

Original Article

Profiling Frequent Attenders to Social and Health Care Services from the Perspective of Knowledge-Based Management

Kirsti Ylitalo-Katajisto, RN, LicHSc, Doctoral Student

Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu, Finland. Director of Healthcare and Social Welfare, City of Oulu, Finland

Outi Tormanen, SN, PhD,

Principal Lecturer, Lapland University of Applied Sciences, Finland

Hanna Tiirinki, OT, PhD

Reform Agent, Programme to address reform in child and family services, Nylands region, Finland

Marjo Suhonen, RN, PhD

Docent, University lecturer, Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu, Finland. Medical Research Center Oulu, University Hospital of Oulu, Finland

Correspondence: Kirsti Ylitalo-Katajisto, City of Oulu, BOX 27, 90015 City of Oulu, Finland

E-mail: kirsti.ylitalo-katajisto@ouka.fi

Abstract

Background: Identifying of frequent attenders has been a focus of research in health care for decades. Profiling frequent attenders from the perspective of joint service planning and knowledge-based management in social and health care services has not been previously studied.

Objective: To profile frequent attenders to social and health care services from the perspective of knowledge-based management.

Methodology: The informants in this study were customers of different ages (n=56) who required the services of social and healthcare centres. The qualitative method used for analysing the service plan was the systematic analysis.

Results: Four customer profiles were classified, one for children and adolescents: **Children and adolescents who are burdened by everyday concerns**. The other three profiles were for adults: **Mothers requiring support, Customers with multiple problems, Customers with an impaired capacity caused by substance abuse**. In each of the profiles, physical, mental health and social problems were interlinked and customers had a need for multiprofessional and customised social and health care services to support their daily lives.

Conclusions: There is a need for an improved understanding of the different customer profiles of frequent attenders and knowledge about the social and health care services they use, as well as for mediating this knowledge across professional barriers and knowledge-based management. Defining customer profiles may help identify frequent customers who require multiprofessional social and healthcare services in order to develop effective care and services.

Key words: frequent attender, customer profile, service plan, social and health care services, multiprofessional, knowledge-based management

Background

Frequent attenders to public services have been a focus for research in the field of health care for decades. A frequent attender can be defined as a customer who uses the services of a general

practitioner more frequently than the population on average, for high frequency varying between 2 and 24 appointments per year (Vedsted & Christensen 2005). There are few examples of frequent attender profiling in studies on public healthcare (e.g. Karlsson et al. 1997, Byrne et al.

2003, Savageau et al. 2006, Ramasubbu et al. 2016) and with children and adolescents the studies have focused on primary healthcare (e.g. Garralda et al. 1999, Stojanovič-Špehar et al. 2007, Vila et al. 2012). In this study, a frequent attender is defined as a person who has used the primary healthcare services of a physician at a social and healthcare centre for more than six times per year or who requires multiprofessional social and health care services based on a professional assessment. A social and healthcare centre is a unit providing publicly funded social and health care services. Customer profiles are descriptions of a group of customers, who share similar behaviours and service needs. In the present study, the aim was to identify customer profiles from the perspective of knowledge-based management. As a concept, the knowledge-based approach is based on the most important resource of an organisation, that is, knowledge (e.g. Grant 1996). The fragmented and disconnected nature of knowledge and problems in communicating knowledge are critical aspects of knowledge-based management (Currie & White 2012), as well as the opportunities and capabilities of an organisation to engage in multiprofessional cooperation (Freeman et al. 2000). In this study, we refer to knowledge-based management as the formation and evolution of knowledge into understanding about customers as part of multiprofessional cooperation and management in social and healthcare services. The objective of this study is to profile frequent attenders to social and health care services from the perspective of knowledge-based management. As far as we know, frequent attenders have not been studied from the perspective of a joint customer relationship with social and healthcare services.

Methodology

The informants in this study were customers of different ages (n=56) who required the services of social and healthcare centres and for whom a service plan had been drawn up between 1 October 2015 and 30 June 2016. The informants were selected based on discretionary sampling (cf. Polit & Beck 2017) so that the selection of customers as well as their service plans were delivered either by the staff of the social and healthcare centres, including e.g. physicians, nurses, social workers and psychologists under the aegis of the education and cultural services. The research permission was obtained from the

social and healthcare services division of a city located in Finland and a privacy policy has been submitted to the Office of Data Protection Ombudsman.

The material was collected by the staff from the receptions of social and healthcare centres. According to the selection criteria, the informants for this study had used the services of a physician in primary health care more than six times in the past 12 months or they required multiprofessional social and healthcare services based on a professional assessment.

Ethical considerations

Each customer was asked to give a written informed consent to their personal service plan to be drawn up (cf. Polit & Beck 2017). The service plan was registered in a joint system of records, which is accessed by different authorities (Act 117/2014 on reducing municipal obligations and governance and experiments supporting multiprofessional service provision). A permission from the ethical committee was not necessary, as the service plans were anonymised for the purpose of the study and the anonymity of the informants was secured throughout the study.

Data analysis

The analysis method used was the systematic analysis, which was applied in analysing concepts in the text material (cf. Perakyla & Ruusuvoori 2017). The phased analytical reading process, which is typical of the systematic method, allows us to analyse and interpret the service plans from the perspective of knowledge-based management. The analysis proceeded through three main phases: preparation analysis, analysis and conclusions (Figure 1).

In the preparation phase, the research questions was based on existing research on the topic and defined as “What are the customers’ profiles of frequent attenders to the social and healthcare centre services like-based on the service plans?” The research question was approached from the various angles of knowledge-based management: the understanding of customers that evolves from data (cf. Grant 1996), the mediating and sharing of knowledge across professional barriers (cf. Currie & White 2012) as well as multiprofessional provision of joint social and healthcare services supporting the customer (cf. Freeman et al. 2000).

In the second phase of analysis, the service plans were divided into two groups: under-18s, or children and adolescents, and over-18s, or adults. At this stage, the analysis focused on individual concepts and their contexts on a sentence level. Notes were made on the concepts used for each individual customer, while simultaneously looking for similarities and linking different factors into categories under both age groups. After this, the analysis progressed with each

reading. During the first reading, the task was to identify the customers' life situations and service needs in both age groups. On the second reading, the focus was on expressions referring to the customers' resources, support networks and cooperation partners. The third reading concentrated on the support and cooperation network within the service provision system. Finally, a synthesis was formed by distinguishing different customer profiles.

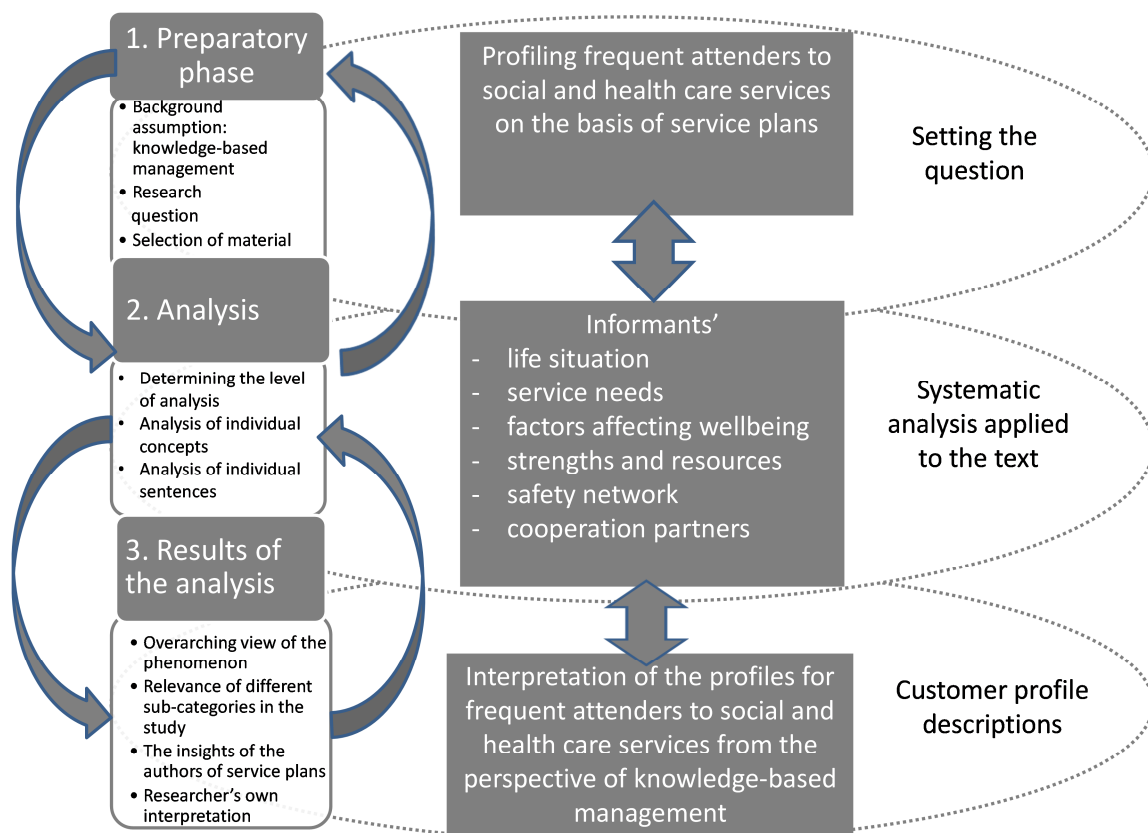


Figure 1. Profiling frequent attenders to social and health care services from the perspective of knowledge-based management using the systematic analysis method.

Table 1. Profiles of frequent attenders to social and health care services from the perspective of knowledge-based management

Profiles	Children and adolescents who are burdened by everyday concerns.	Mothers requiring support	Customers with multiple problems	Customers with an impaired capacity caused by substance abuse.
Service needs	Were related to the mental capacity, behavioral problems, learning difficulties or challenges in social relationships. Their parents' ability to cope and/or inability to look after them were also reasons for attending the services.	Was linked with situations surrounding pregnancy, parenting young children and single parenting. The mothers' abilities to cope were impaired by diminished functional capacity, mental health disorder, various symptoms or exhaustion. Financial difficulties made coping in daily life additionally challenging	Arose from somatic symptoms or illnesses combined with mental health disorders, symptoms and impaired mental functional capacity. Problems in coping with daily lives often paired with financial difficulties.	Had problems related to marginalisation, depressions, panic disorder and substance abuse or were undergoing treatment for opioid addiction. Suffered from functional and occupational incapacity and financial difficulties, which all made coping in daily life more challenging.
Customers recourse, support networks, cooperation partners	Were viewed in relation to school performance, hobbies and their possibilities to rely on their parents. Resources were also identified within the family and network of people close to them.	Were identified in the bond between the mother and the baby, in the mothers' ability to also look after themselves, in their abstinence from substances, and in their own health status and ability to cope. The role of the rest of the family, or a support family, and the partner was also significant, and the lack of these impaired the women's ability to cope with their daily lives.	Included the customers' ability to recognize their own situation, as well as their will to look after themselves and the ability to seek help when necessary. Might also show high resistance towards seeking help and poor adherence to treatment. Their strengths included good social relationships and physical activity. The support network was either weak or their social lives were even too busy, which could impact their daily lives adversely.	A demanding family situation was often a factor when identifying the customer's service needs. They found social situations frightening. Were related to their motivation to live a substance-free life, their social relationships and a successful running of daily lives. Their support networks were often weak.
Support and cooperation	Offered by a system based	The support provided by a multiprofessional	Dependency on the multiprofessional	Tailored and intensive support

<p>network within in service provision system</p>	<p>on a multiprofessional network of specialists in social and healthcare services proved a significant resource in the daily lives of the children and adolescents and in supporting their growth and development at home, day-care and school, as well as in parenting.</p>	<p>social and healthcare services was necessary for their coping.</p>	<p>social and healthcare service system and specialists.</p>	<p>provided by social and healthcare services was necessary for their coping</p>
<p>Examples</p>	<p>“...during the 3-month check-up at the child welfare clinic, concerns were raised about the mother’s ability to cope and the baby’s wellbeing..” “The mother finds many of the daily activities with.... Difficulty in concentration. Occasionally shows defiant behaviour and finds it difficult to complete their homework.”</p>	<p>“The family has two parents and three children under school age. The mother has been experiencing exhaustion. The mother is pregnant.” “The customer is expecting a baby together with a fiance ... The customer is not under any medication and does not use substances. It came up during a visit to the pre-natal clinic that the customer does not cook for herself and that she and her fiancé buy ready meals, pizza, hamburgers, an unvaried diet.”</p>	<p>“The patient spends the entire day at home resting. Every movement makes ... short of breath. The patient calls the ambulance to check their heart...” “Severe anxiety and diminished strength. Exhausted. There is no safety network. Tearful, and has recently had destructive thoughts and at times a complete loss of capacity to function.”</p>	<p>“Has suffered from depression for a long period of time. Long history of substance abuse and had been undergoing replacement therapy for slightly less than a year.” “Replacement therapy has been successful and the customer is highly motivated for treatment. The customer feels that their functional capacity is affected by mood problems, anxiety and difficulties in social situations. Find it difficult to leave home and to be amongst people.</p>

Results

The number of informants in the study was 56. More than one half (61%) of the informants were female and a clear majority (77%) were older than 18. The average age of the informants was 32.7 and the median age was 29.5 years. The youngest informant was 8 months and the oldest 79 years old. Children and adolescents formed 23% of the sample. As a result of the study, four customer profiles were classified: **Children and adolescents who are burdened by everyday concerns, Mothers requiring support, Customers with multiple problems, Customers with an impaired capacity caused by substance abuse** (Table 1).

Discussion

The objective on this study was to profile frequent attenders to social and health care services from the perspective of knowledge-based management. Personal service plans aimed at gathering multiprofessional knowledge about the service needs of frequent attenders to deepen the understanding of customers (Currie & White 2012) and to define customer profiles. As a result of the study, four customer profiles were classified. In each of the profiles, physical, mental health and social problems were interlinked and customers had a need for tailored services at home and the various unit providing social and health care services. The factors distinguishing the different customer profiles are based on the customers' life situation and the reason for which they have sought help. For example, a clear division into profiles based solely on healthcare service needs, as identified by, for example Karlsson et al. (1997), could not be detected. Rather, the results of our study support the findings of Kumar & Klein (2013) on the multifaceted needs and psychosocial factors of frequent attenders and their relevance to primary healthcare provision and other public services.

In this study, the support received by customers profile **Children and adolescents who are burdened by everyday concerns** from multiprofessional social and healthcare services in order to cope in daily life were determined by the deficiencies in functional capacity or challenges in school performance and social relationships. The same service needs were also identified by Vila et al. (2012) for frequent

attenders aged 11–16 and by Garralda et al. (1999) in studies focused on those aged 7–12. In our study, another reason for using the services was the inability of parents to look after their children. Our findings are similar to those made by Stojanovič-Špehar et al. (2007) in their study on the link between children's socioeconomic factors and their frequency of using primary healthcare services.

There is very little existing research into the aspect of parenting or motherhood among research on frequent users of healthcare services. The customer profile **Mothers requiring support**, as identified in our study, highlighted the prevalence of psychiatric symptoms among the mothers and their inability to cope with parenthood.

Browne et al. (1982) found that being a mother to small children constituted a reason for attending to multiple social and healthcare services. Mental health factors, depression in particular (e.g. Hajek et al. 2017), is linked with frequent attendance rate to services in the adult population.

Customers with multiple problems typically suffer from a long-term mental health disorder or panic symptoms combined with diagnosed somatic illnesses or symptoms. This customer profile has in many cases, also financial problems. According to the study by Savageau et al. (2006), frequent attenders to healthcare services typically had multiple problems: they were regularly using urgent care services, suffered from diabetes and received social support.

At a similar conclusion also arrived Smits et al. (2014) in their study, the multiplicity of the problems of frequent attenders were affected by the individual's personality, physical condition, mental capacity and ability to look after themselves.

In our study, the customer profile **Customers with impaired capacity caused by substance abuse** was characterised by multiple problems in coping with daily life, financial difficulties as well as an intensive customer relationship with social and healthcare services. Substance abuse problems have also been highlighted in other studies on frequent attenders (e.g. Neale et al. 2017).

Our findings correlated with those of Byrne et al. (2003) in their study on vulnerable frequent

attenders using urgent care services who also had contacts with social services and substance abuse programmes. In the study of Ramasubbu et al. (2016), frequent attenders reported years of heavy drinking or drug use, mental health problems, unemployment, need for financial assistance and social isolation.

Conclusion

Based on this study, we present the following conclusions to leaders in the social and healthcare service sector:

1. There is a need for an improved understanding of frequent attenders and knowledge about the social and health care services they use, as well as for mediating this knowledge across professional barriers and knowledge-based management.
2. Defining customer profiles may help identify frequent customers who require multiprofessional social and healthcare services in order to develop effective care and services.

Further research is needed information about the quality of the collaboration between different social and healthcare services and the efficacy of the services they provide to frequent attenders.

Trustworthiness

The trustworthiness of this study was evaluated with regard to the research process (cf. Denzin & Lincoln 2017). The research material consisted of service plans described frequent attenders' needs for multiprofessional social and healthcare services and made therefore for suitable research data that was different from anything previously researched.

The service plan pilot period proved, however, to be too short in order to collate a sufficiently comprehensive body of data, but was nonetheless contentually rich and suitable for defining different customer profiles. A quantitatively larger material that could focus, for example, on the adult population frequently using reception services in primary health care would add to the reliability of the present findings.

Systematic analysis proved to be a suitable method for an analysis that progressed in phases through several readings, resulting in the definition of the customer profiles, and the

correlated conclusions arrived at by other researchers. An alternative analysis method would have been content analysis (cf. Perakyla & Ruusuvaori 2017).

References

- Browne G.B. & Humphrey B. & Pallister R. & Browne J.A. & Shetzer L. (1982) Prevalence and characteristics of frequent attenders in a prepaid Canadian family practice. *Journal of Family Practice* 14 (1): 63-71.
- Byrne M. & Murphy A.W. & Plunkett P.K. & McGee H.M. & Murray A. & Bury G. (2003) Frequent attenders to an emergency department: A study of primary health care use, medical profile, and psychosocial characteristics. *Annals of Emergency Medicine* 41 (3): 309-318.
- Currie G. & White L. (2012) Inter-professional Barriers and Knowledge Brokering in an Organizational Context: The Case of Healthcare. *Organization Studies* 33 (10): 1333-1361.
- Denzin N. K. & Lincoln Y.S. (2017) *Handbook of qualitative Research*. Thousand Oaks (Calif.). Sage.
- Freeman M. & Miller C. & Ross N. (2000) The impact of individual philosophies of teamwork on multi-professional practice and implication for education. *Journal of interprofessional care* 14 (3): 237-247.
- Garralda M.E. & Bowman P.M. & Mandalia S. (1999) Children with psychiatric disorders who are frequent attenders to primary care. *European Child and Adolescent Psychiatry* 8 (1): 34-44.
- Grant R.M. (1996) Toward a knowledge-based theory of a firm. *Strategic Management Journal* 17 (S2): 109-122.
- Hajek A. & Bock J.-O. & Konig H.-H. (2017) Association of general psychological factors with frequent attendance in primary care: A population-based cross-sectional observational study. *BMC Family Practice* 18 (1): art. no. 48.
- Karlsson H. & Joukamaa M. & Lahti I. & Lehtinen V. & Kokki-Saarinen T. (1997) Frequent attender profiles: Different clinical subgroups among frequent attender patients in primary care. *Journal of Psychosomatic Research* 42 (2): 157-166.
- Kumar G.S. & Klein R. (2013) Effectiveness of case management strategies in reducing emergency department visits in frequent user patient populations: A systematic review. *Journal of Emergency Medicine* 44 (3): 717-729.
- Neale J. & Parkman T. & Day E. & Drummond C. (2017) Socio-demographic characteristics and stereotyping of people who frequently attend accident and emergency departments for alcohol-related reasons: Qualitative study. *Drugs: Education, Prevention and Policy* 24 (1): 67-74.

- Perakyla A. & Ruusuvoori J. (2017) Analyzing Talk and Text. In: Denzin N. K. & Lincoln Y.S. (2017) Handbook of qualitative Research. Thousand Oaks (Calif.). Sage.
- Polit, DF. & Beck, CT. (2017) Nursing research. Generating and Assessing Evidence for Nursing Practice. 10th edition. Lippincott Williams & Wilkins, Philadelphia.
- Ramasubbu B. & Donnelly A. & Moughty A. (2016) Profile of frequent attenders to a Dublin inner city emergency department Irish Medical Journal 109 (4): 391.
- Savageau J.A. & McLoughlin M. & Ursan A. & Bai Y. & Collins M. & Cashman S.B. (2006) Characteristics of frequent attenders at a community health center. JABFM May-June 2006 (19): no. 3.
- Smits F.T. & Brouwer H.J. & Zwinderman A.H. & Mohrs J. & Schene A.H. & van Weert H.C.P.M. & ter Riet G. (2014) Why do they keep coming back? Psychosocial etiology of persistence of frequent attendance in primary care: A prospective cohort study. Journal of Psychosomatic Research 77 (6): 492-503.
- Stojanovic-Spehar S. & Blazekovic-Milakovic S. & Bergman-Markovic B. & Matijasevic I. (2007) Preschool children as frequent attenders in primary health care in Croatia: Retrospective study Croatian Medical Journal 48 (6): 852-859.
- Vedsted P. & Christensen M.B. (2005) Frequent attenders in general practice care: A literature review with special reference to methodological considerations. Public Health 119 (2): 118-137.
- Vila M. & Kramer T. & Obiols J.E. & Garralda M.E. (2012) Adolescents who are frequent attenders to primary care: Contribution of psychosocial factors. Social Psychiatry and Psychiatric Epidemiology 47 (2): 323-329.