

EMPIRICAL STUDIES

Long- and short-term frequent attenders' perceptions of patient-centredness in Finnish primary healthcare: A cross-sectional survey and the equivalence of the factor structure of the 36-item patient-centred primary care instrument

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Abstract

Aim: The study aimed to compare long- and short-term frequent attenders' (FAs) perceptions of patient-centredness and to assess the equivalence of the factor structure of patient-centred primary care (PCPC) instrument for long- and short-term FAs.

Methods: A cross-sectional survey of long-term ($n = 234$) and short-term ($n = 261$) FAs within the primary healthcare of one city in Finland. The data collected in January–July 2020 via 'the 36-item PCPC instrument' were analysed using Pearson's chi-squared test, Mann–Whitney U -test, Cronbach's alpha, and multigroup confirmatory factor analysis (MGCFA).

Results: Long-term FAs had worse perceptions of patient-centredness than short-term FAs across all subscales: patients' preferences, physical comfort, coordination of care, continuity and transition, emotional support, access to care, information and education, and family and friends. The MGCFA indicated a good fit for the predicted eight-factor model.

Conclusions: Long-term FAs' care needs are currently not being met, indicating the need for considering how the way healthcare services are arranged and care is provided affects prolonged and high care needs. Various dimensions of patient-centredness need to be addressed when developing not only FAs' care but also wider service paths. A distinction should be made between long- and short-term frequent attendance when identifying and addressing FAs' service needs.

KEYWORDS

frequent attenders, health services needs and demand, healthcare utilisation, patient-centredness

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INTRODUCTION

Frequent attendance has been considered as one of the central issues when arranging patient-centred healthcare services. Frequent attenders (FAs) require healthcare services more often than other patients; approximately 10% of the patient population accounts for 30%–50% of general practice visits [1]. In Finland, 10% of patients have been found to cause 81% of social and healthcare service costs [2]. Definitions for FAs vary. For example, top 10% of patients making most visits to healthcare facilities [1] or accounting for top 10% of healthcare costs are considered FAs [3], or the definition can be based on the number of healthcare visits, for example eight visits during 1 year [4].

Frequent attendance is often temporary, as approximately 19% of FAs have an increased need for care across several years [5]. A long-term FA has been defined as a patient with frequent need for services during 3 years [4, 6], while a short-term FA uses healthcare services frequently over 1 or 2 years [5]. The background factors of long- and short-term FAs have been found to differ noticeably. For example, poor self-reported health, depression [7], and chronic health conditions [4, 5] are particularly associated with long-term FAs.

FAs generally have complex care needs, which causes a palpable burden to healthcare professionals and the healthcare system. FAs commonly have chronic health conditions, mental disorders, and acute physical symptoms [8], which are straightforward to identify. However, some FAs present with medically unexplained symptoms for which they seek explanations through frequent consulting [9]; others have poor self-reported health [8]. Also, low perceived quality of life [8] and issues in receiving social support (e.g. feelings of loneliness or experiences of being a burden for family and friends) [10] are nonmedical reasons that may influence an individual's care-seeking decisions. Nurses and physicians more often associate FAs with negative feelings [11] and face challenges in providing appropriate care for FAs [12]. Healthcare is often disease-oriented, and professionals in this field may thus struggle to acknowledge nonmedical issues; this is challenging for FAs, who want healthcare professionals to recognise aspects of their personal lives. Although several factors have been found to be associated with FAs, there is a lack of research concerning how FAs themselves perceive the organisation of care and the extent to which it meets their needs [4, 13–15]. Patient-reported experience measures (PREMs) are central aspect of patient-centredness, providing information for health system quality improvement and performance measurement [16]. Previous qualitative research has revealed that the recognition of patients' individual situations and shared decision-making must be emphasised

to improve FAs' perceptions of patient-centredness [17]. Patient trust has been noted by health professionals as one of the ways for providing individual care for patients with complex issues [18].

Several concept analyses have identified the following dimensions for patient-centred care: involving patients in their own care; effective and respectful communication between the healthcare professional and patient; acknowledging the patient as an individual; and a biopsychological perspective [19–22]. Involving the patient in patient-centred care has been conceptualised as patient participation, that is the patient acts as an expert of their needs and takes part in determining the desired care outcomes [19]. Eklund et al. [20] use the concept of shared decision-making when the patient is actively involved in their care. Langberg et al. [21] have identified a wider dimension, that is 'sharing power and responsibility', which includes both patient participation and shared decision-making. Acknowledging the patient as an individual emphasises the need to acknowledge a patient's preferences [21] and expectations of care [19], as well as how the patient's individual situation is affected by their health condition [22]. A biopsychological perspective refers to an approach that considers the patient's physical, social, and mental aspects [19, 22]. Eklund et al. [20] have included the biopsychological perspective, along with considering nonmedical issues, as a part of the holistic care that acknowledges the patient's entire life. In addition, coordinated care [21, 22], the influence of healthcare professionals' personal qualities on care [22], and empathy [21] have been considered crucial to patient-centred care. Coordinated care not only emphasises the coordination between different healthcare sectors [21, 22], but also coordination between carers and changing situations [21]. While Eklund et al. [20] highlight empathy as one dimension of patient-centred care, Castro et al. [18] consider it as an example of the patient-centred care climate and, therefore, possible to influence through organisational management. Scholl et al. [23] have identified three categories for patient-centredness: principles, enablers, and activities. The principles lay the basis for patient-centredness, recognising the biopsychological aspects and the patient's individual needs, which occur in the encounters between the patient and the professional. The enablers are defined as the elements, which foster patient-centredness, for example coordination of care and access to care. The activities are behaviours, through which patient-centredness is produced, for example involving the patient in one's care and physical and emotional support. In this study, the concept of patient-centredness is defined as an approach that recognises the patient's individual care needs and the fact that the patient is involved in his/her care, that is aspects that occur during consultations. In addition, we consider the organisational factors (coordination of care and information transfer), which enable patient-centredness.

Previous research has revealed that patient-centredness is associated with lower emergency department use, length of hospital stays [24], and hospital admissions, along with improvements in patient satisfaction, quality of life, and self-care [25]. Nurses have experienced providing patient-centred care as difficult when a patient has complex issues, which have possibly developed for a long time because appropriate care has not been provided [26]. Although shifting to a patient-centred approach may not directly improve clinical outcomes, it will improve patients' care experiences and overall satisfaction, both of which can positively affect a patient's self-management and adherence to care [25].

There is extensive research on frequent attendance in healthcare, yet only a limited number of studies have investigated FAs' own perceptions. Although it is important to recognise the background factors that may cause an increased need for healthcare and help identify patients in need of increased care, it is even more essential to understand which factors can be improved during consultations and through the development of services to sufficiently respond to FAs' needs. Previous qualitative studies have provided insight into how healthcare services respond to FAs' care needs [17, 26], yet there is a need to examine whether an association between perceptions of care and the length of frequent attendance exists, that is can the healthcare system adequately respond to care needs when there is a prolonged need for care. The aim of the study was to compare short- and long-term FAs' perceptions of patient-centredness and to assess the equivalence of the factor structure of patient-centred primary care (PCPC) instrument for long- and short-term FAs.

METHODS

Data collection

The cross-sectional data were collected from one Finnish city's (approximately 200,000 residents) patient register, which covers city's six social and healthcare centres. Social and healthcare centres provide primary care services that involve nurses, physicians, physiotherapists, dentists, and social care professionals. The services are publicly available to city residents. In this study, in order to identify FAs from patient registers, healthcare services were considered to comprise visits to physicians and nurses. Long-term ($n=750$) and short-term ($n=750$) FAs were identified from the city's patient record by simple random sampling. Only patients who were at least 18 years of age were included. A patient with at least eight healthcare visits during 1 year was

considered as a FA. A long-term FA was defined as a patient who was a FA at least three out of the four studied years (2016–2019). A short-term FA was defined as a patient who was a FA during one or 2 years and had used health services during the past 6 months. The minimum sample size required to provide statistically significant results ($N=300$) was estimated using power analysis, with the effect size set to 0.3, the power level set to 0.80, p set to 0.05, and the response rate set to 40% [27].

The postal questionnaires were sent to long-term FAs in January 2020, and a reminder questionnaire was sent in February 2020. Short-term FAs received a postal questionnaire in April–May 2020 and a reminder questionnaire in June–July 2020. A total of 234 answers were received from long-term FAs (response rate 31.2%), while 261 answers were received from short-term FAs (response rate 34.8%). Research permission was obtained from the city's social and health services director of healthcare. Participation in the study was voluntary. The participants provided informed consent alongside the questionnaire. An ethical review was not needed, as the participants provided a written informed consent, participants' physical integrity was not intervened, strong stimuli were not exposed to participants, the study did not include minors as participants, participants' safety was not threatened, and the survey did not cause mental harm, which would have exceeded the limits of regular life [28, 29]. Because information was collected from study participants through postal questionnaires, we formed a personal data register. It included information on home addresses and names of the study participants. Identification numbers were coded for study participants in case there was a need to send a reminder to answer the questionnaire. Identification numbers and answers to the questionnaires were stored in separate locations. Only the first author handled password-protected personal information and data. After the questionnaire data were collected, the personal data were disposed.

A previously validated instrument 'the 36-item PCPC instrument' [30] was used to examine the FA's perceptions of patient-centredness. The instrument was originally developed for patients with multimorbidity in primary care setting in the Netherlands. The instrument recognises wider organisational aspects of patient-centredness, instead of focusing only on patient-centredness in patient–professional interaction. It includes 36 items, which are divided into eight subscales: (1) 'Patients' preferences' including items addressing how the patient's preferences are acknowledged in choosing the treatment, whether and what kind of effects the treatment has on the patient's life, and what kind of goals are set for treatment. (2) 'Physical comfort'

includes items related to the physical setting of care facilities, such as privacy, and how the patient's feelings of physical discomfort are noted. (3) 'Coordination of care' considers whether the patient is aware of who is coordinating his/her care and whether the professionals involved in care are aware of the current care situation. (4) 'Continuity and transition' considers whether the care received from different professionals is complementary and the patient information transfers adequately between professionals. (5) 'Emotional support' takes into account items addressing whether emotional support is provided, whether the patient has, for example, feelings of anxiety, or how the current state of health may affect the patient's personal life. (6) 'Access to care' acknowledges distance to care facilities, scheduling an appointment, and the waiting time. (7) 'Information and education' considers whether the patient feels being well informed, whether the information is explained understandably, and if he/she feels free to ask questions. (8) 'Family and friends' involves items related to the fact that, if any, are family members able to ask questions or are their support acknowledged. The respondents scored each item using a five-point scale ranging from 1 ('totally disagree') to 5 ('totally agree'). Study participants were asked to assess the care that they received during the past 6 months. The following background data were collected: age, gender, education, and employment status.

The developers of the instrument [30] provided permission to translate the instrument into Finnish and to validate the Finnish version of the instrument using a FA population from a primary healthcare setting. The instrument was translated from English into Finnish using forward-translation and back-translation in order to translate a conceptually equivalent instrument [31]. In the translation process, an expert panel of six was used. They had broad expertise in developing an instrument, Finnish healthcare system, frequent attendance, and patient-centredness. The expert panel paid particular attention to the fact that the translated instrument would consider the nuances of the Finnish primary healthcare setting and FAs.

Data analysis

Descriptive statistics (frequencies and percentages) and Pearson's chi-squared test were used to describe and compare the background characteristics of long- and short-term FAs. The threshold for statistical significance was set at $p < 0.05$.

Because the factor structure for the PCPC instrument has been identified in the previous study [30], that is

eight subscales have been identified, in this study eight sum variables were created for subsequent analyses. If there were missing cases for items, the score for the sum variable was calculated based on the mean value of answers provided for the items. We included answers with at least one valid item in a subscale. The mean value and standard deviation (SD) for each sum variable were calculated for both short- and long-term FAs. A Mann-Whitney test was used to compare the mean values of sum variables for the short- and long-term FAs. The Mann-Whitney *U*-test was used because the original items of the instrument represent opinion scale and the data were not normally distributed. The data were analysed in IBM SPSS Statistics (version 24; SPSS Inc., Chicago, IL).

Multigroup confirmatory factor analysis (MGCFA) was used to confirm the factor structure of the 36-item PCPC instrument with a sample of short- and long-term FAs (i.e. to test the measurement invariance across long-term and short-term FAs). The application of MGCFA makes it possible to determine model fit (eight-dimension structure originally developed for the PCPC instrument) separately for the FA groups and to make group comparisons. Thus, this method can be used to assess whether long- and short-term FAs interpret the instrument in a similar way [32]. A total of four models were tested in the MGCFA. First (Model 1), the factor structure was tested for both FA groups (configural invariance). The fit indices used were chi-squared test, χ^2/df , root-mean-square error of approximation (RMSEA), Tucker-Lewis fit index (TLI), and comparative fit index (CFI). The following values were considered to indicate a good fit: $\chi^2/df < 5$, TLI > 0.90 [33], CFI > 0.90 , RMSEA < 0.08 [34], and a statistically insignificant result for the chi-squared test ($p > 0.05$) [35]. The MGCFA was performed using AMOS in SPSS. If Model 1 indicates a good fit, invariance with respect to factor loadings can be assessed. Thus, for Model 2, the factor loadings were constrained to be the same for both groups. If statistically significant difference is not found between Models 1 and 2, this indicates invariance in factor loadings (metric invariance), and the analysis can be continued. To assess scalar invariance, the item intercepts were the same for both groups (Model 3; factor loadings were also constrained as in Model 2). There is scalar invariance if Models 2 and 3 do not demonstrate statistically significant differences. If scalar invariance is found, this supports comparing factor means between groups. The last step in the analysis was the assessment of residual invariance (Model 4), which means that the sum of the variance for the item that is not shared with the factor and error variance is similar across groups. The lack of statistically significant differences between Models 3 and 4 is indicative of residual invariance [35].

RESULTS

The background characteristics of long-term FAs ($n = 234$) and short-term FAs ($n = 261$) are presented in Table 1. Relative to long-term FAs (75%), short-term FAs (80%) were more likely to be over the age of 60 years. Long-term FAs were more often female compared to short-term FAs (60% vs. 50%, respectively). Furthermore, a larger share of the short-term FAs (71%) were retired when compared to the long-term FAs (60%). Long-term FAs (23%) received a pension because of other reasons more often than short-term FAs (12%). The two groups of FA did not significantly differ in terms of education.

Model fit to the factor structure of the PCPC instrument is presented for long- and short-term FAs in Table 2. The correlations between latent variables of the confirmatory factor analysis, which ranged from 0.19 (family and friends and access to care) to 0.91 (physical comfort and patients' preferences), are presented in Table 3.

TABLE 1 The background characteristics of long-term ($n = 234$) and short-term ($n = 261$) frequent attenders (FAs).

	Long-term FAs % (n)	Short-term FAs % (n)	Significance p -value ^a
Gender			
Male	37.6 (88)	48.3 (126)	0.019
Female	60.3 (141)	50.2 (131)	
Age (years)			
<31	2.1 (5)	3.8 (10)	0.001
31–40	3.4 (8)	3.5 (9)	
41–50	4.3 (10)	3.5 (9)	
51–60	14.1 (33)	6.9 (18)	
>60	74.8 (175)	80.5 (210)	
Education			
Tertiary	26.1 (61)	34.9 (91)	0.055
Secondary	36.8 (86)	30.7 (80)	
Basic	34.2 (80)	29.5 (77)	
Other	1.7 (4)	1.9 (5)	
Employment status			
Employed	8.6 (20)	7.7 (20)	<0.001
Unemployed	2.6 (6)	5.4 (14)	
Pension (age or working years)	60.3 (141)	70.5 (184)	
Pension (other reason)	22.7 (53)	12.3 (32)	
Other (student, parental leave, civil servant)	6.0 (14)	4.2 (11)	

^aPearson's chi-squared test.

TABLE 2 Standardised loadings of the confirmatory factor analysis for the eight-factor model of the patient-centred primary care instrument for long- and short-term frequent attenders (FAs).

	Long-term FAs	Short-term FAs
Patients' preferences		
Q1	0.77	0.73
Q2	0.74	0.79
Q3	0.75	0.76
Q4	0.88	0.84
Q5	0.91	0.81
Q6	0.92	0.82
Q7	0.86	0.74
Physical comfort		
Q8	0.86	0.75
Q9	0.74	0.62
Q10	0.59	0.58
Q11	0.57	0.55
Q12	0.50	0.62
Coordination of care		
Q13	0.85	0.77
Q14	0.88	0.85
Q15	0.71	0.75
Q16	0.79	0.69
Continuity and transition		
Q17	0.82	0.75
Q18	0.80	0.78
Q19	0.81	0.82
Q20	0.83	0.80
Emotional support		
Q21	0.90	0.94
Q22	0.90	0.89
Q23	0.86	0.86
Q24	0.86	0.82
Access to care		
Q25	0.57	0.52
Q26	0.88	0.87
Q27	0.84	0.82
Q28	0.62	0.63
Q29	0.54	0.41
Information and education		
Q30	0.92	0.91
Q31	0.92	0.90
Q32	0.44	0.42
Q33	0.78	0.71
Family and friends		
Q34	0.86	0.93
Q35	0.94	0.96
Q36	0.97	0.94

The goodness-of-fit indices for the MGCFA are presented in Table 4. Regarding Model 1, two of the five fit indices indicated that data for short- and long-term FAs showed a good fit to the factor structure of the PCPC instrument. Models 1 and 2 did not differ on a statistically significant level; in addition to similar factor structure, the short- and long-term FA groups demonstrated similar factor loadings. Models 2 and 3 did not differ on a statistically significant level; this indicates that long- and short-term FAs had varying responses to items of the PCPC instrument. The difference between Models 3 and 4 was statistically significant; hence, no information about between-group differences was lost when creating the factors.

Data for the short- and long-term FAs demonstrated a reasonable fit to the eight-factor model. Based on MGCFA, short- and long-term FA groups demonstrated similar factor loadings and had varying responses to items of the PCPC instrument.

Both long- and short-term FAs provided relatively low scores for patient-centredness in primary health-care (Table 5), with the long-term FAs scoring patient-centredness lower than short-term FAs. Statistically significant differences between short- and long-term FAs

were found for the entire instrument (3.32 vs. 3.63), as well as across every subscale, more specifically, patients' preferences (3.46 vs. 3.75), physical comfort (3.63 vs. 3.81), coordination of care (3.30 vs. 3.61), continuity and transition (3.78 vs. 4.02), emotional support (2.66 vs. 2.90), access to care (3.44 vs. 3.70), information and education (3.63 vs. 3.95), and family and friends (2.84 vs. 3.19).

DISCUSSION

This study provided novel insight into short- and long-term FAs' perceptions of patient-centred care. According to the results, long-term FAs had worse perceptions of patient-centredness than short-term FAs across the entire PCPC instrument. The finding that long- and short-term FAs have different perceptions of patient-centred care reflected previous results. Koskela et al. [4] compared long-term FAs with non-FAs and identified that long-term FAs had poorer perceptions of patient satisfaction. Only one previous study has compared long- and short-term FAs' perceptions of care: Huhtakangas et al. [36] found short- and long-term FAs to have poorer perceptions of patient-professional interactions. While Huhtakangas et al. [36]

TABLE 3 Correlations between the latent variables of the confirmatory factor analysis for the eight-factor model of the patient-centred primary care instrument (long-term frequent attenders/short-term frequent attenders).

	Physical comfort	Coordination of care	Continuity and transition	Emotional support	Access to care	Information and education	Family and friends
Patients' preferences	0.90/0.91	0.90/0.87	0.85/0.89	0.67/0.58	0.66/0.67	0.82/0.82	0.44/0.33
Physical comfort	–	0.91/0.89	0.87/0.89	0.73/0.64	0.77/0.67	0.84/0.83	0.53/0.30
Coordination of care	–	–	0.84/0.93	0.73/0.58	0.68/0.69	0.85/0.86	0.54/0.36
Continuity and transition	–	–	–	0.65/0.56	0.73/0.64	0.87/0.83	0.49/0.32
Emotional support	–	–	–	–	0.57/0.49	0.73/0.53	0.60/0.41
Access to care	–	–	–	–	–	0.77/0.73	0.53/0.19
Information and education	–	–	–	–	–	–	0.57/0.29

TABLE 4 Goodness-of-fit indices for the multigroup confirmatory factor analysis.

	χ^2	df	<i>p</i> -Value (difference between models) ^a	χ^2/df	TLI	CFI	RMSEA (95% CI)
Model 1 (configural invariance)	2679.242	1132		2.37	0.87	0.89	0.05 (0.05–0.06)
Model 2 (metric invariance)	2706.63	1160	0.497	2.33	0.87	0.89	0.05 (0.05–0.06)
Model 3 (scalar invariance)	2726.73	1188	0.861	2.30	0.88	0.89	0.055 (0.05–0.05)
Model 4 (residual invariance)	2815.61	1224	<0.001	2.30	0.87	0.89	0.05 (0.05–0.05)

Note: Model 1: Goodness of fit of the eight-factor model in long- and short-term FA groups. Model 2: Factor loadings were constrained to be the same for both groups (long- and short-term FAs). Model 3: Item intercepts were constrained to be the same for both groups. Model 4: The sum of variance of the item that is not shared with the factor and error variance is similar across groups.

^aThe lack of a statistically significant difference indicates metric/scalar/residual invariance, and the analysis can continue to the next model.

TABLE 5 Long- and short-term frequent attenders' (FAs) perceptions of patient-centredness in primary healthcare (PCPC) instrument.

Item	Valid <i>n</i>		Missing		Mean		SD		Significance ^a <i>p</i> -value	Cronbach's alpha
	Long-term FAs	Short-term FAs	Long-term FAs	Short-term FAs	Long-term FAs	Short-term FAs	Long-term FAs	Short-term FAs		
PCPC instrument	233	261			3.32	3.63	0.93	0.83	<0.001	0.96
Patients' preferences	232	261	2	0	3.46	3.75	1.11	0.92	0.005	0.94
Physical comfort	232	261	2	0	3.63	3.81	0.90	0.80	0.012	0.79
Coordination of care	233	261	1	0	3.30	3.61	1.14	1.07	0.003	0.86
Continuity and transition	228	260	6	1	3.78	4.02	1.04	0.94	0.008	0.88
Emotional support	223	254	11	7	2.66	2.90	1.26	1.21	0.035	0.93
Access to care	232	261	2	0	3.44	3.70	1.01	0.93	0.006	0.80
Information and education	227	260	7	1	3.63	3.95	1.02	0.88	0.001	0.84
Family and friends	191	221	43	40	2.84	3.19	1.39	1.42	0.013	0.95

^aMann–Whitney *U*-test.

focused on patient–professional interaction, this study assessed broader dimensions of FAs' perceptions of care. The result of long-term FAs having poorer perceptions of patient-centredness is noteworthy, as it seems that provided care or the ways primary healthcare is organised is not able to respond to care needs of patients who have increased and longitudinal care needs.

The difference among FAs regarding patient-centredness may be explained by the fact that long-term FAs have had more experiences during several years of consultations; it should be noted that study participants were asked to assess the care they received during the past 6 months, but it is possible that their responses were biased by prior experiences. Feelings of frustration, ending up in a service circle, not being taken seriously, and having one's needs diminished have been reported for FAs [17], and an individual may have more negative feelings if they encounter these experiences several times.

There are a limited number of research studies addressing which attributes differentiate long-term FAs from short-term FAs [4, 5, 7, 36]. Instead of focusing on a single sociodemographic factor characteristic for FAs (e.g. gender), it would be important to consider more comprehensive matters and what kind of effects the way care and healthcare systems are organised may have on increased need for services, especially in cases where high needs have prolonged. For example, whether long-term FAs – compared to short-term FAs – have more medically unexplained symptoms, health anxiety, or social problems, and how provided care affects these factors. Compared to short-term FAs, poor self-reported health seems to increase the risk of being a long-term FA over three times [7]. Based on this study's results, the FA's individual situation may have significant impact on prolonged frequent attendance.

The result that compared to short-term FAs, long-term FAs provided worse assessments of patients' preferences, and receiving information and education, is corroborated by previous research. For example, Huhtakangas et al. [36] found that long-term FAs assessed their involvement in care worse than short-term FAs. Considering patients' experiential knowledge of their symptoms and how the condition affects their life is important for successful care [22]. Moreover, it has been shown that FAs want to participate in decision-making [17]. Hujala et al. [37] found in their literature review that for patients with multimorbidity the demand for active agency was viewed as individual performance in a business-like style, although in reality patients cannot make entirely consumeristic choices regarding care. This is because patients with multimorbidity have complex care needs because they may not have the required competence for self-administration. Thus, a critical assessment is needed to determine whether a patient-centred approach is suitable for every situation. Furthermore, the patient and the healthcare professional may have different views of health priorities; it is impossible to identify the main health priorities during every consultation as disease progression and nonmedical issues may affect overall health.

Based on the presented results, long- and short-term FAs' perceptions of accessibility and care coordination differed. Similar results have been found regarding FAs in general [15]. Organisational factors, for example an adequate amount of healthcare professionals, workload, timeliness of care, and stability of healthcare professionals, have a profound influence on the provision of patient-centred care [38]. Social and healthcare centres differ in which services and to what extent they offer to patients; how many and which healthcare professionals are available for the purposes of complex care needs; or whether

case management is possible. A lack of care coordination and the complexity of the healthcare system are reasons why FAs often feel that they are 'bounced around' [24]; this is why effective case management is needed to guide FAs to the appropriate care [39]. It should be noted that in Finland, access to primary care is guaranteed in the legislation; this means that patients should receive non-urgent care within at least 3 months of care need assessment [40].

Continuity and transition, which relates to multiprofessional care and information transfer, was also found to differ between long- and short-term FAs. The complexity of FAs' care needs may require expertise from multiple healthcare professionals, which leads to the fragmentation of care [41]. This becomes challenging if multiple care plans exist simultaneously, which may lead to healthcare professionals lacking essential information to make informed care decisions [42]. Although FAs require care coordination, care plans are often made separately in different sectors. In addition, there are issues in transferring patient information between sectors and professionals. The information technology in Finland does not support information transfer between primary and specialised healthcare or social care because the systems are incompatible, which hampers multiprofessional work and FAs' care [43]. For FAs, having a multiprofessional or multidisciplinary care plan increases the probability of achieving positive outcomes, such as health, self-management, patient satisfaction, and reduced costs of care [39].

In Finland, a care plan must be made if required, and patients have a right to be involved in care planning as well as receive information about their care options and the implications. However, an audit performed in 2015 found that approximately 20% of health centres had not made care plans for patients with chronic diseases and that health centres rarely made care plans for over 50% of patients with chronic diseases [42]. Also, healthcare professionals have reported that only 30%–50% of FAs are involved in care planning [44, 45]. A FA's reoccurring need for multiprofessional care [46] means that an individualised care plan would be critical to improving care coordination.

Although several instruments exist for measuring patient-centredness, the existing instruments should be assessed for structural validity and applicability to different patient groups, countries, and healthcare systems [47, 48]. The PCPC instrument used in this study has demonstrated good psychometric properties [30] but has not been tested using MGCFA or FAs in the Finnish primary healthcare setting. The results of this study support the factor structure of the PCPC instrument based on comparisons of long- and short-term FAs. Cronbach's alpha was used to assess the internal consistency of the instrument and subscales. According to Bland and Altman [49], alpha

value of at least 0.7 is considered satisfactory. Cronbach's alpha for the entire PCPC instrument (36 items) was 0.96. For individual subscales, Cronbach's alpha ranged from 0.79 to 0.95, which was considered satisfactory.

Limitations

This study has some limitations. Although the minimum sample size was estimated at 300 short- and long-term FAs, the responses for these groups were only 34.8% ($n=261$) and 31.2% ($n=234$), respectively. However, a sample size of 200 provides adequate statistical power for data analysis [50]. As the study was conducted in a Finnish primary healthcare setting, it may not be possible to generalise the results to different healthcare settings. The results represent sample collected from one city in Finland. There are various ways how care is arranged and which services were provided for patients in particular cities and regions, and FAs as a patient group are recognised, for example whether case management is used or how care plans are made and monitored. For future studies, follow-up analyses with data collected from similar sites are needed. The translated instrument can be used for assessing FAs' perceptions of patient-centredness in other regions. In addition, it should be noted that there was extensive representation of elderly among long- and short-term FAs (75% and 81%) among the study participants and they were retired (60% and 71%) or on pension due to other reasons (23% and 12%). Thus, the findings are mainly generalisable to FAs over the age of 60 and FAs on pension. Because the study did not include non-FAs, it is not possible to state how long- and short-term FAs' perceptions of patient-centredness differ from non-FAs. The instrument includes eight subscales ranging from four to six items each, for a subscale total minimum of four to six to a maximum of 36. Groupwise means may overlap each other.

An ongoing relationship between the healthcare professional and patient is critical to patient-centredness and is especially relevant to FAs because of reoccurring healthcare visits. The study participants were asked to assess the care they had received during the past 6 months. This strengthens the reliability of the findings, as the instrument was used to evaluate patient-centredness over time instead of at one particular consultation [47]. However, it is possible that the study participants evaluated their care based on particular visit(s), and – as such – the responses do not provide a comprehensive picture of FAs' perceptions of patient-centredness. Also, the respondents may have used different healthcare professional services during the past 6 months, which is why the results cannot be viewed from the perspective of particular healthcare professional group. However, the study provides

information on the prevalence of patient-centredness in the care provided to FAs. The instrument was initially developed for patients with multimorbidity in primary care in the Netherlands. The meanings of each item in the instrument may vary between Finland and the Netherlands. There may be differences in cultural, societal, and governmental programme nuances. As is the case in Finland, also the Netherlands emphasises the patient's own active role in care and the essential role of primary healthcare setting in providing care [51, 52]. Thus, considering the common core for how healthcare is arranged in relation to patient-centredness, selecting an instrument developed in the Netherlands was considered suitable although attention was paid to cross-country differences in the translation process. In order to maximise the quality of the translation process, a systematic approach for accurate instrument translation was used [29].

CONCLUSIONS AND IMPLICATIONS

The low scores provided by FAs on assessments of patient-centredness indicate that their care needs are currently not being met, with long-term FAs having worse perceptions of patient-centredness than short-term FAs. In Finland, primary healthcare serves a gatekeeping role in access to specialised healthcare. FA is a patient group that needs to be addressed when improving patient-centredness and aligning the work in healthcare and social care centres with patients' individual needs, as these patients often need extensive and multiprofessional healthcare and social care services. Main challenges in FAs' care in primary care setting are related to collaboration and information exchange between healthcare professionals and sectors. The examination of FAs' current perceptions of the patient-centredness of primary healthcare provides information that will be critical to developing patient-centred and integrated care for FAs. The presented results indicate that long-term FAs require particularly strong attention. More information is needed on what kind of factors in the way care is organised may affect especially on long-term frequent attendance. The results identified in this study, that is the dimensions of patient-centredness, provide a considerable basis for future studies.

AUTHOR CONTRIBUTIONS

HM, KO and KH designed the study. HM conducted the data collection. HM and TM analyzed the data. HM wrote the first draft of the manuscript. HM and TM wrote the methods section. KO and KH contributed to the entire manuscript. All authors read and approved the final manuscript.

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CONFLICT OF INTEREST STATEMENT

The authors declare there are no conflicts of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ETHICS STATEMENT

The study participants provided informed consent alongside the questionnaire. Participation in the study was voluntary. An ethical review for the study was not needed because the participants provided informed consent, their physical integrity was not intervened, and they were not exposed for strong stimuli. Research permission was obtained from the city's social and health services director.

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REFERENCES

1. Vedsted P, Christensen MB. Frequent attenders in general practice: a literature review with special reference to methodological considerations. *Public Health*. 2005;119(2):118–37.
2. Leskelä RL, Komssi V, Sandström S, Pikkujämsä S, Haverinen A, Olli SL, et al. Paljon sosiaali- ja terveystalveluja käyttävät asiakkaat Oulussa [heavy users of social and health care services in the city of Oulu. In Finnish]. *Suom Laakaril*. 2013;68(48):3163–9.
3. Wammes J, van der Wees P, Tanke M, Westert G, Jeurissen P. Systematic review of high-cost patients' characteristics and healthcare utilization. *BMJ Open*. 2018;8(9):e023113.
4. Koskela TH, Rynänen OP, Soini EJ. Factors for persistent frequent use of the primary health care services among frequent attenders: a Bayesian approach. *Scand J Prim Health Care*. 2010;28(1):55–61.
5. Pymont C, Butterworth P. Longitudinal cohort study describing persistent frequent attenders in Australian primary healthcare. *BMJ Open*. 2015;5(10):e008975.
6. Reho T, Atkins S, Talola N, Sumanen M, Viljamaa M, Uitti J. Comparing occasional and persistent frequent attenders in occupational health primary care – a longitudinal study. *BMC Public Health*. 2018;18(1):1291.
7. Huhtakangas M, Kyngäs H, Bloigu R, Kanste O. Differentiating middle-aged long-term and short-term frequent attenders by means of the northern Finland birth cohort 1966 study. *Scand J Caring Sci*. 2021;35(3):813–23.
8. Kivelä K, Elo S, Kääriäinen M. Frequent attenders in primary health care: a concept analysis. *Int J Nurs Stud*. 2018;86:115–24.

9. Polakovská L, Řiháček T. What is it like to live with medically unexplained physical symptoms? A qualitative meta-summary. *Psychol Health*. 2022;37(5):580–96.
10. Wiklund-Gustin L. Struggling on my own: a cognitive perspective on frequent attenders' conception of life and their interaction with the healthcare system. *Psychiatry J*. 2013;2013:580175.
11. Sharabani R, Kagan I, Cojocar S. Frequent attenders in primary health care: a mixed-methods study of patient and staff perspectives. *J Clin Nurs*. 2023;1:7135–46.
12. Brunner L, Allen C, Malebranche M, Hudon C, Senn N, Hugli O, et al. Qualitative evaluation of primary care providers' experiences caring for frequent users of the emergency department. *BMJ Open*. 2021;11(6):e044326.
13. Cunningham A, Mautner D, Ku B, Scott K, LaNoue M. Frequent emergency department visitors are frequent primary care visitors and report unmet primary care needs. *J Eval Clin Pract*. 2017;23(3):567–73.
14. Dinkel A, Schneider A, Schmutzer G, Brähler E, Häuser W. Family physician-patient relationship and frequent attendance of primary and specialist health care: results from a German population-based cohort study. *Patient Educ Couns*. 2016;99(7):1213–9.
15. Hudon C, Sanche S, Haggerty J. Personal characteristics and experience of primary care predicting frequent use of emergency department: a prospective cohort study. *PLoS One*. 2016;11(6):e0157489.
16. Gilmore KJ, Corazza I, Coletta L, Allin S. The uses of patient reported experience measures in health systems: a systematic narrative review. *Health Policy*. 2023;128:1–10.
17. Loeb D, Bayliss E, Candrian C, DeGruy F, Binswanger I. Primary care providers' experiences caring for complex patients in primary care: a qualitative study. *BMC Fam Pract*. 2016;22(17):34.
18. Castro E, Van Regenmortel T, Vanhaecht K, Sermeus W, Van Hecke A. Patient empowerment, patient participation and patient-centeredness in hospital care: a concept analysis based on a literature review. *Patient Educ Couns*. 2016;99(12):1923–39.
19. Grover S, Fitzpatrick A, Azim FT, Ariza-Vega P, Bellwood P, Burns J, et al. Defining and implementing patient-centered care: an umbrella review. *Patient Educ Couns*. 2022;105(7):1679–88.
20. Eklund J, Holmström I, Kumlin T, Kaminsky E, Skoglund K, Högländer J, et al. "Same same or different?" A review of reviews of person-centered and patient-centered care. *Patient Educ Couns*. 2019;102(1):3–11.
21. Langberg E, Dyhr L, Davidsen A. Development of the concept of patient-centredness - a systematic review. *Patient Educ Couns*. 2019;102(7):1228–36.
22. Hudon C, Fortin M, Haggerty J, Lambert M, Poitras ME. Measuring patients' perceptions of patient-centered care: a systematic review of tools for family medicine. *Ann Fam Med*. 2011;9(2):155–64.
23. Scholl I, Zill J, Harter M, Dirmaier J. An integrative model of patient-centredness: a systematic review and concept analysis. *PLoS One*. 2014;17(9):e107828.
24. Park M, Giap T, Lee M, Jeong M, Go Y. Patient- and family-centered care interventions for improving the quality of health care: a review of systematic reviews. *Int J Nurs Stud*. 2018;87:69–83.
25. Younas A, Inayat S, Masih S. Nurses' perceived barriers to the delivery of person-centred care to complex patients: a qualitative study using theoretical domains framework. *J Clin Nurs*. 2023;32(3–4):368–81.
26. Huhtakangas M, Tuomikoski A-M, Kyngäs H, Kanste O. Frequent attenders' experiences of encounters with health-care personnel: a systematic review of qualitative studies. *Nurs Health Sci*. 2021;23(1):53–68.
27. Munro B. *Statistical methods for health care research*. 5th ed. Lippincott Williams & Wilkins; 2005.
28. Finnish National Board on Research Integrity. The ethical principles of research with human participants and ethical review in the human sciences in Finland. Finnish National Board on Research Integrity TENK Guidelines. 2019. <https://tenk.fi/en/ethical-review/ethical-review-human-sciences>
29. World Medical Association. Declaration of Helsinki – Ethical principles for medical research involving human subjects. 2013. <https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/>
30. Cramm J, Nieboer A. Validation of an instrument for the assessment of patient-centred care among patients with multimorbidity in the primary care setting: the 36-item patient-centred primary care instrument. *BMC Fam Pract*. 2018;19(1):143.
31. World Health Organization. Process of translation and adaptation of instruments. 2016. https://www.who.int/substance_abuse/research_tools/translation/en/
32. Milfont T, Fischer R. Testing measurement invariance across groups: applications in cross-cultural research. *Int J Psychol Res*. 2010;3(1):111–30.
33. Hu L, Bentler P. Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Struct Equ Model Multidiscip J*. 2009;3:1–55.
34. Browne M, Cudeck R. Alternative ways of assessing model fit. *Sociol Methods Res*. 1992;21(2):230–58.
35. Byrne B. *Structural equation modelling with AMOS: basic concepts, applications, and programming*. London: Erlbaum; 2001.
36. Huhtakangas M, Tolvanen M, Kanste O. Vuorovaikutus terveydenhuollon ammattihenkilöiden kanssa paljon terveystalvemuksien tarvitsevien asiakkaiden arvioimana [Patient-professional interaction assessed by frequent attenders. In Finnish]. *Sosiaalilääketieteellinen Aikakauslehti*. 2022;59(3).
37. Hujala A, Rijken M, Laulainen S, Taskinen H, Rissanen S. People with multimorbidity: forgotten outsiders or dynamic self-managers. *J Health Organ Manag*. 2014;28(5):696–712.
38. Hower K, Vennedey V, Hillen H, Kuntz L, Stock S, Pfaff H, et al. Implementation of patient-centred care: which organisational determinants matter from decision maker's perspective? Results from a qualitative interview study across various health and social care organisations. *BMJ Open*. 2019;9(4):e027591.
39. Hudon C, Chouinard MC, Pluye P, El Sherif R, Bush P, Rhoux B, et al. Characteristics of case management in primary care associated with positive outcomes for frequent users of health care: a systematic review. *Ann Fam Med*. 2019;17(5):448–58.
40. Health Care Act 1326/2010 [In Finnish]. <https://www.finlex.fi/fi/laki/ajantasa/2010/20101326#L6P51a>
41. The Commonwealth Fund. Designing a high-performing health care system for patients with complex needs – Ten recommendations for policymakers. 2017. <https://www.commonwealthfund.org/publications/fund-reports/2017/sep/designing-high-performing-health-care-system-patients-complex>

42. National Audit Office of Finland. Paljon palveluja tarvitsevat ja käyttävät asiakkaat perusterveydenhuollossa [Frequent users of basic health care services. In Finnish]. 2017. <https://www.vtv.fi/app/uploads/2018/05/22105012/paljon-palveluja-tarvitsevat.pdf>
43. Alahuhta M, Niemelä E. Paljon sosiaali- ja terveystalveluja käyttävien asiakkaiden palveluiden toteutuminen – työntekijöiden ja johtavien viranhaltijoiden haastattelututkimus [the realization of services of frequent attenders in health and social care – an interview study of the employees and the leading officeholders. In Finnish]. *Sosiaalilääketieteellinen Aikakauslehti*. 2017;54(1):6–17.
44. Hujala A, Taskinen H, Oksman E, Kuronen R, Karttunen A, Lammintakanen J. Sote-ammattilaisten monialainen yhteistyö: Paljon palveluja tarvitsevat asiakkaat etusijalle [Multidisciplinary work among social and healthcare professionals: prioritizing frequent attenders. In Finnish]. *Yhteiskuntapolitiikka*. 2019;5–6.
45. Vehko T, Jolanki O, Aalto A-M, Sinervo T. How do health care workers manage a patient with multiple care needs from both health and social care services? A vignette study. *Int J Care Coord*. 2018;21(1–2):5–14.
46. Ylitalo-Katajisto K, Tiirinki H, Jokelainen J, Suhonen M. Individualised integration of social and health services for frequent attenders. *J Integr Care*. 2019;27(4):316–27.
47. Köberich S, Farin E. A systematic review of instruments measuring patients' perceptions of patient-centred nursing care. *Nurs Inq*. 2015;22(2):106–20.
48. Yağar F. Why does patient-physician communication matter? More active patients, decreased healthcare use and costs. *J Patient Exp*. 2021;8:237437352110365.
49. Bland JM, Altman DG. Statistics notes: Cronbach's alpha. *BMJ*. 1997;314(7080):572.
50. Hoe S. Issues and procedures in adopting structural equation modeling technique. *J Appl Quantitat Methods*. 2008;3:76–83.
51. Keskimäki I, Tynkkynen L-K, Reissel E, Koivusalo S, Syrjä V, Vuorenkoski L, et al. Finland: health systems review. European observatory on health systems and policies. *Health Syst Transit*. 2019;21(2):1–66. <https://apps.who.int/iris/handle/10665/327538>
52. Kroneman M, Boerma W, van den Berg M, Groenewegen P, de Jong J, van Ginneken E. Netherland: health system review. European observatory on health systems and policies. *Health Syst Transit*. 2016;18(2). <https://apps.who.int/iris/handle/10665/330244>

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