

Population's perceptions and availability of primary care services in Romania- a pilot survey in County Brasov.

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Abstract

Background National health reports on Romania show that decisions in healthcare planning are not correlated with the health needs of the population and that there is a high degree of unmet healthcare needs of the population (related to cost, distance and waiting times), especially for low-income populations. Family medicine is facing underfinancing, slow pace of development.

Methods The research is part of a wider project of health services needs assessment in county Brasov, Romania. A subset of questions were dedicated to identifying the perception of population on primary healthcare services. Comparison with previous national and international studies was done.

Results The characteristics of the population questioned: predominantly women (67.2%), 61.1% graduates of high school or other professional schools. 97.4% are registered with a FD. The average number of visits at the FD is 11.25, higher than the national average of 7.7 reported in a previous study in 2009. Access to the FD is appreciated as satisfactory in terms of availability of doctors in the community (97.4%), opening times by (91.1%), phone access (90.5%). Only 26.6% of participants reported a same day opportunity to reach the FD. Continuity of care is reported as present in 58.7% of cases in out of hours centres. The population is appreciating the fact that FDs knows their history (90%), knows how to treat them (88.2%). Most of the preventative services are offered by FDs. 94.4% flu vaccination, 85.6% pregnancy monitoring, 90.7% well child visits. Procedures like blood draws, pap smear have less availability (46.2% respectively 63.1%).

Conclusions Despite limitations in the practice of family medicine in Romania and therefore a narrow spectrum of services offered by primary care in general, the level of contentment of the population with this healthcare resource is still high. Barriers to access are related to the lack of some essential services, especially preventive and out-of-hours services. Research at national level should be done in order to better categorize population' perceptions on primary care and be able to use their opinion to influence policies and healthcare planning.

Key words: unmet health needs, population's perception, primary care, Romania

Background

Populations' expectations and needs of healthcare services are changing. These changes are correlated with changes in disease profiles, a higher prevalence of chronic diseases, the introduction of new and innovative treatments and health technologies, and the emergence of new social and economic contexts¹⁻⁹. Healthcare systems need to adapt to these trends and aim to cover the health needs of the population¹⁰. Romania's position in this equation, especially in relation to primary care, is a challenging topic to address.

In 2017, the European Observatory on Health System and Policies published a national report on Romania, showing that while Romanians claim to have good health, mortality figures are still very high,

being among the first in Europe for most preventable diseases¹¹. The underfinancing of the healthcare system is one of the main causes identified by the authors of the report, as well as the inefficient use of resources. Healthcare planning in Romania is merely top-down in nature and is not correlated with the health needs of the population. Romania is reporting a high degree of unmet healthcare needs in the population related to cost, distance and waiting times, especially for the low-income group¹².

Introducing health need assessment (HNA) as a premise for healthcare planning is recognised as a method to identify gaps in care¹³. Health needs are various: felt needs, expressed needs, normative needs. All of these can be met or unmet at a certain moment, in correlation with the three dimensions: need, supply and demand.

A study published in 2011 by public health specialists from the National School of Public Health and Management Bucharest (NSPHM), acknowledge the increasing demand of health services from the population in Romania, especially for cardiology, oncology and medico-social services¹⁴. Under the coordination of the Ministry of Health (MH), the NSPHM has also performed a health services need assessment, considering demographic and morbidity data, on a national and regional level¹⁵. From the perspective of primary care, the analyses focus on the deficit of health care providers, isn't detailed enough in terms of the services provided and it also doesn't comprise patient's views.

Even if evidence is showing that the involvement of patients in decision making can contribute to changes in the healthcare system¹⁶, in Romania their opinions are rarely consulted. In 2009 a WHO led survey elicited patient's perspectives on primary care, at a national level, seeking for accessibility and continuity of care issues¹⁷. Since then, changes in the National Contract have altered the way care is provided and data on population's perspective should be renewed.

According to the Healthcare law (Law 95/2006), Romania has a national health insurance system that is compulsory to all citizens. Primary care occupies an important role in the healthcare system. It is the point of access to it, in a non-discriminative way, without any direct payment to the healthcare provider. Family medicine is the main component of primary care, acting independently from other specialists from the community (scholar doctors, ambulatory specialists, community nurses, physical therapists etc). Out of the entire population 92.5% is registered with a FD (data from 2016 provided by the National Health Insurance House-NHIH)¹⁸. The insured population accounts for 77% of the those registered at the FD. In urban areas the level of the insured population is higher (85.6%) than in rural areas (65.64%)¹³. Several causes lead to this situation, like for example a higher un-employment rate in rural communities, the phenomenon of migration.

Under the health insurance system, a basic package of services is provided to insured people and a minimal package to uninsured. The minimal package contains urgent care, infectious diseases and prenatal care services.

Family medicine is a private medical sector. FDs are self-employed health professionals working in privately owned premises, organized mainly as solo practices. The healthcare team is made only of the doctor and the nurse, connections with other providers in the healthcare system being made only by referral (see appendix 1- The structure of the Romanian Healthcare system).

Family medicine is payed under the framework of a contract with the NHIH. A mixed form of payment is in place: capitation and fee for service in a 50/50 distribution (capitation is calculated according to the number of insured patients and adjusted according to age groups).

The free choice of the FD is guaranteed by the National Health Insurance Contract.

Despite the generous policy statements made in the Health Strategy 2014–2020 of the Ministry of Health, about the essential role of FD's in the healthcare system, the practice of family medicine in Romania is very restrictive. The national health insurance contract limits FDs in initiating certain medications like oral antidiabetics, inhaled medication for asthma and COPD or antidepressant medication, rather, a referral to a specialist is needed. Other limitations are present in the reimbursement of procedures, discouraging FDs from performing it. In this context, we are witnessing a narrowing of the scope of care of family medicine, such that it is transforming into a point of referral rather than one of intervention, in the system.

Therefore, under the framework of an HNA project run in county Brasov, Romania, which had the objectives to map the need of health services at all levels of care, we performed a sub-analysis of the perception of the population on the availability of primary care services.

The findings allow us to explore the degree of unmet healthcare needs of the population from their perspective, related to primary care, and identify to what degree system barriers have altered the use of medical services in primary care, trust in FDs and ultimately the FDs' roles themselves in the community.

Methods

The research consisted of a survey conducted in the context of a Health services needs assessment project, commissioned by the County Council of Brasov to Transylvania University, with the objective to map the need of medical services in the county. A subset of questions were dedicated to identifying the perception of patients on primary healthcare services.

Participants and settings

Brasov County accounts for 635,084 inhabitants (census from the County Statistical Department at 01.01.2019). Participants to the survey were randomly selected from 17 settlements of County Brasov that represent the variety of urban and rural population.

Settlement	Size	Number of questionnaires
Brasov	Municipality	400
Sacele	Over 20.000 inhabitants	100
Codlea	over 20.000 inhabitants	100
Rasnov	10.000 – 19.000 inhabitants	80
Victoria	under 10.000 inhabitants	65
Rupea	under 10.000 inhabitants	65
Bran	Rural over 5.000 inhabitants	55
Hoghiz	Rural over 5.000 inhabitants	55
Tarlungeni	Rural over 5.000 inhabitants	55
Teliu	Rural 3.000 -4.999 inhabitants	45
Vama Buzaului	Rural 3.000 -4.999 Inhabitants	45
Poiana Marului	Rural 3.000 -4.999 inhabitants	45
Recea	Rural 3.000 -4.999 inhabitants	45
Homorod	Rural between 1.500 – 3.000 inhabitants	35
Parau	Rural between 1.500 – 3.000 inhabitants	35
Ormenis	Rural between 1.500 – 3.000 inhabitants	35
Dragus sau Ticus	Rural under 1.500 inhabitants	25
TOTAL		1285

Independent operators (medical students of the Faculty of Medicine) accessed people randomly from FDs' offices waiting rooms, County Councils offices, by asking systematically until target reached. The time interval was between June and September 2018.

The calculated statistical error of the sample is 3.32% for $p = 95\%$.

Variable and data collection

In the project, we designed a 54-item questionnaire meant to analyse the felt and expressed needs of the population and the need to access different levels of healthcare in the past 12 months. Twenty-one of these questions were dedicated to exploring the perception of the population about primary care services, inquiring information on access, continuity, responsivity, comprehensiveness, results of care and type of services provided.

The questionnaire was self-administered and had preformulated answers that prefigured the recognised normative aspect of care. A total of 877 questionnaires were returned and validated.

The Cronbach's alpha coefficient was 0.828, a value that has allowed us to pursue research.

Questions were grouped to explore the three dimensions of care: structure, process and outcomes of care¹⁹.

Structural attributes have targeted the following: waiting time until appointment, opening hours, access by telephone, availability of FDs in the community, presence of a second family doctor in the community, and availability of out-of-hours services (OOH) led by FDs.

The process attributes include continuity of care, information on medication, information on prevention, time spent at consultations, range of diseases that can be addressed, availability of preventive services (Pap smear), flu vaccination, medical procedures available (blood draw/electrocardiogram), FDs' knowledge of patients' history, and facilitation of access to secondary or tertiary care.

Outcomes of care attributes include health problems not resolved after FD encounters and being more informed about health problems after visiting FDs.

We have also explored patterns of the use of services related to family medicine, such as the number of visits to the FD per year and the constancy in being registered with FDs.

The questionnaire was piloted on 15 adults from different environment to validate the questions.

Data analysis

For the purpose of this article only frequency analyses were performed.

Results

The demographic characteristics of the participants to the study are summarised in Table 1. It should be noted that the population over 65 is higher (18.2%) than the county average (15.8%), as published by the County Statistical Department. The gender distribution favours women (67.2% female and 32.8% male). The level of education is as follows: 11.6% have a basic education level (8 classes and under), 61.1% have graduated from a high school or a professional school, and 27.2% have a university background. This distribution covers the broad spectrum of education in the community.

In terms of visits to the FD, 15.6% of patients visited their FD once in the past 12 months, 19.8% visited the FD 12 times, and only 3.9% visited the FD more than 12 times.

Table 1. Demographic data of the sample

Data	Category			
Age distribution (%)	18-30y	31-50y	51-65y	Over 65y
	19.7	39	22.4	18.9
Gender distribution (%)	Female	Male		
	67.2	32.8		
Level of education (%)	Primary school	Professional	High school	University and higher
	11.6	13.7	47.4	27.2
Residence (%)	Urban	Rural		
	48	52		
Years with same FD	Less than 10 years	More than 10 years	More than 1 year	
	46.4%	53.6%	94.7%	
Number of visits to FD in the past 12 months (%)	One	Less than 12	More than 12	Average
	15.6	19.8	3.9	11.25

In table 2 we present the summary of data related to the access to FD's office. Results are showing that opening hours are appreciated by the population as offering good opportunities to reach the FD, 91.1% being satisfied with it. Practices can be easily accessed by phone in 90.5% of cases.

Continuity of care represented through the presence of OOH services is low, only 58.7% stating they have access to it but access to another FD in the area is mentioned as satisfactory by 72.4% of the

participants.

Good coverage with FD's is confirmed by the percentage of the participants to the study stating that they have a FD in the neighbourhood (97.4%).

26.6% of the participants stated that they can reach a same day visit to the FD and cumulatively 53.9% same or next day.

Table 2. Health needs in relation to access to the FD's office

Questions	Yes (%)	No (%)
In the past 6 months, did you feel the need to be seen by an FD and you couldn't reach him or her?	11.4	88.6
In the place where you live, do the opening hours of the FD allow you to access services whenever you need them?	91.1	8.8
In the place where you live, is there an out-of-hours centre?	58.7	41.1
In the place where you live, is the FD's office is easy to access by telephone?	90.5	9.5
In the place where you live, if your FD is not present, is there any other FD you can visit?	72.4	27.6
Do you have a FD where you live?	97.4	2.6

How long do you have to wait for an appointment for the FD?

26.6%: same day/53.9%: 1 day/12.1%: 2 days/7.4%: more than 2 days

Table 3 is summarizing the perception of the participants about the process of care. It is showing that FDs are recognised as treasurers of the medical information of the patient (over 90% satisfaction about the FD knowing personal history and medication). Over 80% degree of satisfaction is stated in relation with time spent at consultation, medical problems that can be addressed and intermediation of the relation with secondary and tertiary care.

Table 3. Health needs in relation to the processes of care in the FD’s office

Questions	Yes (%)	No (%)
Does your FD know your disease history?	93.8	6.2
Does your FD know your medication history?	93.5	6.5
Did you receive clear information from your FD regarding your illness?	88.8	11.2
Did you receive clear information regarding ways to prevent illnesses?	87.7	11.2
Is your FD spending enough time with you?	86.8	13.2
At the FD, you can address any medical problems?	87.6	12.4
In the FD’s office, can you get referrals for appointments for secondary or tertiary care?	82.1	17.9

Table 4 is resuming information from participants questionnaire about the perceived result of the process of care.

88.2% of the participants felt that their health status improved after the visit to the FD, 91.9% affirming that they have understood how to take their medication after physician’s advice 87.4% felt satisfied with information given on prevention.

Table 4. Health needs in relation to outcomes of care in the FD’s office

Questions	Yes (%)	No (%)
After the consultation with your FD, did you feel that your health had improved?	88.2	11.8
After the consultation with your FD, did you feel more informed on preventative measures?	87.4	12.6
After the consultation with your FD, did you understand how to take your medication?	91.9	8.1

Table 5 is summarizing data on the availability of procedures. Access to Pap smear testing is limited in FD's offices only 46.2%. Flu vaccination is offered in 94.4%, pregnancy monitoring 85.6%. Blood draw and electrocardiogram are showing low scores (36.9% and 44% respectively).

Table 5. Health needs in relation to procedures in the FD's office

Questions	Yes (%)	No (%)
In the place where you live, do you have access to IV injections or infusions?	92.4	7.6
In the place where you live, do you have access to the flu vaccine?	94.4	5.6
In the place where you live, do you have access to pregnancy monitoring?	85.6	14.4
Is your FD doing well-child monitoring?	90.7	9.3
In the place where you live, do you have access to Pap smear services in the FD's office?	46.2	53.8
In the place where you live, do you have access to blood draw services in the FD's office?	63.1	36.9
In the place where you live, do you have access to an electrocardiogram?	56	44

Discussion

Our study summarises participants' perspective on availability and provision of services in primary care in a pilot county. One of the first discussion point is access to primary care. In Brasov County only 2.6% of patients declared that they do not have a FD in the area where they live. The result is in concordance with the reduced number of settlements without a FD in the studied area (Data from Brasov Health Insurance House at 31/07/2019). Brasov county being highly urbanised and offering good employment opportunities is a region of choice for FDs.

In other regions of Romania, the problem of coverage with FDs is of a different magnitude. In 2015 reports from NHIH cited by authors of the Health System review published in 2016¹² showed that all over Romania, 300 communities did not have a FD. Despite the financial stimulants and the construction of modern facilities in remote regions, the problem of attracting and retaining of FD's didn't improve. A new regulation issued in April 2019 (Law 79/2019) stated that FDs can open a branch of his/hers practice in a settlement where there is a need. Recent data from NHIH are showing a slight reduction of the deficit of FDs (A report of the NHIH from August 2019). It accounts for 195 communities all over Romania with an uneven distribution, the range varying from 0–16 per county. Overall the deficit of FDs is inscribed in the general downward trends of the healthcare workforce in Romania, as it is encountered also in other eastern European countries. The phenomenon is due to migration of doctors to Western countries, aging of FDs, insufficient motivation for a carrier choice. Although data on the outflow of doctors in Romania are not accurate, official data on diploma verification applications in 2007 where showing that 10% of doctors had the intention to leave the country²⁰. A report from the European Commission on the health care workforce published in 2012, estimated a shortage of 230 000 doctors by 2020 meaning that 13.5% of health needs are not being covered.

In Romania, under the framework of the National Health Insurance System (NHIS), 92.5% of the population is registered with an FD but registration is not a guaranty for good access. The free choice of the doctor has led to a phenomenon of migration of patients toward preferred doctors and consequently FD's have lost their catchment areas. If in 2009, 70.8% of patient's reported having to travel less than 20 minutes to the FD¹⁷ now things would need to be explored. This fact has brought problems especially in condition of an acute illness, fact that is triggering the use of emergency services.

Reaching the FD is also discussed in terms of opening hours and telephone contact. The compulsory working hours of FD's in Romania are 25/ 35 a week, office time and another 10 hours a week for home visits. Working time is correlated with the size of patient list. Practices with over 2200 of registered patients, can offer increasing office access 1–2 extra hours a day). Services provided outside working hours are not payed to the provider. Fee for service can be charged but is seldomly solicited by FDs. Another characteristic of the working time is the work in shifts (morning and afternoon) especially in urban settlements due to the small dimension of the premises and sharing of the same office. This type of opening hours is leaving patients without access to their FD for 24h, fact that is encouraging the use of emergency services for conditions that could have been treated at the FD. Despite these facts 91.2% of responders of our study stated that the hours of operation of FDs offices allow them to access the practice easily.

Furthermore, asked in general if reaching their FD was a problem (in the past 6 months), 88.6% of the population answered not having had any problems, and only 11.6% answered that they encountered problems.

Comparing opening hours of other European countries and the UK²¹, we see that opening hours vary widely across countries the majority having longer opening hours than Romania, ranging from 7 to 12h. Only Hungary and Lithuania are reporting lower times (2 to 6 hours a day).

The results of our study showed that only 26.6% of people could receive a same-day appointment with their GP. The pattern of access has changed since the beginning of the health insurance system. As it is reported by the regional WHO office in 2009 when 92.8% of people could schedule a same-day appointment with their FD¹⁷, today this has dropped to a quarter.

Nevertheless, our study shows that next-day appointments are possible in 53.9% of cases.

When asked if there was an alternative doctor to see if their FD was missing, 27.6% of participants affirmed that there was no other doctor to replace their FD in the community meaning that continuity of care cannot be insured otherwise than in OOH centres. But only 58.6% of cases, there is access to an out-of-hours (OOH) centre in the neighbourhood.

Access to FDs' offices by telephone is available in 90.5% of practices. This pattern of access by appointment is compulsory in the Health insurance system. Easy phone access is a quality criterion in the evaluation of practice. Telephone consultations are not recognised as a type of consultation.

Longitudinal continuity of care

Our study showed that patients prefer long-term relationships with their FDs, even though they have the option of choosing and consequently changing their doctor. About half of the patients are registered with their FD for more than 10 years (53.6%) but more than 90% more than 1 year. Romanian patients perceive that FDs are meant to be close to the family and prefer to see the same doctor every time. This type of preferred relationship is impeding availability of access to healthcare services only to the working hours of the doctor. Accessing another FD is only recently possible in the contractual framework of the health insurance upon notification of the absence of the current doctor.

Seeking medical care at the FD

The average number of visits to the FD in the past 12 months in our study was 11.25. 19.8% of questioned people visited their FD 12 times. The highest frequency is registered at the group over 65. A European database²³ (Eurostat, Healthcare activities statistics- consultations) shows an average of 5.7 contacts with the GP, and a national report from 2009 shows 7.7 visits per years¹⁷. The increase in the number of visits is due to the contract framework of the National Health Insurance House (NHIH), which specifies the gatekeeping role of the FD. Limitations of access to the FD are caused by system organisation. In the contract a FD has a limited number of consultations per day (20 or 24 according to

the number of patients registered in the patient list) and only 5- or 6 opening hours a day. Despite these limitations, that could cause waiting lists, there is no significant waiting time to see a FD, only 7.4% of the patients having to wait more than 2 days to reach their FD. It can be explained by the fact that FDs cover extra patients every day, thus reducing the length of the consultations that are normally set to 15 minutes per patient.

Although a same day visit is possible only in 26.6% of cases people do not consider this feature to be a barrier to access. In our opinion, it is probably linked with the lack of another perspective. If alternative model practices, with more time availability, could be an option, perhaps the patient's options would have been more differentiated.

A possible option to cover the reduced consultation time at FD office is access to continuity of care through out-of-hours (OOH) services and or other health resources (ambulatory subspecialty care, private medical services). It is necessary considering that in 27.6% of cases, the FD is the only health resource in the community.

Access to out-of-hours services is a problem due to the lack of coverage in the whole territory of the county. It is a result of the fact that OOH is a service organised by FDs at their sole discretion, without rigorous planning of the service by the District Health Authorities.

Person-centred care and trust

In terms of the process of care, respondents have shown that they consider FDs a reliable health resource. FDs who knows their history and medications can inform and educate them regarding their disease. This result shows that even though there is a reduced variety of services that FDs can provide (in the situations of the restrictive contractual framework), patients are still counting on their FDs. The potential of this relationship is important, and FDs are to be encouraged to practice at their full potential, broadening the spectrum of services that they deliver to patients, adapting it to the needs of the population and responding to the needs of public health²⁴.

Health improvement and education

The results of our study show that most of the responders are satisfied with the results of care.

Health education and medical advice is recognised to be valuable in 88.8% of cases concerning diseases and 87.7% of cases for preventative measures.

A total of 52.3% of patients suffered from a chronic disease, and 91.9% of them affirmed that they understood the medical advice of their FD on how to take medication.

Availability of procedures

We looked at some of the procedures relevant to public health, such as pregnancy monitoring and well-child and cervical cancer screening. Access to these services is appreciated by patients, yet data from the NHH show a reduced number of reported services, such as pregnancy monitoring (0.98% of all services/year/2016) and well-child (2.26 % of all services provided by FD/year/2016). Underreporting is one of the causes, as well as a lack of education among the population accessing these services can be a cause.

Cervical cancer screening was included temporarily (5 years) in a payment scheme, during a cervical cancer screening organized by the Ministry of Health between 2012–2017. During the program, FDs had the opportunity to screen for Pap smears in their offices or to refer to a gynaecologist. Not many FD's chose to do Pap smears in their offices. After the end of the program this service was not paid under the health insurance scheme.

Point-of-care testing, such as lab tests and electrocardiograms (EKGs), is not recognised as an offered service in the family doctor's office.

Conclusion

Overall the analysis of population's perceptions on the primary care system in County Brasov is showing an unexpectedly high degree of satisfaction among the patients.

Results are surprising if we consider all the normative barriers in the provision of medical services in primary care that are set by the government like for example the limited number of consultations, reduced time of opening hours, barriers in medication prescription.

Access to the FD is perceived as good since only 5 communities in county Brasov have no FD and the free choice of the FD is allowing patients to register with a FD in a neighbouring community. The possibility of FD's to open a branch of their practice in a community without a doctor has slightly improved access at a national level.

Although opening hours of FD's offices are lower than in other European countries, patients still report an easiness to reach their doctor (91.1% satisfied with opening hours).

Same day appointments (26.6%) are reduced in comparison with the previous patient's survey from 2009, when it accounted for 79.7%. The compulsory appointment system and the limited number of consultations to 20 (24 or more if increased number of patients) has altered the access of patients to primary care, triggering the inappropriate use of emergency services.

Continuity of care is low and didn't improve since the last survey. 58.7% of patients reported having access to an OOH centre comparing to 48.9% in the previous study.

The MH should find new and flexible strategies for the development of OOH services and an equitable distribution according to the needs of the population.

Preventative services like well child, pregnancy monitoring, flu vaccination is perceived as available by the population.

Screening for cervical cancer is offered only in 46.2% of cases although an important screening campaign was developed between 2012–2017 by the Ministry of Health. More should be done in increasing the capacity for prevention of cervical cancer in FD's practices.

FDs are seen by the population as trusted health resources of information about their illnesses and treatment. More should be done to validate this important function of the FD.

In our opinion, these findings mostly reflect the population's belief that the competences of this speciality are limited by its nature, and this is how it is supposed to be. The fact that a medical resource is relatively easily available encompasses the barriers to access due to limitations in the spectrum of services that is offered. These limitations are merely disturbing for FDs who feel unable to practice their profession. A more in-depth analysis of population's perceptions should be done at a national level.

It is the responsibility of the Government to continue in stimulating primary care providers, through flexible payment schemes, to practice services that are of interest for public health considering in the same time the health needs of the population.

Limitations Of The Study

This analysis was performed to describe the healthcare service needs of the population in our region. Generalisability is therefore limited in terms of specific results, but some of the conclusions related to regulatory policies are generally applicable.

List Of Abbreviations

p>FD: family doctor

NHIS: National health insurance system

NHIH: National Health Insurance House

DHIH: District Health Insurance House

HNA: health needs assessment

OOH: out-of-hours services

MH: Ministry of Health

NSPHM: National School of Public Health and Management Bucharest

Declarations

- Ethics approval and consent to participate

The study was approved by the Ethics Committee of Transylvania University. The consent of the patients to participate in the study was verbal and assumed through the completion of the questionnaire. The questionnaire has a heading section that explains the reasons for the study and that the study is anonymous. The questionnaire was approved by the Ethics Committee.

- Consent for publication

Not applicable

- Availability of data and materials

The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

- Competing interests

The authors declare that they have no competing interests

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- Authors' contributions

AN is the main author responsible for the design of the study, Ethics Committee approval, questionnaire design and validation, data collection, and manuscript writing and therefore is the corresponding author.

LR contributed to the study design and data analysis.

DP contributed to the questionnaire design and validation.

IA contributed to the questionnaire design and data analysis.

MAM contributed to the study design and data analysis.

FL contributed to the study design and data analysis.

AL has contributed to the data analysis and interpretation.

- Acknowledgements

Not applicable

- Authors' Information

AN is a family physician and a lecturer at the Fundamental, Prophylactic and Clinical Sciences Department of Transylvania University, where she teaches family medicine to undergraduate and postgraduate students. She is also a leader in the medical community, as she is the president of the professional association of family doctors of County Brasov, Romania. In the past 10 years, she has been involved in projects linked with increasing the quality of medical services in primary care.

Together with all the other authors of the article, she has developed the needs assessment project in our community between January 2018 and February 2019.

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Figures

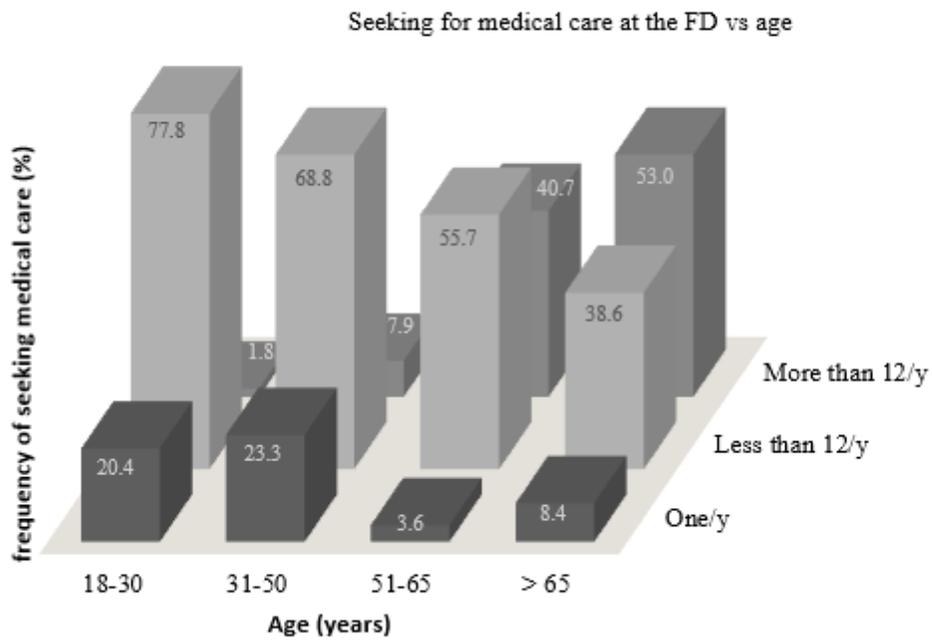


Figure 1

Seeking medical care at the FD vs age

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