# PATIENT PERCEPTIONS OF REFERRALS TO FAMILY PHYSICIAN IN GEORGIA

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**Abstract** - Adequate utilization of primary health care directly reflects the health status of a population. In Georgia many patients seek care without a referral by a primary-care provider, as a result, patient's referral rate to a family physician is low. The tendency of patient's self-referral behavior may reduce the effectiveness of the healthcare system. The research aims to study the cause of low referral rate to a family physician in Georgia. We used mixed method study which includes a quantitative survey of 300 patients and qualitative interviews with 20 family physicians in different cities and regions of Georgia. According to research patient's referral rate to a family physician is low. 55% of family physician once a year or do not visit at all and 57% do not consult with a family physician for preventive purpose. The result suggests that patient's low referral rate is due to distrust towards family physicians, which is related to the lack of qualification of physicians and the low public awareness of the family doctor's competence. Due to an inadequate reimbursement, family physicians do not have enough motivation to provide adequate service and lack of continuous education negatively affects their professional development. It is recommended to raise public awareness about the primary care, to introduce effective methods for payment of family doctors, to increase the role and affordability of continuous professional education.

Keywords - Primary Health Care, Family Physician, Family Medicine, Self-referral.

### I. INTRODUCTION

The primary health care concept was formulated at the World Health Organization conference in Alma-Ata in 1978. Primary care involves the first contact of the patient with the organized medical service. It is provided by the family physician near the patient's place of residence and includes the assessment of the patient's health status, diagnosis, treatment and management of health problems, also prevention and health promotion during primary contact. Primary care is a kind of "gatekeeper" in the healthcare system that ensures the primary assessment of the disease and if necessary, refers the patient to specialists. According to the best practices, the primary care constitutes 80-90% of visits to medical personnel. The gatekeeping of the primary care is widely used in the UK, Netherlands, Switzerland, and in the US Healthcare System.

Primary care serves as the cornerstone for building a strong healthcare system that ensures positive health outcomes. Health care system orientation to the primary care has a positive effect on the continuity and coordination of medical services. which simultaneously reduces the cost of unnecessary specialized services and improves the overall health of the population. In the healthcare system focused on primary health care, the role of family physician as a gatekeeper increase. In such a system the patient tries to apply firstly to a family physician, and if necessary, apply for specialized services. Studies have confirmed that the patient's referral to the special medical care through a family physician decreases the health care

costs and maintains the medical supervision at the high level [1]. Also, the mortality rate after the coronary shunting is low in patients who are under supervision of a family physician rather than in free treatment with specialists [2]. Constant supervision of a family physician positively impacts the quality of life, e.g., the pain management [3].

Studies have confirmed that patients under supervision of family physicians spend less time in hospital. Consequently, we can conclude that these patients take medical care more coordinated and rationally. Patients who are under the permanent supervision of a primary care physician are less likely to require specialized services or hospitalization [4]. Thus, primary care is considered as a mechanism for preventing health care costs, which is very important for a low-income country like Georgia [5,6].

One of the most important components of the assessment of effectiveness of medical care is the patient's referral rate to family physician. It aims to analyze how often the population applies to the primary health care institutions. Studies show that the primary healthcare system in the Republic of Georgia has failed to develop under the standards that have been applicable in many developed countries for several years. This is confirmed by the fact that the patient's referral rate to family physician is 3.6 (7.5 in European countries), which is due to the fact that patients have less motivation to address the primary care physician for prevention. Patients prefer hospital services [7,8]. It is obvious that the low development of primary care and family physician institute has a

negative impact on the health status of the population and health care costs [9,10].

Important reforms in the primary healthcare sector in Georgia began in 2000. It referred to the improvement of the primary healthcare network. Following the granting of autonomy to service providers, the PHC facilities underwent a structural reorganization. Most of the facilities at the district level were grouped into single legal entities such as district-level policlinic ambulatory unions or hospital polyclinic unions covering the catchment population. In one pilot region (Imereti), all of the PHC providers, including village-level ambulatory services, gained independent status. The Government of Georgia received substantial support from the international donor community to reform the PHC system. Family medicine training programmes and the rehabilitation process of PHC facilities were started with the support of the United Kingdom Department for International Development (DFID) and World Bank grant.

Implemented interventions had no significant effect on outpatient service use. Studies have confirmed that the patient's referral rate to family physician was low, and according to the 2011 data, this rate per capita was 2.1 annually. Georgia ranks the second last place by this indicator compared to the WHO European countries. In 2010, only 50.9% of patients, who applied to medical facilities due to health problems for the first time, preferred the primary health care institutions.

In 2013 the Universal State Health Care Program was launched in Georgia, aiming to ensure financial and geographical access to health care for the population. As a result of the program, the patient's referral rate to outpatient services increased by 25% in 2014, which demonstrates the rise in affordability of the health care services [11]. However, only 22% of the beneficiaries of the Universal State Health Care Program addressed the outpatient clinic for a scheduled medical assistance. According to the survey conducted in Georgia, 40.1% of respondents express partial (38.6.8%) or full (1.5%) dissatisfaction with the family physician [12]. More than half of the respondents (75%) report that the physician does not appoint periodic medical examinations, that shows that the preventive medicine component is very weak in primary care services which significantly increases the cost of medical care because of the late detection of the disease. According to the 2015 data, family physicians in Georgia refer 40% of patients to other physicians. This suggests that most of the population uses medical services only in case of urgent need and not for prevention, which increases the risk of late detection of illnesses and health care costs.

The development of a family physician's institute in the country is hindered by the low reimbursement of primary health care staff. Nowadays, under the

Universal State Health Care Program a family physician is paid according to the number of beneficiaries registered with him/her. The program allocated for each beneficiary amounts 1.93 GEL per month, which is transferred to the primary health care facility. The medical facility pays a family physician 10-12% of this amount. Accordingly, he/she receives a net of 0.20 GEL on average per beneficiary in a month, while a nurse receives only a half of this sum. If we consider that about 2000 beneficiaries are registered with one family physician, the net monthly salary of a family physician has to be 400 GEL, and of a nurse -200 GEL. Of course, with such a salary the family physician institute will not be developed., It is necessary to pay the appropriate remuneration to the medical staff in order to make the family physician institute prestigious.

The purpose of the work is to study the cause of a low rate of the patient's referral to family physician in Georgia. The objective of the research is to identify the factors that cause low confidence in a family physician.

This research will inevitably be specific for family medicine. In this article we explore the various questions that must be answered to achieve the complex and multifaceted goal of improving confidence in a family physician and therefore the quality of care.

# **II. METHODS**

An analytic cross-sectional study was conducted. We used mixed method study which includes a quantitative survey of patients and qualitative interviews with family physicians. Participants were 300 patients from different cities and regions of Georgia. Ten large Family Medicine Centers of Georgia were selected for research. The criteria for involvement in the survey were local patients who voluntarily expressed the desire to participate in the study. The study instrument was a semi-structured questionnaire that was modified from the relevant studies. The validity of the modified questionnaire was assessed among 5 participants.

All of the registered family physicians who worked on these Family Medicine Centers were asked to participate. Of the 43 family physicians, 20 have agreed to participate in the survey. Within the qualitative study, in-depth interviews of family physicians were conducted. The questionnaire for this study was developed based on a review of literature and specificities of primary health care system in Georgia.

The survey was conducted in February-May of 2018. The duration of interview of a beneficiary was about 30-45 minutes. After the questionnaire had been built, the information of respondents were collected by a convenient sampling method. Then descriptive statistics were used to describe the sample and the results of the questionnaires.

The main limitation of the survey is the fact that the survey was conducted only in few cities/regions due to the lack of time.

# **III. RESULTS**

#### 3.1. Family Physicians Survey Results

Within the scope of the survey, 20 family physicians were interviewed. The absolute majority of respondents were females; the majority of them (45%) were 41-50 years old. 70% of them has worked as a family physician for 5-10 years. The greater part (55%) served 1000 to 2,000 patients. About 60% of respondents served 10 to 15 patients per day. 55% of family physicians have revealed that patients often address them only for the referral to the specialists. The survey made it clear that only 15% of family physicians have provided preventive consultations periodically and 50% - in case of need only (Table 1).

	Ν	%
Age		
21-30	1	5
31-40	4	20
41-50	9	45
51-60	4	20
Over 60 years old	2	10
Working experience		
Less than 5 years	2	10
5-10 years	14	70
More than 10 years	4	20
The number of beneficiaries under the		
family physician's supervision		
Less than 1000	1	5
From 1000 to 2000	11	55
More than 2000	8	40
The number of patient's received by a		
family physician during a day		
Less than 10	1	5
From 10 to 15	12	60
More than 15	7	35
The patients address the family		
physicians often only to receive a		
referral to a specialist		
Yes	3	15
No	5	25
More or less	11	55
Not sure	1	5
Remuneration of the interviewed		
family physicians		
300-500 GEL	5	25
501-700 GEL	13	65
701-900 GEL	2	10
More than 901 GEL	0	0

Assessment of their remuneration by the interviewed physicians		
Low remuneration	13	65
Satisfactory remuneration	6	30
Good remuneration	1	5
Adequacy of remuneration as assessed by the interviewed family physicians		
Works more than paid	14	70
Pay is adequate to the work	1	5
Works somehow less than paid	5	25
Works more than paid Pay is adequate to the work	1 5	5

Table 1. Results of Family Physicians Interview (1)

The lower rate of the patient's referral to family physician in Georgia is due to a low confidence. When asked, what caused the patients' low confidence in family physicians, the physicians answered:"Some patients think that the specialist will verify the diagnosis made by us."

"I cannot answer clearly what is the reason of lack of confidence. Most of disappointed patients complain about standing in the queue. Patients are more dissatisfied with young family physicians, and say that they do not have enough knowledge."

When asked about the solution of the family physician's problems in the primary care, we have received the following answers:"The healthcare system should constantly try to deepen the knowledge of family physicians and intensively familiarize them with new guidelines, new approaches, promote their regular participation in trainings."

As we can see, physicians have named the low salary the reason for low motivation. One of the ways to solve the existing primary care problems is a rise in salaries. The study showed that the salary of 90% of respondents was below 700 GEL. The majority (65%) think that their remuneration is low. In addition, 70% of family physicians think that their remuneration is not adequate to their work and that they work more than they are paid (Table 1).

The survey has found that 60% of family physicians do not have nurses (Table 2). Considering that a nurse plays a significant role in providing services, her absence in a family medicine team negatively affects the quality of service and therefore the patient's satisfaction. 45% of family physicians think that the employer does not care about their maintenance and professional growth as a human resource. 35% of respondents think that the employers don't try to listen to their problems and do not respond to them in time. physician's low Along with salary. the above-mentioned factors also appear to be a reason for the family physician dissatisfaction. Continuous professional education of medical personnel plays a great role in medicine. 50% of family physicians think that they are more or less able to improve professionally, but 35% do not have the opportunity to

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do so (Table 2). 35% of respondents cannot participate in educational programs for family physicians. Continuous professional education in Georgia is not mandatory, and trainings and educational programs are mostly paid. Family physicians do not have the opportunity to get trainings and improve their education, and the employer does not care about it. This negatively affects the professional growth and qualification of the physicians. 50% of family physicians are familiar with medical news through medical journals and articles, and 45% are more or less familiar. It is noteworthy that 30% of the respondents do not follow the news on the Internet (Table 2).

	N	%
Do you movido anti-	N	
Do you provide preventive consultat	ions to	your
patients?	2	`5
Sometimes	3	`5
Only in case of need	10	50
I have no time for such consultations	7	35
Whether family physicians have nurses?		
Yes	8	40
No	12	60
Does the employer seek professional family physician?	growth	of a
Yes	3	15
No	9	45
More or less	5	25
Not sure	3	15
	5	-
Does the employee always listen and res problems?	sponds u	5 your
Yes	4	20
No	7	35
More or less	7	35
Not sure	2	10
Do you have career development,	profes	sional
improvement opportunity?	1	
Yes	0	0
No	7	35
More or less	10	50
Not sure	3	15
Do you attend educational program	s for f	
physicians?		5
Yes	3	15
No	7	35
More or less	6	30
Not sure	4	25
Do you follow the medical news thr	ough m	
journals and articles?	ougn m	curcur
Yes	10	50
No	0	0
More or less	9	45
Not sure	1	5
Do you get updated guidelines via the Internet?		
Yes	7	35
No	6	30
More or less	7	35
Not sure	0	0
Table 2. Results of Family Physicians Int	•	-
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### 3.2. Patient Survey Results

56% of the interviewed patients are female and 44% male. The majority have higher education (73%). The share of 51-60 year old respondents is 24%. The monthly income of most patients (36%) ranges between 301-500 GEL (Table 3).

	Ν	%	
Gender			
Female	168	56	
Male	132	44	
Age			
Below 20	30	10	
21-30	33	11	
31-40	48	16	
41-50	51	17	
51-60	72	24	
60 and over	66	22	
Education			
Secondary education	81	27	
Higher education	219	73	
Monthly income			
Less than 300	93	31	
300-500 GEL	108	36	
501-1000 GEL	51	17	
1001-1500 GEL	42	14	
More than 1500 GEL	6	2	
Health Status			
Good	120	40	
Average	144	48	
Not satisfactory	36	12	
Coverage			
Universal care	237	79	
Private insurance	45	15	
Both	18	6	
Table 3. Patient Survey Results (1)			

The health status of 48% of respondents is average. Most of them (79%) are beneficiaries of the universal state health care program. 35% of respondents address both a family physician and a specialist-physician. At the same time, 30% of respondents will address directly to the physician. 42% of respondents visit the family physician once a year or do not visit at all (Table 4).

Most respondents (49%) spend less than 10 minutes with family physician. More than 30% of respondents agree that getting medical services with family physician is comfortable. The majority of respondents believe that the family physician institute needs some changes (Table 4).

	Ν	%
To whom will you mainly address in case of health		
problems?		
Family physician	60	20
Specialist-physician	90	30
Sometimes a family physician,	105	35

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sometimes to as			
specialist-physician			
Self-medicate	45	15	
How often do you address to a fami	ily physicia	an during	
a year?		•	
Once or not at all	126	42	
2-5	72	24	
6-8	42	14	
9-10	54	18	
11 and more	6	2	
Do you have confidence in f	family ph	ysician's	
qualification?	• •		
Yes	101	34	
No	91	30	
Not sure	108	36	
How long lasts your visit to a factor	amily phy	sician in	
average?			
Less than 10 minutes	147	49	
10-20 minutes	87	29	
20-30 minutes	36	12	
More than 30 minutes	30	10	
Do you wait for appointment by a f	family phy	sician for	
a long time?			
Strongly disagree	27	9	
Disagree	33	11	
Agree more or less	93	31	
Agree	132	44	
Strongly agree	15	5	
	Getting medical services with family physician is		
comfortable			
Strongly disagree	69	23	
Disagree	24	8	
Agree more or less	90	30	
Agree	81	27	
Strongly agree	36	12	
How would you rate the family physician's institute?			
Positively	90	30	
Requires some changes	141	47	
Negatively	54	18	
Not sure	15	5	

 Table 4. Patient Survey Results (2)

## **IV. DISCUSSION**

The survey has shown that rate of visiting family physician in Georgia is lower compared to other countries. A significant part of patients visits a family physician once a year or do not visits at all. In case of health impairment, patients try to visit directly the specialist-physician bypassing the family physician. Of course, such patients are less likely to have a continuous medical supervision by their family physician. In many European countries with a general practitioner system (GP), the patient's self-referral is less noticeable and as a rule, general practitioners as gatekeepers, make a professional decision and refer the patient to the specialists in case of need [13,14]. In the primary care system of Georgia, a patient more often applies to specialized medical services (hospital, physician specialists) by him/herself. The existing system does not contribute to the reduction of self-referral to specialized medical services. Studies have confirmed that this situation may have a negative effect on the patient's treatment [15].

It is noteworthy that the greater share of respondents rarely addresses the family physician for consultation with the purpose of prevention. Family physicians are less likely to take preventive measures. This reduces the efficiency of medical care. Studies have confirmed that the patient's self-referral to the specialized medical care without family physician negatively impacts the health of the population, reduces the quality of medical care and increases health care costs [16].

Low rate of the patient's referral to family physician in Georgia may be due to lack of confidence in the quality of medical care. According to family physicians, the mistrust and low satisfaction of the patients are not only due to them, but also because patients do not like the infrastructure of outpatient medical facilities as well as standing in a queue to visit the family physician. Also, the other important factor is the established stereotype that family physicians are less professional than specialist-physicians. It can be said that the low remuneration of family physicians has a significant impact on the low development of the primary care system in the country. At the same time, according to family physicians, their load exceeds their pay. It should be taken into consideration that the majority of family physicians do not have a nurse and have to work for two. The situation is aggravated by the fact that employers are less likely to support professional growth of family physicians. Consequently, family physicians do not have the opportunity to improve and develop skills, which is very important for people employed in the medicine, as well as in any other field. The study shows that the administration of the medical facilities is less interested in the problems of family physicians. Consequently, the problems are not identified, each particular issue is not reviewed, analyzed and the ways of its solution is not searched for.

A separate problem is the fact that the continuous professional education in the country is not mandatory. In addition, for some physicians the academic and educational programs are not affordable, as participation in them is paid.

The study shows that family physicians' pay is low, which hinders the development of a family physician institute in the country. In addition, the effective methods of remuneration of a family physician are not used. Particularly, currently, under the universal state healthcare program, the family physician is paid according to the number of beneficiaries registered with him/her. In this regard, in many countries, the combined methods of remuneration in primary care have been introduced, which means funding by other methods (according to provided services, targeted remuneration, etc.). In Britain, family physician financing depends not only on the number of patients registered with him/her but also how he/she works. In this case, physicians are interested in expanding the range of diagnostic and treatment services, ensuring continuity of medical care; the work in rural areas is encouraged. The physician's financing method is one of the key leverages to effectively implement health care services.

### V. CONCLUSIONS

The rate of patient's referral rate to family physician in Georgia is low. Patients are trying to address specialist-physicians directly bypassing the family physician. Most of them rarely address a family physician for prevention. Family physicians are less likely to take preventive measures. The low role of a family physician reduces the effectiveness of medical care because it is not possible to detect illness early by preventive measures. The patient's self-referral has a negative effect on the health of the population, reduces the quality of medical care and increases health care costs.

The low rate of the patient's referral to family physician may be due to lack of confidence in the quality of medical care. This is mainly caused by low qualifications of family physicians, their low pay. The state and employers are less likely to support professional growth of family physicians. Accordingly, family physicians do not have the opportunity to develop and grow professionally. It is noteworthy that the continuous professional education is the country is not mandatory.

Primary healthcare reform will not be implemented without properly educated family physician/nurse. In the furtherance of this goal the level of professional training shall be raised. In this view, there are family medicine training centers in the country, where the family physician/nurse are trained. However, most of them are paid trainings and often are not affordable. With the support of donor organizations, the state shall ensure development of the necessary capacities of primary healthcare human resources of the appropriate qualification throughout the country. Also, the state should support continuous medical education of family physicians.

In order to promote the development of the family physician's institute, it is necessary to ensure the normal remuneration of primary care medical staff. It is advisable to introduce the combined methods of pay for the primary health care, which means funding other than remuneration method (targeted remuneration, and so on). Special attention shall be attached to the methods of incentive remuneration of physicians to carry out prophylactic measures for beneficiaries.

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