiatric problems ^c	41.3	81.4	18.5
	RR 2.2 (2.0 – 2.5)	RR 4.4 (3.9 – 5.0)	
 Anxious feelings 	13.3	33.5	6.1
MUPS ^d	36.4	69.3	16.4
	RR 2.2 (1.9 – 2.5)	RR 4.2 (3.7 – 4.8)	

Social problems	7.6	24.9	2.6
	RR 3.0 (2.1 – 4.2)	RR 9.7 (6.7 – 14.1)	

Prevelances are noted as percentage of the total number of patients in the group

a. Including ICPC-code 'fear of venereal disease' in the category 'anxious feelings'

b. All patients with one or more ICPC P-code

c. Excluding ICPC-code 'fear of venereal disease' in the category 'anxious feelings'

d. MUPS = medically unexplained physical symptoms

Expectations

Factor analysis and reliability

The factor analysis resulted in four different dimensions: doctor-patient relationship, medical care, information and support, and organisation of care. The reliability coefficients were respectively 0.77, 0.72, 0.78 and 0.76 (see appendix 7).

Comparison among groups

Mean scores were calculated per dimension. All three groups had the highest expectations on 'doctor-patient relationship' and lowest on 'medical care' (see table 6). On all dimensions, FAs and pFAs scored slightly higher compared to non-FAs.

One-way ANOVA was performed to assess differences between all three groups. This showed only a significant difference among the mean scores for 'doctor-patient relationship' (p = 0.030). Levene's test showed that equal variances were assumed (p = 0.163). Therefore Tukey's post-hoc test was used to assess the differences between the specific groups. FAs had higher expectations than non-FAs on this dimension (p = 0.022). No significant differences were found between pFAs and non-FAs (p = 0.401) and FAs and pFAs (p = 0.864) on the dimension 'doctor-patient relationship'. There were no significant differences for the other dimensions.

Table 7 shows the results for 'continuity of care'. One-way ANOVA showed a significant difference between the three groups (p < 0.001). Equal variances were not assumed for the dimension on the Levene's test (p < 0.001). Therefore Games-Howell post-hoc test was used to assess the differences between the specific groups. Both FAs and pFAs have higher expectations on continuity of care compared to non-FAs (p = 0.012 and p < 0.001 respectively). Furthermore, pFAs had higher expectations than FAs (p = 0.002).

The percentage of patients that usually gets an appointment with the same practitioner is also higher in both groups compared to non-FAs (p = 0.041 for FAs, p = 0.022 for pFAs).

Table 6. Mean and SD of the Likert scores per dimension of expectations

	FAs	pFAs	Non-FAs
Doctor-patient	4.46 (SD 0.48)	4.42 (SD 0.66)	4.33 (SD 0.51)
relationship	n = 293	n = 65	n = 162
One-way ANOVA ^a	p = 0.030		
Tukey ^b	p = 0.022 (vs. non-FAs)	p = 0.401 (vs. non-FAs)	
	p = 0.864 (vs. pFAs)		

Medical care	4.00 (SD 0.58) 3.91 (SD 0.57)		3.88 (SD 0.60)	
	n = 288	n = 65	n = 162	
One-way ANOVA ^a	<i>p</i> = 0.094			
Information and	4.07 (SD 0.55)	3.98 (SD 0.60)	3.98 (SD 0.60)	
support	n = 281	n = 64	n = 160	
One-way ANOVA ^a	p = 0.215	·	·	
Organisation of care	4.01 (SD 0.55)	3.93 (SD 0.61)	3.91 (SD 0.57)	
	n = 278	n = 64	n = 160	
One-way ANOVA ^a	p = 0.130			

a. Means compared by one-way ANOVA, overall significance between the three groups

b. Means compared by Tukey's post-hoc test, significance between specific groups

Table 7. Continuity of care

	FAs	pFAs	Non-FAs
	(n = 277)	(n = 64)	(n = 160)
Item 1 ^a (mean and SD)	3.04 (SD 0.84)	3.41 (SD 0.75)	2.78 (SD 0.96)
One-way ANOVA ^b	p < 0.001		
Games-Howell ^c	p = 0.012 (vs. non-FAs)	P < 0.001 (vs. non-FAs)	
	p = 0.002 (vs. pFAs)		
Item 2 ^d	58.8 / 41.2	65.6 / 34.3	48.7 / 51.3
(yes / no %)	p = 0.041	p = 0.022	

a. Mean of the questions 'How important is it to you to usually get an appointment with the same general practitioner (1 = very unimportant, 5 = very important)?' and 'I prefer to get an appointment as soon as possible, even if this means that I don't get an appointment with the doctor that I prefer (1 = agree, 3 = depending on the problem, 5 = disagree)

- b. Means compared by one-way ANOVA, overall significance between the three groups
- c. Means compared by Games-Howell post-hoc test, significance between specific groups
- d. Question 'Do you usually get an appointment with the same general practitioner?' Percentages compared by Chi-squared test

Satisfaction

Factor analysis and reliability

The same dimensions as for expectations were used. Reliability coefficients were 0.88 for 'doctorpatient relationship', 0.86 for 'medical care', 0.89 for 'information and support' and 0.83 for 'organisation of care' (see appendix 8).

Comparison among groups

In general, patients are very satisfied with the practice (see table 8). For all three groups, satisfaction was highest on the dimension 'doctor-patient relationship' and lowest on the dimension 'organisation of care'. One-way ANOVA showed no statistical significant differences.

	FAs	pFAs	Non-FAs	
Doctor-patient relationship	4.16 (SD 0.70)	4.17 (SD 0.74)	4.05 (SD 0.66)	
	n = 275	n = 63	n = 158	
One-way ANOVA ^a	p = 0.283			
Medical care	3.90 (SD 0.74)	3.76 (SD 0.77)	3.85 (SD 0.66)	
	n = 274	n = 63	n = 157	
One-way ANOVA ^a	<i>p</i> = 0.380			
Information and support	3.90 (SD 0.72) 3.83 (SD 0.86) 3.81 (SD 0.70)		3.81 (SD 0.70)	
	n = 274	n = 63	n = 157	
One-way ANOVA ^a	p = 0.448			
Organisation of care	3.60 (SD 0.72)	3.62 (SD 0.71)	3.54 (SD 0.76)	
	n = 273	n = 63	n = 156	
One-way ANOVA ^a	<i>p</i> = 0.618			

Table 8. Mean and SD of the Likert scores per dimension of satisfaction

a. Means compared by one-way ANOVA, overall significance between the three groups

Logistic regression analysis

Non-FAs vs. pFAs and FAs

The overall expectations had a significant relationship with frequent attendance when non-FAs were compared to pFAs and FAs (p = 0.003). This effect however disappeared when we corrected for characteristics, morbidity and satisfaction (p = 0.115). Looking at the different dimensions, 'doctor-patient relationship' and 'continuity of care' had a significant relationship with frequent attendance (p = 0.011 and p < 0.001 respectively). For 'doctor-patient relationship', this effect disappeared when we corrected for characteristics, morbidity and satisfaction (p = 0.086). 'Continuity of care' remained a significant factor after correction (p = 0.011). Furthermore, age and morbidity had significant relationships with frequent attendance (see appendix 10).

pFAs vs. FAs

There was no significant relationship between overall expectations and frequent attendance when pFAs were compared to FAs (p = 0.317 after correction). Of the different dimensions, only 'continuity of care' had a significant relationship with frequent attendance (p = 0.002). This effect disappeared after correction (p = 0.101). Again, morbidity was a significant factor (see appendix 11).

Discussion

Main findings and comparison with existing literature

Our findings on characteristics are in line with previous research. [3,4] pFAs and FAs were older compared to non-FAs, even though we adjusted for age beforehand. The percentage of patients with a higher degree, in a relationship and living together was highest in non-FAs and lowest in pFAs, but the differences were not significant. Unemployment was significantly higher among pFAs compared to FAs (p < 0.001) and non-FAs (p < 0.001). The high proportion of pFAs being unemployed, being single and living alone could be an indication for loneliness or social isolation. This was also described by Vedsted et al. [20] and Hand et al. [21]

Other studies confirmed our results on morbidity. [3,4] pFAs and FAs more often suffered from chronic somatic diseases, psychiatric problems, MUPS and social problems compared to non-FAs. Furthermore, FAs and pFAs made more use of other health care services compared to non-FAs, which was confirmed by Kersnik et al. [11]

Satisfaction and expectations were divided into four different dimensions: doctor-patient relationship, medical care, information and support, and organisation of care. Regarding satisfaction, all three groups scored highest on the dimension 'doctor-patient relationship' and lowest on 'organisation of care'. Remarkably, we found no significant differences among the groups. This is in contrast to previous research. [10-12] These studies also used the EUROPEP questionnaire, but had a different study design than we had. Grol et al. [10] and Kersnik et al. [11] used an absolute instead of a proportional threshold to define frequent attendance. Heje et al. [12] found a positive association between satisfaction and increasing attendance rate, but did not compare FAs to non-FAs.

Regarding expectations, all three groups had the highest expectations of 'doctor-patient relationship'. Both pFAs and FAs had higher expectations on the dimension 'continuity of care' compared to non-FAs. The proportion of patients who usually get an appointment with the same general practitioner was highest among pFAs and lowest among non-FAs. The regression analysis showed that expectations on the dimension 'continuity of care' had a significant relationship with frequent attendance. This is in line with previous research, that showed that a higher attendance rate is related to a greater continuity of care. [22,23]

Strengths and limitations

This study was conducted in one practice, therefore the results are not generalizable. More than half of the patients enlisted at the practice are students. This was reflected in the study sample. More than half of the patients were 30 years or younger and the mean age of the different groups varied from 31 to 35 years. However, the associations we found between frequent attendance with characteristics and morbidity are similar to previous research. [3,4] Furthermore, the practice is quite large with nine general practitioner and approximately 12,000 patients enlisted.

Several forms of bias can result from using a questionnaire. There could be differences between responders and non-responders, for example if patients that are very satisfied are more likely to respond. Even though there was a limited timeframe of two weeks, the response rate of 24% was acceptable. There is selection bias because patients who did not have an email address were excluded, it is plausible that this are mainly older patients. Patients who were no longer enlisted at the practice were also excluded, this could be of influence on the results of satisfaction if dissatisfaction was the reason for deregistration. Of all returned questionnaires, 9% was incomplete. This can be explained by the fact that the questionnaire was quite long, it consisted of 59 questions.

We defined non-FA as patients of whom the total number of contacts was equal to the average of this practice (adjusted for age and sex). By excluding patients which are close to being an FA or patients who avoid care, we tried to keep heterogeneity to a minimum. The frequent attenders of course elevate the average number of contacts and the exclusion of patients who did not attend the practice in the study period causes bias.

Implications for clinical practice and further research

The doctor-patient relationship is more important to pFAs and FAs than medical care, information and support, and organisation of care. Furthermore, continuity of care is more important to pFAs and FAs than to non-FAs. Continuity was also significantly associated with frequent attendance.

Previous research has also shown that continuity of care is associated with improved preventive care, reduced hospitalization and lower mortality in elderly. [24,25]

Continuity of care could play a role in interventions aimed at treating pFAs and FAs. Previous research has already shown that a team care approach in FAs resulted in a significant reduction in the number of consultations [26] and an improvement in wellbeing and satisfaction, compared to a control group. [27] Further research should focus on the role of continuity of care in improving the wellbeing of pFAs and FAs and reducing the attendance rate.

The results also have implications for the practice where this study was conducted. The high proportion of pFAs being unemployed, being single and living alone could be an indication for loneliness or social isolation. This issue will be discussed between GPs and pFAs and possible solutions (e.g. initiatives provided by social services) will be offered. Furthermore, we found that the prevalence of psychiatric problems was especially high in pFAs, 81.4% (after exclusion of ICPC-code 'fear of venereal disease'), with only 34.8% visiting a psychologist. It is possible that GPs are unable to deliver the appropriate care and that other health care providers (e.g. psychologists) could play a role.

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Abbreviation list

FA	Frequent attender
GP	General practitioner
ICPC	International Classification of Primary Care
MUPS	Medically unexplained physical symptoms
pFA	Persistent frequent attender

Accomplishment of learning goals

The research is a self-contained project; it is not part of a larger project. The student, with help of the tutors, carried out the project.

This project has learned me about the different aspect of scientific research. Almost every aspect was new to me and there were some challenges that I had to overcome. Writing the research proposal taught me how to do a background research and to look for gaps in currents knowledge, define a clear research question and set up a research design. Beforehand I was a bit worried about the statistical analysis, since I had no experience in this area. The e-learning on biostatistics turned out to be very helpful and afterwards I really enjoyed engaging myself with the analysis. I learned very much about the different types of analyses and how to apply and interpret them.

Approved project plan

Naam / name student: Jenneke Leen	Student nummer: 6161596
Project titel / project title:	
Frequent attendance in general practice: patient characteristics	, satisfaction and expectations.

Onderzoekslijn (circa 250 woorden):

The project will take place from the department of General Practice / Family Medicine at the AMC and I will be stationed at Huisartsen Oude Turfmarkt / Bureau Studentenartsen. This is a multicentre primary care practice / student health service that is located in the centre of Amsterdam. The practice was established in 1938 as a primary care setting solely for students. In 1981 the practice was turned into a full primary care practice where all sorts of patients were welcome. This is a multicentre practice where nine general practitioners are working. In total there are 12,000 patients enrolled. The practice is still focused on students; 7000 of the 12,000 patients are students or are recently graduated. The remaining 5000 patients consist of former students or people who live in the care area of this practice and have all sorts of education levels.

The department of General Practice / Family Medicine at the AMC has a research line on problems which emerge from daily practice. Several articles on frequent attendance have been published from this research line (see references). The practice at Oude Turfmarkt has a research department where several students will be working on different research projects. The research department has performed studies mainly about health issues among students (see references). A GP and a research tutor from the Huisartsen Oude Turfmarkt and a senior tutor from the AMC will supervise the project.

References on articles that have been published from the AMC on the subject of frequent attendance:

- Smits, F. T. M., Mohrs, J. J., Beem, E. E., Bindels, P. J. E., & Weert, H. C. P. M. Van. (2008). Defining frequent attendance in general practice. BMC Family Practice, 9:21. doi:10.1186/1471-2296-9-21
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References on articles that have been published from this practice at Oude Turfmarkt:

- C. van der Heijde, A. Konijn, P. Vonk. F. Meijman. De webagenda: speelruimte om toegankelijkheid van de praktijk te verhogen. Huisarts en Wetenschap, 2016.
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Achtergrond en probleemstelling (circa 500 woorden):

Some patients visit their GP more often than others. In literature, the top 10th percentile of patients that visit the GP most frequent are referred to as frequent attenders (FAs). [1] FAs from a major problem in general practice. GPs spend a disproportionally amount of time on these patients: about 39% of the face-to-face consultations is spent on FAs and 8% is spent on persistent frequent attenders or pFAs (patients who are a FA during three consecutive years or more). [2] Not only do FAs and pFAs form an extensive part of the workload of GPs, this group also accounts for substantial health costs. Previous research has shown that costs in primary and specialist care are significantly higher for (p)FAs. [3]

Frequent attendance is related to the sex and age of the patient; the attendance rate rises with age and women are known to visit the GP more frequently. [1] pFAs and FAs more often suffer from psychiatric problems, medically unexplained physical symptoms and chronic somatic diseases. Social problems also contribute to frequent attendance; FA is higher in unemployed and divorced patients. [2,4] One out of seven patients that is a FA during one year will become a pFA. [2] Factors that attribute to persistence of frequent attendance are panic disorder, other anxiety, negative life events, illness behaviour and lack of mastery. [5]

Frequent attendance might also be influenced by the GP-patient relationship. A positive GP-patient relationship is related to better treatment adherence and patient satisfaction [6] and results in fewer referrals. [7]

Previous studies have found that frequent attenders tend to have a stronger relationship with their GP. A Slovenian study found a positive relationship between patient satisfaction and frequent attendance. [8] A Danish study showed similar results, a positive GP-assessment was associated with frequent attendance and also with higher age. [9]. Fenton et al found that higher patient satisfaction was associated with higher inpatient admissions and higher health care expenses. [10] A German study, on the other hand, did not find a relationship between the quality of the GP-patient relationship and frequent attendance of GPs and medical specialists. [11]

The aim of this paper is to research if patient satisfaction and expectations towards the GP are related to patient characteristics of (p)FAs. It is also the aim to measure if characteristics in this particular practice are similar as the literature learns. By finding out what (p)FAs expect from their GP, we hope to make a step towards effective interventions that may reduce the attendance rate. Based on what (p)FAs are diagnosed with, they will be divided into the following groups: chronic somatic disease, psychiatric problems, medically unexplained physical problems and social problems. This is according to the previous research that has shown that (p)FAs more often suffer from these problems. [2,4] To our knowledge, an association between patient satisfaction / expectations and diagnoses made in (p)FAs has not yet been researched.

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Vraagstelling en/of hypothese (circa 150 woorden)

The main question is: what are patient characteristics of (p)FAs in this particular practice and are they related to patient satisfaction and expectations towards the GP?

In order to answer this question, there are several sub-questions that I would like to answer:

- What are patient characteristics of pFAs and FAs? Characteristics being age, sex, total years
 of education (≤8 years, 9-12 years, ≥13 years), employment status (employed, nonemployed, student), marital status (married, divorced, widowed, in a relationship),
 treatment of a medical specialist/psychologist and number of visits to the emergency
 department.
- What are pFAs and FAs most frequently diagnosed with?
- How satisfied are pFAs and FAs with the practice and with their GP? What are their expectations towards their GP?

Onderzoeksopzet (circa 500 woorden):

This is a cohort study that will take place from Huisartsen Oude Turfmarkt / Bureau Studentenartsen. This is a multicentre primary care practice / student health service that is located in the centre of Amsterdam. The project will run from September – December 2017.

All patients ≥17 years who are able to read and write Dutch or English and are enrolled at the practice are eligible. Patients will be selected from data that is extracted from the electronic files in HIS (Huisartsen Informatie Systeem). Data sheets with are already available (including name, patient number, sex, date of birth, total number of contacts with the GP).

Frequent attenders are defined as the top 10% of patients with the highest attendance rate in four age groups (17-30, 31-45, 46-60, 61+), separately for men and women. [1] Frequent attendance will be determined for the years 2014, 2015 and 2016. The group of FAs will consist of patients who were FAs during one or two of those years and the group of pFAs will consist of patients who were FA's during all three years. Only contacts with the GP will be taken into account (consultation at the practice, telephone consultation, e-consultation, house visit).

The included patients will receive a questionnaire by email. Items on the questionnaire are:

- 1. Patient characteristics: total years of education, employment status, marital status, treatment of a medical specialist/psychologist, number of visits to the emergency department.
- 2. Patient satisfaction.
- 3. Expectations towards the GP.

The practice has a general email address that can be used to send the questionnaires and receive the filled in questionnaires. If a reply has not been received within two weeks, a reminder will be send. It is not yet clear which questionnaire will be used. For patient satisfaction, we will use either the EUROPEP or the PDRQ-9 questionnaire. A questionnaire to research expectations will be developed.

Data on age and sex will be obtained from the electronic files, data the other patient characteristics will be obtained from the questionnaire. ICPC codes will be used in order to determine diagnoses and divide patients into groups (chronic somatic disease, psychiatric problems, medically unexplained physical problems and social problems). A grouping used by Smits et al will also be used for this project. [2] The outcome is to determine whether there is a relationship between patient satisfaction / expectations and patient characteristics.

Several forms of bias can result from using a questionnaire. There could be differences between responders and non-responders, for example if patients that are very satisfied are more likely to respond. A limited timeframe can result in limited response. There is selection bias because patients who do not have an email address are excluded.

SPSS will be used to build the database and to perform the statistical analysis. The chi-squared test will be used. Patients who do not return the questionnaire or return an incomplete questionnaire will not be used in the analysis of the comparison between patient satisfaction / expectations and patient characteristics. Statistical significance is set at p < 0.05.

STROBE guidelines were used in order to write this section.

References:

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- 2. Smits, F. T., Brouwer, H. J., Riet, G., & Van, H. C. P. (2009). Epidemiology of frequent attenders : a 3-year historic cohort study comparing attendance, morbidity and prescriptions of one-year and persistent frequent attenders. BMC Public Health, 9:36.

Werkplan en Stage-specifieke leerdoelen (circa 500 WOORDEN):

Week 1-2: I will include the patients and identify the FAs and pFAs. The questionnaire will be completed will and sent to the patients. I will do a background literature research and write the Introduction. As a preparation on academic English writing, I will read the document on English writing that can be found on Blackboard.

Week 3-4: A reminder will be sent to patients who haven't yet returned the questionnaire. Patient

characteristics (age, sex) and ICPC-codes will be obtained from HIS and entered in SPSS. Week 4-5: I will process the returned questionnaires in SPSS and I will write the Method section Week 6: the first evaluation will take place with one of the tutors.

Week 6-7: I will do an e-course on biostatistics that is provided by the University of Amsterdam. The data will be analyzed in SPSS.

Week 8-10: I will write the Results.

Week 11-13: I will write the Discussion.

Week 12: the preliminary report will be handed in.

Week 14-16: the final report will be completed and handed in. I will give my presentation.

Faciliteiten (circa 250 WOORDEN):

In order to successfully perform and complete this project, I will need a workplace with a desk and a computer. There are several workplaces with computers available that I can use. Computers in the practice have SPSS. I will also need access to the electronic medical files, this has already been arranged. My tutors will be working in the same practice, so they will be easy to approach for questions and consultation.

METC, DEC, GGO:

For this project METC-approval is not required.

Professionele ontwikkeling student (circa 250 woorden):

The main goal of this project is to learn how to do a scientific research. Writing this research proposal has already taught me how to do a background research and look for gaps in currents knowledge, define a clear research question and set up a research design and workplan. I hope to learn more about gathering and analyzing data, how to build a database and how do a statistical analysis in SPSS. Especially the statistical analysis in SPSS is going to be a challenge, since I have very little experience with this. Furthermore I hope to learn how to write a paper in academic English and how to present the results from my research.

This subject has my personal interest since I am considering to become a GP myself. I hope that by doing this project I will get more insight in the scientific aspects of general practice. I think that this topic will help me get more insight in frequent attendance and I also think that this will be helpful to me in my further career. If I become a GP, it is inevitable that I will come across this subject during my work.

Questionnaire (English)

Introduction / informed consent

Dear sir/madam,

The general practice Oude Turfmarkt / Bureau Studentenartsen wants to deliver care as good as possible. Once in every while we research the expectations and satisfaction.

We asked a medical student, Jenneke Leen, to perform this research for 2017. She is studying Medicine at the University of Amsterdam / AMC and is doing her master internship at Huisartsen Oude Turfmarkt. We would like to invite you to participate in this questionnaire on expectations and satisfaction.

Purpose of the research:

This research is about the association between patient expectations and satisfaction on medical care and the frequency of the use of care. The purpose of this project is also to find out if patients have unmet needs and expectations.

Items on the questionnaire:

This questionnaire contains questions about personal background information, your health, expectations and satisfaction. Completing the questionnaire takes about 10-15 minutes. If you participate you can win a **Bol.com gift card with a value of €50**.

Voluntary participation and withdrawal:

You can choose whether you want to participate in this questionnaire or not. Participation is voluntary and one-time. You are also free to cancel your participation at any time.

Possible benefits and risks:

By participating you contribute to research on expectations and satisfaction. Results of this research could possibly lead to improvements and optimization of our care.

This research could give you insight to your own expectations and satisfaction. Some questions could lead to mild discomfort. This is however not likely.

Confidentiality:

The questionnaire is completely confidential and your answers will be processed anonymously and on a group-level. Results from this study will be discarded of personal information and will be stored for the next 10 years. Only researchers who are directly involved in this research will have access to the data. The anonymous data may be used in publications or subsequent studies.

Publication of the results:

A report with the results of this study will be posted in due time on the website of Huisartsen Oude Turfmarkt (see subpage 'Artikelen en rapporten' of section 'Wetenschap').

If you have questions or comments, feel free to contact Jenneke.

Kinds regards, Peter Vonk, general practitioner Jenneke Leen, researcher j.leen@amc.uva.nl

- 1. I read and understood this information. I consent voluntarily to participate in this research and give permission to have my responses used for scientific purposes.
- 0. I do not consent to participate in this research.

Characteristics

First we would like to ask you some questions on personal background information.

What is your sex?

- 1. Female.
- 2. Male.

What is your age?

What is your highest educational qualification?

- 1. Primary school
- 2. High school or equivalent
- 3. Bachelor's degree
- 4. Master's degree
- 5. Doctorate (PhD)

What is your current employment status?

- 1. Housewife/-man
- 2. Student
- 3. Employed (parttime work)
- 4. Employed (fulltime work)
- 5. Sick leave / incapacitated / unemployed
- 6. Other, namely

What is your marital status?

- 1. Married
- 2. Divorced
- 3. Widowed
- 4. In a relationship
- 5. Single
- 6. Other, namely

What is your current living situation?

- 1. Living with spouse or partner
- 2. Living with family
- 3. Living with friends or roommates
- 4. Living alone
- 5. Other, namely

Are you currently under treatment of a medical specialist?

- 1. Yes, namely
- 0. No

Are you currently under treatment of a psychologist?

- 1. Yes, for
- 0. No

How often did you visit the emergency department in the past year? How often did you visit the out-of-hours general practice in the past year?

Expectations

This part is about your **expectations** towards the general practitioner and the practice and what is **important** to you. You will see a number of items. You are asked how important these items are to you.

Doctor-patient relationship:

How important are the following items of the general practitioner and/or general practice to you (1 = very unimportant, 5 = very important)?

- 1. Making you feel you have time during consultations
- 2. Interest in your personal situation
- 3. Making it easy for you to tell him or her about your problems
- 4. Involving you in decisions about your medical care
- 5. Listening to you
- 6. Keeping your records and data confidential

Medical care:

How important are the following items of the general practitioner and/or general practice to you (1 = very unimportant, 5 = very important)?

- 7. Quick relief of your symptoms
- 8. Helping you to feel well so that you can perform your normal daily activities
- 9. Thoroughness
- 10. Physical examination of you
- 11. Offering you services for preventing diseases (e.g. screening, health checks, immunisations)

Information and support:

How important are the following items of the general practitioner and/or general practice to you (1 = very unimportant, 5 = very important)?

- 12. Explaining the purpose of tests and treatments
- 13. Telling you what you want to know about your symptoms and / or illness
- 14. Helping you deal with emotional problems related to your health status
- 15. Helping you understand the importance of following his or her advice
- 16. Knowing what he or she had done or told you during contacts
- 17. Preparing you for what to expect from specialist or hospital care

Organisation of care:

How important are the following items of the general practitioner and/or general practice to you (1 = very unimportant, 5 = very important)?

18. The helpfulness of the staff (other than doctor)

19. Getting an appointment to suit you

- 20. Getting through to the practice on the phone
- 21. Being able to speak to the general practitioner on the telephone
- 22. Waiting time in the waiting room
- 23. Providing quick services for urgent health problems

Continuity of care:

In our practice there are several general practitioners. How important is it to you to usually get an appointment with the same general practitioner (1 = very unimportant, 5 = very important)?

Do you usually get an appointment with the same general practitioner?

- 1. Yes
- 0. No

Do you agree or disagree with the following statement?

I prefer to get an appointment as soon as possible, even if this means that I don't get an appointment with the doctor that I prefer.

- 1. Agree
- 3. That depends on what the problem is
- 5. Disagree

Satisfaction

The next part is about how **satisfied** you are with the general practitioner and the practice. You will see the same items as before. Now you are asked how satisfied you are with these items.

Doctor-patient relationship:

Indicate to what extent you agree with the statement (1 = poor, 5 = excellent). What is your opinion of the general practitioner and/or general practice over the last 12 months with respect to...

- 1. Making you feel you had time during consultations?
- 2. Interest in your personal situation?
- 3. Making it easy for you to tell him or her about your problems?
- 4. Involving you in decisions about your medical care?
- 5. Listening to you?
- 6. Keeping your records and data confidential?

Medical care:

Indicate to what extent you agree with the statement (1 = poor, 5 = excellent). What is your opinion of the general practitioner and/or general practice over the last 12 months with respect to...

- 7. Quick relief of your symptoms?
- 8. Helping you to feel well so that you can perform your normal daily activities?
- 9. Thoroughness?
- 10. Physical examination of you?
- 11. Offering you services for preventing diseases?

Information and support:

Indicate to what extent you agree with the statement (1 = poor, 5 = excellent). What is your opinion of the general practitioner and/or general practice over the last 12 months with respect to...

12. Explaining the purpose of tests and treatments (e.g. screening, health checks, immunisations)?

- 13. Telling you what you wanted to know about your symptoms and / or illness?
- 14. Helping you deal with emotional problems related to your health status?
- 15. Helping you understand the importance of following his or her advice?
- 16. Knowing what he or she had done or told you during contacts?

17. Preparing you for what to expect from specialist or hospital care?

Organisation of care:

Indicate to what extent you agree with the statement (1 = poor, 5 = excellent). What is your opinion of the general practitioner and/or general practice over the last 12 months with respect to...

- 18. The helpfulness of the staff (other than doctor)?
- 19. Getting an appointment to suit you?
- 20. Getting through to the practice on the phone?
- 21. Being able to speak to the general practitioner on the telephone?
- 22. Waiting time in the waiting room?
- 23. Providing quick services for urgent health problems?

End of the questionnaire

You have finished the questionnaire. Thank you for your time and co-operation. If you have any comments on the questionnaire, feel free to note them in the box below.

Please fill in your email address in case you want to make a chance at winning one of the Bol.com gift cards with a value of €50.

Questionnaire (Dutch)

Introductie / informed consent

Beste meneer/mevrouw,

De huisartsenpraktijk Oude Turfmarkt / Bureau Studentenartsen wil haar zorg zo goed mogelijk uitvoeren. Eens in de zoveel tijd doen we onderzoek naar de verwachtingen en tevredenheid.

Voor dit onderzoek in 2017 hebben we een student Geneeskunde, Jenneke Leen, gevraagd dit uit te voeren. Zij studeert Geneeskunde aan de Universiteit van Amsterdam / AMC en voor haar masterstage doet ze dit onderzoek bij de Huisartsen Oude Turfmarkt. Hierbij nodigen wij u uit om deel te nemen aan deze vragenlijst over verwachtingen en tevredenheid.

Doel van het onderzoek:

Het onderzoek gaat over het verband tussen verwachtingen van patiënten en hun tevredenheid over de zorg en hoe vaak ze gebruiken maken van de zorg van de arts. Het doel is tevens te achterhalen wat voor onvervulde verwachtingen en behoeften patiënten hebben.

Inhoud van de vragenlijst:

Deze vragenlijst bevat vragen over persoonlijke achtergrondinformatie, uw gezondheid, verwachtingen en tevredenheid. Het invullen duurt ongeveer 10-15 minuten. Onder de deelnemers worden **Bol.com cadeaukaarten ter waarde van €50** verloot.

Vrijwillige deelname en terugtrekking:

U kunt zelf besluiten of u wel of niet wilt deelnemen aan deze vragenlijst. Het invullen van deze vragenlijst is vrijwillig en eenmalig. U kunt op elk desgewenst moment uw deelname herroepen.

Mogelijke voordelen en risico's:

Met uw deelname draagt u bij aan het onderzoek naar verwachtingen en tevredenheid. Uitkomsten van dit onderzoek leiden zo mogelijk naar tips ter verbetering en het efficiënter maken van onze zorg.

Dit onderzoek kan u inzicht geven in uw eigen verwachtingen en tevredenheid. Het kan zijn dat sommige vragen leiden tot milde discomfort. Dit is echter niet waarschijnlijk.

Vertrouwelijkheid:

Er wordt vertrouwelijk met uw gegevens omgegaan en uw antwoorden worden op groepsniveau en anoniem verwerkt. De gegevens die deze studie opleveren zullen uiteraard van persoonlijk te herleiden informatie worden ontdaan. De gegevens zullen voor de komende 10 jaar worden bewaard en zijn alleen toegankelijk voor onderzoekers die direct betrokken zijn bij het onderzoek. Geanonimiseerde gegevens kunnen worden gebruikt voor publicaties of vervolgonderzoek.

Publicatie van de resultaten:

Over de resultaten van deze studie zal te zijner tijd worden bericht op de website van de Huisartsen Oude Turfmarkt (zie onder sectie 'Wetenschap' de subpagina 'Artikelen en rapporten').

Als u vragen of opmerkingen heeft, voelt u zich dan vrij om met Jenneke contact op te nemen.

Vriendelijke groeten,

Peter Vonk, huisarts

Jenneke Leen, onderzoeker j.leen@amc.uva.nl

- 1. Ik heb bovenstaande informatie gelezen en naar tevredenheid begrepen. Ik verleen mijn medewerking aan dit onderzoek en geef hierbij toestemming om mijn ingevulde gegevens te gebruiken voor onderzoeksdoeleinden.
- 0. Ik geef geen toestemming en wil niet deelnemen aan dit onderzoek.

Karakteristieken

Eerst worden er een aantal vragen gesteld over persoonlijke achtergrondinformatie.

Wat is uw geslacht?

- 1. Vrouw.
- 2. Man.

Wat is uw leeftijd?

Wat is de hoogste opleiding die u heeft afgerond?

- 6. Basisschool / lagere school
- 7. Middelbare school of MBO
- 8. Bachelor (HBO of WO)
- 9. Master (HBO of WO)
- 10. Doctoraat (PhD)

Wat is uw huidige werksituatie?

- 7. Huisman / huisvrouw
- 8. Scholier / student
- 9. Werkend (parttime)
- 10. Werkend (fulltime)
- 11. Ziekteverlof / arbeidsongeschikt / werkloos
- 12. Anders, namelijk

Wat is uw burgerlijke staat?

- 7. Getrouwd
- 8. Gescheiden
- 9. Weduwnaar / weduwe
- 10. In een relatie
- 11. Single
- 12. Anders, namelijk

Wat is uw huidige woonsituatie?

- 1. Samenwonend met echtgenoot / echtgenote of partner
- 2. Samenwonend met familie
- 3. Samenwonend met vrienden of huisgenoten
- 4. Alleenwonend
- 5. Anders, namelijk

Bent u op dit moment onder behandeling van een medisch specialist?

- 2. Ja, namelijk
- 0. Nee

Bent u op dit moment onder behandeling van een psycholoog?

- 2. Ja, namelijk voor
- 0. Nee.

Hoe vaak heeft u in het afgelopen jaar de Spoedeisende Hulp bezocht? Hoe vaak heeft u in het afgelopen jaar de huisartsenpost (buiten kantoortijden) bezocht?

Verwachtingen

Dit onderdeel gaat over uw **verwachtingen** met betrekking tot uw huisarts en de huisartsenpraktijk en wat voor u **belangrijk** is. U ziet een aantal onderwerpen verschijnen. U wordt gevraagd per onderwerp aan te geven hoe belangrijk dit voor u is.

Dokter-patiënt relatie:

Hoe belangrijk zijn de volgende onderdelen van de huisarts en/of de praktijk voor u (1 = zeer onbelangrijk, 5 = zeer belangrijk)?

- 1. U het gevoel geven dat u tijd heeft tijdens de consulten
- 2. Belangstelling voor uw persoonlijke situatie
- 3. Ervoor zorgen dat u hem of haar gemakkelijk over uw problemen kunt vertellen
- 4. U betrekken bij de beslissing over uw medisch zorg
- 5. Naar u luisteren
- 6. Het geheimhouden houden van aantekeningen en gegevens over u

Medische zorg:

Hoe belangrijk zijn de volgende onderdelen van de huisarts en/of de praktijk voor u (1 = zeer onbelangrijk, 5 = zeer belangrijk)?

7. Het snel verlichten van uw klachten

- 8. Het bieden van hulp zodat u zich goed voelt om uw normale dagelijkse bezigheden uit te voeren
- 9. Een zorgvuldige en degelijke aanpak
- 10. Lichamelijk onderzoek doen bij u

11. Het aanbieden van hulp bij het voorkómen van ziekten (bijvoorbeeld bevolkingsonderzoek, inentingen)

Informatie en ondersteuning:

Hoe belangrijk zijn de volgende onderdelen van de huisarts en/of de praktijk voor u (1 = zeer onbelangrijk, 5 = zeer belangrijk)?

12. Uitleg geven over wat de bedoeling is van onderzoeken en behandelingen

13. U vertellen over wat u wilt weten over uw klacht

14. Hulp bij het omgaan met emotionele problemen die te maken hebben met uw gezondheidstoestand

15. Het duidelijk maken waarom het belangrijk is om zijn / haar advies op te volgen

- 16. Zich herinneren wat hij / zij gedaan of u verteld heeft tijdens voorgaande bezoeken
- 17. U voorbereiden op wat u kunt verwachten bij de specialist of onderzoek in het ziekenhuis

Organisatie van zorg:

Hoe belangrijk zijn de volgende onderdelen van de huisarts en/of de praktijk voor u (1 = zeer onbelangrijk, 5 = zeer belangrijk)?

18. De behulpzaamheid van de medewerkers? (anderen dan de arts)

- 19. Het krijgen van een afspraak op het moment dat het u schikt
- 20. De telefonische bereikbaarheid van de praktijk
- 21. De mogelijkheid om de huisarts aan de telefoon te krijgen
- 22. De wachttijd in de wachtkamer
- 23. Het snel verlenen van hulp bij spoedsituaties

Continuïteit:

In onze praktijk werken meerdere huisartsen. Hoe belangrijk vindt u het om doorgaans een afspraak bij dezelfde huisarts te krijgen (1 = zeer onbelangrijk, 5 = zeer belangrijk)?

Krijgt u doorgaans een afspraak bij dezelfde huisarts?

- 1. Ja
- 0. Nee

Geef aan of u het eens of oneens bent met de volgende stelling:

Ik heb het liefst zo snel mogelijk een afspraak, ook als dat betekent dat ik dan geen afspraak bij de arts van mijn keuze kan krijgen.

- 1. Eens
- 3. Dat hangt af van het probleem
- 5. Oneens

Tevredenheid

Het volgende onderdeel gaat over hoe **tevreden** u bent met de huisarts en de praktijk. U ziet dezelfde onderwerpen nogmaals verschijnen. Nu wordt u gevraagd aan te geven hoe tevreden u over deze onderwerpen bent.

Dokter-patiënt relatie:

Geef aan in hoeverre u het eens bent met de stellingen (1 = slecht, 5 = uitstekend). Als u terugkijkt naar de afgelopen 12 maanden, wat vindt u dan van de huisarts en/of de praktijk als het gaat om:

- 1. U het gevoel geven dat u tijd had tijdens de consulten?
- 2. De belangstelling voor uw persoonlijke situatie?
- 3. Ervoor zorgen dat u hem of haar gemakkelijk over uw problemen kunt vertellen?
- 4. U betrekken bij de beslissing over uw medische zorg?
- 5. Naar u luisteren?
- 6. Het geheimhouden houden van aantekeningen en gegevens over u?

Medische zorg:

Geef aan in hoeverre u het eens bent met de stellingen (1 = slecht, 5 = uitstekend). Als u terugkijkt naar de afgelopen 12 maanden, wat vindt u dan van de huisarts en/of de praktijk als het gaat om:

7. Het snel verlichten van uw klachten?

8. Het bieden van hulp zodat u zich genoeg voelt om uw normale dagelijkse bezigheden uit te voeren?

9. Een zorgvuldige en degelijke aanpak?

10. Lichamelijk onderzoek doen bij u?

11. Het aanbieden van hulp bij het voorkómen van ziekten (bijvoorbeeld bevolkingsonderzoek, inentingen)?

Informatie en ondersteuning:

Geef aan in hoeverre u het eens bent met de stellingen (1 = slecht, 5 = uitstekend). Als u terugkijkt naar de afgelopen 12 maanden, wat vindt u dan van de huisarts en/of de praktijk als het gaat om:

12. Uitleg geven over wat de bedoeling is van onderzoeken en behandelingen?

13. U vertellen over wat u wilde weten over uw klacht?

14. Hulp bij het omgaan met emotionele problemen die te maken hebben met uw gezondheidstoestand?

- 15. Het duidelijk maken waarom het belangrijk is om zijn/haar advies op te volgen?
- 16. Zich herinneren wat hij / zij gedaan of u verteld heeft tijdens voorgaande bezoeken?
- 17. U voorbereiden op wat u kon verwachten bij de specialist of onderzoek in het ziekenhuis?

Organisatie van zorg:

Geef aan in hoeverre u het eens bent met de stellingen (1 = slecht, 5 = uitstekend). Als u terugkijkt naar de afgelopen 12 maanden, wat vindt u dan van de huisarts en/of de praktijk als het gaat om:

- 18. De behulpzaamheid van de medewerkers? (anderen dan de arts)?
- 19. Het krijgen van een afspraak op het moment dat het u schikte?
- 20. De telefonische bereikbaarheid van de praktijk?
- 21. De mogelijkheid om de huisarts aan de telefoon te krijgen?
- 22. De wachttijd in de wachtkamer?
- 23. Het snel verlenen van hulp bij spoedsituaties?

Einde van de vragenlijst

Dit is het einde van de vragenlijst. Bedankt voor uw tijd en medewerking. Als u opmerkingen heeft over de vragenlijst kunt u die hier achterlaten.

Indien u kans wilt maken op één van de Bol.com cadeaukaarten ter waarde van €50, laat hieronder dan uw emailadres achter.

ICPC codes

	ICPC code	Problem
Chronic somatic diseases		
Diabetes mellitus:	Т90	Diabetes mellitus type 1 and 2
Chronic cardiovascular disease:	K74	Angina pectoris
	K75	Acute myocardial infarction
	K76	Other/chronic ischemic heart disease
	K77	Heart failure
	K78	Atrial fibrillation/flutter
	К82	Pulmonary heart disease
	К83	Non-rheumatic heart valve disease
	К86	Hypertension, uncomplicated
	K87	Hypertension with target organ damage /
		secondary hypertension
	К89	Transient cerebral ischemia
	К90	Cerebrovascular accident
	К91	Atherosclerosis
	К92	Other peripheral vascular disease
Chronic respiratory disease:	R70	Pulmonary tuberculosis
	R91	Chronic bronchitis / bronchiectasis
	R95	Emphysema / COPD
	R96	Asthma
	R97	Hay fever / allergic rhinitis
HIV/AIDS:	B90	HIV-infection (AIDS)
Psychiatric problems	All P-codes	
Anxious feelings:	P01	Feeling anxious / nervous / tense
	P74	Anxiety disorder / anxiety state
	P09	Concern about sexual preference
	A27	Fear of other disease
	B27	Fear of other disease blood / lymphatic
		system
	D27	Fear of other disease digestive system
	F27	Fear of eye disease
	H27	Fear of ear disease
	K27	Fear of other disease cardiovascular
	L27	Fear of other disease musculoskeletal
	N27	Fear of other disease nerve system
	P27	Fear of other disease psychological
	R27	Fear of other disease respiratory system
	S27	Fear of other disease skin / subcutaneous
		tissue
	T27	Fear of other disease endocrine system /

		metabolic system / nutrition
	U27	Fear of other disease urinary tract
	X27	Fear of other disease reproductive organs /
		breasts female
	Y27	Fear of other disease reproductive organs
		male
	Z27	Fear of social problem
		·
	A26	Fear of cancer
	B26	Fear of cancer blood / lymphatic system
	D26	Fear of cancer digestive system
	L26	Fear of cancer musculoskeletal
	N26	Fear of cancer nerve system
	R26	Fear of cancer respiratory system
	S26	Fear of cancer skin / subcutaneous tissue
	T26	Fear of cancer endocrine glands
	U26	Fear of cancer urinary tract
	X25	Fear of cancer reproductive organs female
	X26	Fear of breastcancer female
	Y26	Fear of cancer reproductive organs male
	A25	Fear of death
	B25	Fear of AIDS
	К24	Fear of heart attack
	K25	Fear of high bloodpressure
	X23	Fear of venereal disease female
	Y25	Fear of venereal disease male
	X24	Fear of sexual dysfunction female
	Y24	Fear of sexual dysfunction male
Depressed feelings:	P03	Feeling down / depressed
	P76	Depressive disorder
Addiction	P15	Chronic alcohol abuse
	P16	Acute alcohol abuse
	P17	Tobacco abuse
	P18	Medicinal abuse
	P19	Drug abuse
Medically unexplained physical	A04	General tiredness / weakness
problems		
	D01	Generalized abdominal pain / cramps
	D08	Flatulence / gas pain / belching
	D09	Nausea
	D11	Diarrhoea
	D12	Constipation
	D93	Spactic colon / Irritable bowel syndrome
	К04	Palpitations / aware of heartbeat
	1.01	Nock symptoms / somplaints
		Reck symptoms / complaints
		back symptoms / complaints
	LU3	Low back pain without radiation

	L04	Chest symptoms / complaints
	L18	Muscle pain / fibromyalgia
	N01	Headache
	N02	Tension headache
	N06	Other sensibility disturbances / involuntary
		movements
	N17	Vertigo / dizziness
	P04	Feeling or behaving irritable / angry
	P06	Insomnia / disturbance of sleep
	P20	Disturbance of memory / concentration /
		orientation
	R02	Dyspnea, shortness of breath
	R21	Symptoms / complaints throat
	Т03	Loss of appetite
	Т07	Weight gain
	Т08	Weight loss
Social problems	All Z-codes	

Factor analysis and reliability coefficients for expectations

Rotated Component Matrix^a

	Dimension 1	Dimension 2	Dimension 3	Dimension 4
Doctor-patient relationship				
Cronbach's alpha: 0.77				
ltem 1	,629	,172	,170	,137
ltem 2	,653	,309	,050	-,092
ltem 3	,744	,225	,083	,030
ltem 4	,642	,072	,055	,202
ltem 5	,764	,126	,068	,188
ltem 6	,467	,158	,137	,151
Medical care				
Cronbach's alpha: 0.72				
ltem 7	,100	,054	,306	,671
ltem 8	,225	,174	,249	,636
ltem 9	,474	,149	,119	,521
ltem 10	,095	,392	,041	,623
ltem 11	,102	,597	,032	,342
Information and support				
Cronbach's alpha: 0.72				
ltem 12	,280	,542	,020	,340
ltem 13	,324	,414	,098	,357
ltem 14	,306	,621	,215	-,081
ltem 15	,111	,735	,167	,149
ltem 16	,188	,471	,278	,143
ltem 17	,199	,698	,187	,071
Organisation of care				
Cronbach's alpha: 0.76				
ltem 18	,315	,299	,379	,173
ltem 19	,089	,009	,737	,241
Item 20	,142	,130	,727	,170
Item 21	,117	,247	,670	,127
Item 22	,086	,181	,726	,004
ltem 23	,456	,082	,258	,301

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Factor analysis and reliability coefficients for expectations

Rotated Component Matrix^a

	Dimension 1
Continuity of care 1 ^b	,838
Continuity of care 2 ^c	,838

Extraction Method: Principal

Component Analysis.

a. 1 components extracted

b. Question 1: How important is it to you to usually get an appointment with the same general practitioner?

c. Question 2: I prefer to get an appointment as soon as possible, even if this means that I don't get an appointment with the doctor that I prefer.

Cronbach's alpha: 0.58

Factor analysis and reliability coefficients for satisfaction

Rotated Component Matrix^a

	Dimension 1	Dimension 2	Dimension 3	Dimension 4
Doctor-patient relationship				
Cronbach's alpha: 0.88				
ltem 1	,723	,220	,169	,187
ltem 2	,794	,195	,118	,277
ltem 3	,806	,223	,146	,227
ltem 4	,697	,313	,196	,192
ltem 5	,779	,315	,211	,151
ltem 6	,258	,059	,123	,530
Medical care				
Cronbach's alpha: 0.86				
ltem 7	,240	,778	,165	,184
ltem 8	,321	,747	,188	,168
Item 9	,479	,614	,196	,211
ltem 10	,246	,682	,138	,208
ltem 11	,076	,483	,208	,495
ltem 12	,442	,493	,223	,348
Information and support				
Cronbach's alpha: 0.89				
Item 13	,555	,543	,149	,214
ltem 14	,435	,392	,132	,523
ltem 15	,397	,350	,171	,589
ltem 16	,491	,111	,163	,597
ltem 17	,224	,389	,206	,635
Organisation of care				
Cronbach's alpha: 0.83				
ltem 18	,197	,379	,520	,137
ltem 19	,177	,143	,781	,130
ltem 20	,116	,089	,788	,115
ltem 21	,096	,188	,737	,252
ltem 22	,181	,092	,699	,177
ltem 23	,067	,197	,380	,648

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Correlation table with Pearson correlation coefficients

	1	2	3	4	5	6	7	8	9	10	11	12
1. Sex	1	-,145**	,026	,111*	-,010	,052	,059	-,101*	,060	-,011	-,146**	-,092**
2. Age ^a	-,145**	1	,094**	-,034	,192**	-,126**	-,206**	,236**	-,134**	-,008	,101*	,255**
3. Type FA ^b	,026	,094**	1	-,059	,197**	-,068	-,030	,229**	,163**	,114**	,087*	264**
4. Education ^c	,111*	-,034	-,059	1	-,067	,067	-,036	-,093*	,060	-,021	-,045	-,111**
5. Work ^d	-,010	,192**	,197**	-,067	1	-,188**	-,177**	,290**	,112**	,057	,072	,086*
6. Marital state ^e	,052	-,126**	-,068	,067	-,188**	1	,532**	-,106*	-,143**	-,006	-,052	-,067
7. Living situation ^f	,059	-,206**	-,030	-,036	-,177**	,532**	1	-,088*	-,040	,040	-,033	-,024
8. Medical specialist ^g	-,101*	,236**	,229**	-,093*	,290**	-,106*	-,088*	1	,185**	,074	,168**	,191**
9. Psychologist ^g	,060	-,134**	,163**	,060	,112**	-,143**	-,040	,185**	1	,007	,031	-,017
10. GP out of office ^h	-,011	-,008	,114**	-,021	,057	-,006	,040	,074	,007	1	,132**	,103 [*]
11. Emergency room ⁱ	-,146**	,101*	,087*	-,045	,072	-,052	-,033	,168**	,031	,132**	1	,138**
12. Chronic somatic diseases ^j	-,092**	,255**	,264**	-,111**	,086*	-,067	-,024	,191**	-,017	,103*	,138**	1
13. Psychiatric problems ^k	,016	,107**	,353**	-,081	,125**	-,081	-,073	,132**	,162**	-,013	,020	,129**
14. MUPS '	,011	,106**	,312**	,011	,074	-,035	-,020	,065	,025	,063	,038	,149**
15. Social problems	-,012	,177**	,202**	-,044	,132**	-,002	,020	,124**	,094*	,069	,076	,107**
16. Expectations Doctor-patient relationship	,069	,058	,087*	-,030	,063	-,012	-,072	,065	,088*	,053	-,055	,043
17. Expectations Medical care	,061	,069	,047	-,037	-,028	,070	,034	,056	-,010	,100*	,049	,052
18. Expectations Information and support	,034	,057	,030	-,074	,021	,030	,024	,016	-,008	,117**	,052	,074
19. Expectations Organisation of Care	,115**	,053	,042	-,014	-,011	,105*	,030	,031	-,033	,115**	,030	,044
20. Expectations Continuity of Care	,103*	,221**	,218**	-,056	,145**	-,033	-,039	,160**	,062	,093*	,004	,087
21. Satisfaction Doctor-patient relationship	-,044	,244**	,066	-,026	,070	,069	-,068	,081	,032	-,015	,034	,081
22. Satisfaction Medical care	-,054	,200**	-,017	-,011	-,007	,106*	-,009	,030	-,066	-,024	,015	,051
23. Satisfaction Information and support	-,089*	,246**	,027	-,047	-,016	,107*	,003	,004	-,053	-,016	,023	,041
24. Satisfaction Organisation of Care	-,063	,169**	,042	-,048	,024	,027	-,057	,100*	-,009	-,046	,038	,073

	13	14	15	16	17	18	19	20	21	22	23	24
1. Sex	,016	,011	-,012	,069	,061	,034	,115**	,103*	-,044	-,054	-,089*	-,063
2. Age ^a	,107**	,106**	,177**	,058	,069	,057	,053	,221**	,244**	,200**	,246**	,169**
3. Type FA ^b	,353**	,312**	,202**	,087*	,047	,030	,042	,218**	,066	-,017	,027	,042
4. Education ^c	-,081	,011	-,044	-,030	-,037	-,074	-,014	-,056	-,026	-,011	-,047	-,048
5. Work ^d	,125**	,074	,132**	,063	-,028	,021	-,011	,145**	,070	-,007	-,016	,024
6. Marital state ^e	-,081	-,035	-,002	-,012	,070	,030	.105*	-,033	,069	,106*	,107*	,027
7. Living situation ^f	-,073	-,020	,020	-,072	,034	,024	,030	-,039	-,068	-,009	-,003	-,057
8. Medical specialist ^g	,132**	,065	,124**	,065	,056	,016	,031	,160**	,081	,030	,004	,100*
9. Psychologist ^g	,162**	,025	,094*	,088*	-,010	-,008	-,033	,062	,032	-,066	-,053	-,009
10. GP out of office ^h	-,013	,063	,069	,053	,100*	,117**	,115**	,093*	-,015	-,024	-,016	-,046
11. Emergency room ⁱ	,020	,038	,076	-,055	,049	,052	,030	,004	,034	,015	,023	,038
12. Chronic somatic diseases ^j	,129**	,149**	,107**	,043	,052	,074	,044	,087	,081	,051	,041	,073
13. Psychiatric problems ^k	1	,314**	,190**	,050	-,049	,044	,006	,138**	-,060	-,122**	-,045	-,066
14. MUPS ¹	,314**	1	,138**	,031	,063	,034	,060	,117**	-,028	-,071	-,098*	-,015
15. Social problems	,190**	,138**	1	,078	,004	,041	,042	,140*	,085	,013	,034	,061
16. Expectations Doctor-patient relationship	,050	,031	,078	1	,509**	,569**	,454**	,210**	,186**	,108*	,167**	,118*
17. Expectations Medical care	-,049	,063	,004	,509**	1	,612**	,537**	,117**	,162**	,242**	,206**	,152**
18. Expectations Information and support	,044	,034	,041	,569**	,612**	1	,539**	,167**	,101*	,134**	,178**	,110*
19. Expectations Organisation of Care	,006	,060	,042	,454**	,537**	,539**	1	,112*	,074	,115*	,106*	-,060
20. Expectations Continuity of Care	,138**	,117**	,140**	,210**	,117**	,167**	,112**	1	,169**	,093*	,140**	,054
21. Satisfaction Doctor-patient relationship	-,060	-,028	,085	,186**	,162**	,101*	,074	,169**	1	,691**	,766**	,511**
22. Satisfaction Medical care	-,122**	-,071	,013	,108*	,242**	,134**	,115*	,093*	,691**	1	,758**	,561**
23. Satisfaction Information and support	-,045	-,098*	,034	,167**	,206**	,178**	,106*	,140**	,766**	,758**	1	,586**
24. Satisfaction Organisation of Care	-,066	-,015	,061	,118**	,152**	,110*	-,060	,054	,511**	,561**	,586**	1

* Correlation is significant at the 0.05 level (2-tailed)

- ** Correlation is significant at the of 0.01 level (2-tailed)
- a. Age calculated on 01.12.2017 (closure date of the questionnaire)
- b. Type FA: pFA, FA or non-FA
- c. Lower educational level (primary school, high school or equivalent) vs. higher education: bachelor or master's degree, PhD
- d. Unemployed vs. employed
- e. Married or in a relationship vs. widowed, divorced or single
- f. Living with spouse, partner, family, friends or roommates vs. living alone
- g. Treatment of a medical specialist or psychologist
- h. Visits to the out of office general practice in the past year
- i. Visits to the emergency room in the past year
- j. Chronic somatic disease: diabetes mellitus, cardiovascular chronic disease, respiratory chronic disease, HIV / AIDS
- k. Psychiatric problems: anxious feelings, depressed feelings, addiction, other psychiatric problems (excluding patients coded with 'fear of venereal disease' in the category 'anxious feelings')
- I. Medically unexplained physical symptoms

Logistic regression analysis – Non-FAs vs. pFAs and FAs

Expectations – Total

			Variables	in the Equ	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations total	,644	,219	8,649	1	,003	1,905	1,240	2,926
	Constant	-1,779	,876	4,128	1	,042	,169		

richles in the Equatio

a. Variable(s) entered on step 1: Expectations total

								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	,058	,249	,055	1	,815	1,060	,650	1,729
	Age	-,020	,009	4,492	1	,034	,980	,963	,999
	Educational level	-,269	,460	,341	1	,559	,764	,310	1,884
	Work - unemployed	,396	,420	,892	1	,345	1,487	,653	3,384
	Marital state	-,004	,276	,000	1	,990	,996	,580	1,712
	Living situation	-,019	,272	,005	1	,944	,981	,576	1,671
	Medical specialist	,383	,276	1,923	1	,166	1,466	,854	2,519
	Psychologist	,257	,317	,659	1	,417	1,293	,695	2,406
	GP out of office	,044	,048	,840	1	,360	1,045	,952	1,147
	Emergency room	,158	,263	,358	1	,550	1,171	,699	1,961
	Chronic somatic	1,101	,307	12,840	1	,000	3,009	1,647	5,495
	disease								
	Psychiatric problems	1,305	,257	25,734	1	,000	3,689	2,228	6,109
	MUPS	,999	,259	14,925	1	,000	2,717	1,636	4,510
	Social problems	1,151	,566	4,131	1	,042	3,161	1,042	9,587
	Satisfaction total	,273	,199	1,893	1	,169	1,314	,890	1,941
	Expectations total	,427	,271	2,488	1	,115	1,533	,901	2,607
	Constant	-2,093	1,578	1,758	1	,185	,123		

Variables in the Equation

a. Variable(s) entered on step 1: Sex, Age 01-12-2017, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction, Expectations total.

Expectations – Doctor-patient relationship

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations Doctor- patient relationship	,461	,180	6,547	1	,011	1,586	1,114	2,257
	Constant	-1,232	,794	2,407	1	,121	,292		

a. Variable(s) entered on step 1: Expectations Doctor-patient relationship.

								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	,074	,248	,088	1	,767	1,076	,662	1,750
	Age	-,019	,009	4,159	1	,041	,981	,964	,999
	Educational level	-,293	,461	,403	1	,525	,746	,303	1,841
	Work - unemployed	,380	,421	,817	1	,366	1,463	,641	3,338
	Marital state	,002	,276	,000	1	,995	1,002	,583	1,720
	Living situation	,021	,272	,006	1	,938	1,021	,599	1,741
	Medical specialist	,377	,276	1,868	1	,172	1,459	,849	2,506
	Psychologist	,207	,317	,425	1	,515	1,230	,660	2,290
	GP out of office	,052	,048	1,189	1	,276	1,053	,960	1,156
	Emergency room	,192	,263	,531	1	,466	1,211	,724	2,027
	Chronic somatic	1,088	,307	12,580	1	,000	2,968	1,627	5,414
	disease								
	Psychiatric problems	1,303	,257	25,738	1	,000	3,681	2,225	6,090
	MUPS	1,012	,258	15,414	1	,000	2,751	1,660	4,558
	Social problems	1,116	,568	3,861	1	,049	3,052	1,003	9,290
	Satisfaction Doctor-	,259	,171	2,284	1	,131	1,295	,926	1,811
	patient relationship								
	Expectations Doctor-	,378	,220	2,948	1	,086	1,460	,948	2,248
	patient relationship								
	Constant	-2,108	1,539	1,875	1	,171	,122		

Variables in the Equation

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction Doctor-patient relationship, Expectations Doctor-patient relationship.

Expectations – Medical care

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations Medical	,303	,163	3,483	1	,062	1,354	,985	1,863
	care								
	Constant	-,414	,643	,414	1	,520	,661		

a. Variable(s) entered on step 1: Expectations Medical care.

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	,121	,249	,235	1	,628	1,128	,693	1,837
	Age	-,017	,009	3,282	1	,070	,983	,966	1,001
	Educational level	-,299	,459	,424	1	,515	,742	,302	1,823
	Work - unemployed	,448	,422	1,127	1	,289	1,565	,685	3,577
	Marital state	,019	,275	,005	1	,946	1,019	,594	1,748
	Living situation	-,032	,271	,014	1	,906	,968	,569	1,647
	Medical specialist	,379	,275	1,891	1	,169	1,460	,851	2,506
	Psychologist	,295	,317	,870	1	,351	1,343	,722	2,499
	GP out of office	,049	,048	1,049	1	,306	1,050	,956	1,154
	Emergency room	,137	,260	,278	1	,598	1,147	,689	1,910
	Chronic somatic disease	1,107	,307	13,013	1	,000	3,025	1,658	5,521
	Psychiatric problems	1,316	,259	25,881	1	,000	3,730	2,246	6,194
	MUPS	,972	,258	14,162	1	,000	2,644	1,593	4,387
	Social problems	1,200	,564	4,525	1	,033	3,321	1,099	10,033
	Satisfaction Medical care	,138	,167	,680	1	,409	1,148	,827	1,593
	Expectations Medical care	,293	,199	2,162	1	,141	1,341	,907	1,982
	Constant	-1,210	1,382	,766	1	,382	,298		

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction Medical care, Expectations Medical care.

Expectations – Information and support

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations Information and support	,226	,162	1,934	1	,164	1,253	,912	1,722
	Constant	-,138	,657	,044	1	,834	,871		

a. Variable(s) entered on step 1: Expectations Information and support.

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	,156	,248	,395	1	,530	1,169	,718	1,903
	Age	-,019	,009	3,918	1	,048	,982	,964	1,000
	Educational level	-,320	,460	,486	1	,486	,726	,295	1,787
	Work - unemployed	,403	,420	,922	1	,337	1,497	,657	3,412
	Marital state	,023	,274	,007	1	,932	1,024	,598	1,753
	Living situation	-,038	,271	,020	1	,888	,963	,566	1,637
	Medical specialist	,426	,276	2,387	1	,122	1,532	,892	2,631
	Psychologist	,280	,317	,781	1	,377	1,323	,711	2,460
	GP out of office	,053	,048	1,236	1	,266	1,055	,960	1,158
	Emergency room	,142	,258	,302	1	,583	1,152	,695	1,911
	Chronic somatic	1,128	,307	13,475	1	,000	3,088	1,691	5,638
		1 205	255	24 5 7 2	1	000	2 5 4 2	2 1 4 0	F 940
		1,205	,255	24,572	1	,000	3,542	2,148	5,840
		1,001	,200	10,011	1	,000	2,890	1,735	4,813
	Social problems	1,189	,564	4,449	1	,035	3,285	1,088	9,920
	Satisfaction	,317	,167	3,619	1	,057	1,373	,990	1,904
	Information and								
	support								
	Expectations	,032	,192	,027	1	,869	1,032	,709	1,503
	Information and								
	support								
	Constant	-,836	1,425	,344	1	,557	,433		

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction Information and support, Expectations Information and support.

Expectations – Organisation of care

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations	,289	,169	2,917	1	,088	1,335	,958	1,860
	Organisation of care								
	Constant	-,383	,673	,323	1	,570	,682		

a. Variable(s) entered on step 1: Expectations Organisation of care.

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	,116	,253	,208	1	,648	1,123	,683	1,844
	Age	-,016	,009	2,982	1	,084	,984	,967	1,002
	Educational level	-,322	,458	,493	1	,483	,725	,296	1,779
	Work - unemployed	,415	,419	,978	1	,323	1,514	,666	3,444
	Marital state	,058	,277	,043	1	,836	1,059	,615	1,824
	Living situation	-,038	,272	,019	1	,890	,963	,565	1,642
	Medical specialist	,386	,275	1,960	1	,162	1,471	,857	2,523
	Psychologist	,244	,317	,594	1	,441	1,277	,686	2,375
	GP out of office	,054	,048	1,282	1	,258	1,056	,961	1,160
	Emergency room	,138	,254	,293	1	,588	1,148	,697	1,890
	Chronic somatic	1,111	,307	13,091	1	,000	3,038	1,664	5,547
	Psychiatric problems	1,285	,256	25,218	1	,000	3,614	2,189	5,966
	MUPS	,987	,256	14,812	1	,000	2,683	1,623	4,436
	Social problems	1,206	,566	4,543	1	,033	3,339	1,102	10,119
	Satisfaction	,175	,158	1,227	1	,268	1,191	,874	1,623
	Organisation of care								
	Expectations	,230	,199	1,334	1	,248	1,259	,852	1,860
	Organisation of care								
	Constant	-1,052	1,442	,533	1	,466	,349		

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction Organisation of care, Expectations Organisation of care.

Expectations – Continuity of care

	Variables in the Equation											
								95% C.I.f	or EXP(B)			
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper			
Step 1ª	Continuity of Care	,418	,109	14,775	1	,000	1,519	1,228	1,880			
	Constant	478	.330	2.092	1	.148	.620					

a. Variable(s) entered on step 1: Continuity of Care.

	Variables in the Equation											
								95% C.I.f	or EXP(B)			
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper			
Step 1 ^a	Sex	-,005	,250	,000	1	,983	,995	,609	1,624			
	Age	-,021	,009	4,819	1	,028	,980	,962	,998			
	Educational level	-,318	,460	,480	1	,489	,727	,295	1,791			
	Work - unemployed	,440	,424	1,080	1	,299	1,553	,677	3,565			
	Marital state	,058	,274	,045	1	,831	1,060	,619	1,815			
	Living situation	-,061	,271	,050	1	,823	,941	,553	1,601			
	Medical specialist	,317	,274	1,345	1	,246	1,373	,803	2,347			
	Psychologist	,285	,316	,810	1	,368	1,329	,715	2,470			
	GP out of office	,048	,048	1,035	1	,309	1,050	,956	1,152			
	Emergency room	,162	,256	,399	1	,528	1,175	,712	1,940			
	Chronic somatic disease	1,178	,309	14,496	1	,000	3,248	1,771	5,956			
	Psychiatric problems	1,257	,255	24,299	1	,000	3,516	2,133	5,796			
	MUPS	,985	,256	14,751	1	,000	2,678	1,620	4,427			
	Social problems	1,249	,568	4,837	1	,028	3,488	1,146	10,622			
	Continuity of Care	,319	,126	6,391	1	,011	1,376	1,074	1,762			
	Constant	-,051	1,129	,002	1	,964	,951					

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems , MUPS, Social problems, Continuity of Care.

Logistic regression analysis – pFAs vs. FAs

Expectations – total

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations total	-,223	,313	,506	1	,477	,800	,434	1,478
	Constant	-,607	1,267	,230	1	,632	,545		

a. Variable(s) entered on step 1: Expectations total.

			variables	in the Equ	Jation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	-,056	,403	,019	1	,889	,945	,430	2,081
	Age	-,026	,017	2,314	1	,128	,974	,942	1,008
	Educational level	,455	,619	,540	1	,463	1,576	,468	5,300
	Work - unemployed	1,127	,458	6,066	1	,014	3,088	1,259	7,573
	Marital state	,014	,420	,001	1	,973	1,014	,446	2,309
	Living situation	-,080	,424	,035	1	,851	,923	,402	2,121
	Medical specialist	,479	,369	1,692	1	,193	1,615	,784	3,327
	Psychologist	,509	,399	1,626	1	,202	1,663	,761	3,634
	GP out of office	,071	,062	1,277	1	,258	1,073	,949	1,213
	Emergency room	,091	,289	,100	1	,752	1,095	,622	1,929
	Chronic somatic	1,080	,379	8,129	1	,004	2,946	1,402	6,191
	disease								
	Psychiatric problems	1,672	,429	15,214	1	,000	5,324	2,298	12,335
	MUPS	1,002	,362	7,640	1	,006	2,723	1,338	5,542
	Social problems	1,328	,413	10,328	1	,001	3,773	1,679	8,480
	Satisfaction total	,215	,283	,576	1	,448	1,240	,712	2,160
	Expectations total	-,435	,435	1,000	1	,317	,647	,276	1,518
	Constant	-3,313	2,425	1,866	1	,172	,036		

Variables in the Equation

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction total, Expectations total.

Expectations – Doctor-patient relationship

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations Doctor- patient relationship	-,132	,257	,264	1	,608	,876	,529	1,451
	Constant	-,919	1,148	,641	1	,423	,399		

a. Variable(s) entered on step 1: Expectations Doctor-patient relationship.

	Variables in the Equation												
								95% C.I.f	or EXP(B)				
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper				
Step 1 ^a	Sex	-,090	,398	,052	1	,820	,914	,419	1,992				
	Age	-,027	,017	2,496	1	,114	,973	,941	1,007				
	Educational level	,466	,622	,561	1	,454	1,594	,471	5,395				
	Work - unemployed	1,132	,458	6,101	1	,014	3,100	1,263	7,609				
	Marital state	-,006	,419	,000	1	,989	,994	,438	2,258				
	Living situation	-,083	,426	,038	1	,846	,921	,400	2,120				
	Medical specialist	,496	,370	1,799	1	,180	1,641	,796	3,387				
	Psychologist	,514	,404	1,616	1	,204	1,671	,757	3,689				
	GP out of office	,069	,063	1,196	1	,274	1,071	,947	1,212				
	Emergency room	,070	,288	,059	1	,809	1,072	,610	1,885				
	Chronic somatic	1,061	,378	7,861	1	,005	2,889	1,376	6,064				
	disease												
	Psychiatric problems	1,719	,434	15,697	1	,000	5,577	2,383	13,052				
	MUPS	,978	,363	7,262	1	,007	2,660	1,306	5,418				
	Social problems	1,367	,418	10,685	1	,001	3,925	1,729	8,910				
	Satisfaction Doctor-	,213	,259	,677	1	,411	1,237	,745	2,054				
	patient relationship												
	Expectations Doctor-	-,453	,367	1,528	1	,216	,635	,310	1,304				
	patient relationship												
	Constant	-3,031	2,397	1,598	1	,206	,048						

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction Doctor-patient relationship, Expectations Doctor-patient relationship.

Expectations – Medical care

Variables in the Equation											
								95% C.I.f	or EXP(B)		
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper		
Step 1 ^a	Expectations Medical	-,264	,237	1,245	1	,265	,768	,482	1,222		
	care										
	Constant	- 442	941	221	1	638	642				

a. Variable(s) entered on step 1: Expectations Medical care.

	Variables in the Equation												
								95% C.I.f	or EXP(B)				
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper				
Step 1 ^a	Sex	-,108	,398	,073	1	,787	,898	,412	1,960				
	Age	-,025	,017	2,084	1	,149	,975	,943	1,009				
	Educational level	,479	,615	,607	1	,436	1,615	,483	5,394				
	Work - unemployed	1,107	,456	5,884	1	,015	3,024	1,237	7,396				
	Marital state	,040	,416	,009	1	,924	1,040	,460	2,354				
	Living situation	-,085	,423	,040	1	,842	,919	,401	2,107				
	Medical specialist	,491	,369	1,772	1	,183	1,634	,793	3,366				
	Psychologist	,528	,397	1,766	1	,184	1,695	,778	3,692				
	GP out of office	,063	,063	1,023	1	,312	1,065	,942	1,204				
	Emergency room	,094	,292	,104	1	,747	1,099	,621	1,946				
	Chronic somatic disease	1,047	,377	7,690	1	,006	2,848	1,359	5,968				
	Psychiatric problems	1,609	,429	14,078	1	,000	4,999	2,157	11,585				
	MUPS	1,014	,363	7,815	1	,005	2,756	1,354	5,610				
	Social problems	1,308	,412	10,094	1	,001	3,701	1,651	8,295				
	Satisfaction Medical care	,060	,240	<i>,</i> 063	1	,802	1,062	,663	1,702				
	Expectations Medical care	-,226	,323	,488	1	,485	,798	,424	1,503				
	Constant	-3,545	2,097	2,857	1	,091	,029						

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Satisfaction Medical care, Expectations Medical care.

Expectations – Information and support

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations Information and	-,255	,237	1,163	1	,281	,775	,487	1,232
	support								
	Constant	-,451	,957	,222	1	,637	,637		

a. Variable(s) entered on step 1: Expectations Information and support.

			Variabies	In the Equ					
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	-,056	,401	,019	1	,890	,946	,431	2,077
	Age	-,028	,017	2,613	1	,106	,972	,940	1,006
	Educational level	,480	,621	,597	1	,440	1,616	,478	5,462
	Work - unemployed	1,111	,461	5,814	1	,016	3,037	1,231	7,490
	Marital state	-,038	,423	,008	1	,928	,962	,420	2,204
	Living situation	-,043	,428	,010	1	,920	,958	,414	2,215
	Medical specialist	,500	,372	1,803	1	,179	1,648	,795	3,417
	Psychologist	,490	,399	1,509	1	,219	1,633	,747	3,569
	GP out of office	,070	,063	1,236	1	,266	1,073	,948	1,214
	Emergency room	,103	,291	,126	1	,722	1,109	,627	1,962
	Chronic somatic	1,117	,382	8,568	1	,003	3,057	1,447	6,460
	disease								
	Psychiatric problems	1,680	,429	15,372	1	,000	5,367	2,317	12,433
	MUPS	1,002	,363	7,602	1	,006	2,723	1,336	5,552
	Social problems	1,324	,415	10,199	1	,001	3,759	1,668	8,472
	Satisfaction	,224	,237	,890	1	,345	1,251	,786	1,991
	Information and								
	support								
	Expectations	-,440	,313	1,973	1	,160	,644	,349	1,190
	Information and								
	support								
	Constant	-3,320	2,071	2,571	1	,109	,036		

Variables in the Equation

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems (ex., MUPS, Social problems, Satisfaction Information and support, Expectations Information and support.

Expectations – Organisation of care

			Variables	in the Eq	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Expectations	-,264	,244	1,169	1	,280	,768	,476	1,240
	Organisation of care								
	Constant	-,419	,975	,185	1	,667	,658		

a. Variable(s) entered on step 1: Expectations Organisation of care.

			Variables	in the Equ	uation				
								95% C.I.f	or EXP(B)
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	Sex	-,091	,400	,051	1	,821	,913	,417	1,999
	Age	-,025	,017	2,287	1	,130	,975	,943	1,008
	Educational level	,443	,615	,521	1	,471	1,558	,467	5,196
	Work - unemployed	1,124	,462	5,925	1	,015	3,076	1,245	7,600
	Marital state	,058	,417	,019	1	,890	1,059	,468	2,399
	Living situation	-,106	,424	,062	1	,803	,900	,392	2,065
	Medical specialist	,444	,370	1,438	1	,230	1,559	,755	3,222
	Psychologist	,500	,399	1,573	1	,210	1,649	,755	3,603
	GP out of office	,067	,062	1,173	1	,279	1,070	,947	1,208
	Emergency room	,088	,286	,095	1	,758	1,092	,623	1,914
	Chronic somatic disease	1,070	,379	7,978	1	,005	2,916	1,388	6,127
	Psychiatric problems	1,637	,425	14,838	1	,000	5,140	2,235	11,822
	MUPS	1,000	,363	7,600	1	,006	2,719	1,335	5,536
	Social problems	1,297	,413	9,858	1	,002	3,658	1,628	8,219
	Satisfaction	,123	,240	,264	1	,607	1,131	,707	1,811
	Organisation of care								
	Expectations	-,264	,318	,689	1	,407	,768	,412	1,432
	Organisation of care								
	Constant	-3,536	2,132	2,749	1	,097	,029		

Variables in the Equation

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation,
 Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems,
 MUPS, Social problems, Satisfaction Organisation of care, Expectations Organisation of care.

Expectations – Continuity of care

Variables in the Equation											
								95% C.I.for EXP(B)			
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper		
Step 1ª	Continuity of Care	,616	,197	9,831	1	,002	1,852	1,260	2,722		
	Constant	-3.462	.675	26.330	1	.000	.031				

a. Variable(s) entered on step 1: Continuity of Care.

variables in the Equation												
								95% C.I.for EXP(B)				
		В	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper			
Step 1ª	Sex	-,309	,400	,598	1	,439	,734	,335	1,607			
	Age	-,027	,017	2,737	1	,098	,973	,942	1,005			
	Educational level	,343	,579	,351	1	,554	1,409	,453	4,378			
	Work - unemployed	1,013	,463	4,785	1	,029	2,754	1,111	6,824			
	Marital state	-,109	,407	,071	1	,789	,897	,404	1,993			
	Living situation	,075	,422	,031	1	,859	1,078	,471	2,464			
	Medical specialist	,531	,370	2,057	1	,151	1,700	,823	3,510			
	Psychologist	,451	,401	1,269	1	,260	1,570	,716	3,444			
	GP out of office	,040	,065	,388	1	,534	1,041	,917	1,182			
	Emergency room	,044	,286	,023	1	,878	1,045	,597	1,828			
	Chronic somatic	1,045	,375	7,745	1	,005	2,842	1,362	5,932			
	disease											
	Psychiatric problems	1,452	,408	12,655	1	,000	4,270	1,919	9,501			
	MUPS	1,053	,361	8,527	1	,003	2,866	1,414	5,810			
	Social problems	1,354	,414	10,688	1	,001	3,872	1,720	8,718			
	Continuity of Care	,393	,240	2,687	1	,101	1,482	,926	2,371			
	Constant	-4,606	1,609	8,194	1	,004	,010					

Variables in the Fo ...:

a. Variable(s) entered on step 1: Sex, Age, Educational level, Work - unemployed, Marital state, Living situation, Medical specialist, Psychologist, GP out of office, Emergency room, Chronic somatic disease, Psychiatric problems, MUPS, Social problems, Continuity of Care.