



The Open Public Health Journal

Content list available at: www.benthamopen.com/TOPHJ/

DOI: 10.2174/1874944501811010201



RESEARCH ARTICLE

Evaluation of Patient Satisfaction with Cardiology Services

Tengiz Verulava^{1,*}, Revaz Jorbenadze², Leila Karimi³, Beka Dangadze¹ and Temur Barkalaia¹¹School of Business, Public Health and Insurance Institute, Ilia State University, Tbilisi, Georgia²G. Chapidze Emergency Cardiology Center, Tbilisi, Georgia³School of Psychology and Public Health, La Trobe University, Melbourne, Australia

Received: January 8, 2018

Revised: May 6, 2018

Accepted: May 8, 2018

Abstract:

Background:

Patient satisfaction is widely used as an important component in evaluating quality of health care. The current study aimed to evaluate patient satisfaction with the quality of healthcare.

Methods:

The study was carried out by a cross-sectional method for evaluation of hospitalized patient satisfaction with provided services. Participants of this research include patients who have been hospitalized during the last 5 years (2012-2016). Research tools were prepared on the basis of specially developed "Medical Outcomes Study, Patient Satisfaction Questionnaire" (MOS PSQ-III).

Results:

Most of the patients positively evaluated financial accessibility and quality of health services, even though some aspects of health care need improvement. This may be related to the introduction of the Universal Health Care Program in 2013, which increased population coverage. The international quality accreditation of the Emergency Cardiology Center has also played an important role in raising patient's satisfaction levels and in achieving higher standards in the sectors of patient safety and quality management. However, the study indicated, that there was a moderate level of satisfaction with the accessibility of healthcare services. So the further revisions and actions are needed to expand and refine the Universal Health Care Program. We also found an evidence that gender, age and education act as the socioeconomic determinants of satisfaction with healthcare quality.

Conclusion:

The patient satisfaction study, as one of the most important quality indicators, should be developed throughout the country. It will promote the development of healthy competitive environment among medical organizations and will improve the quality of medical services.

Keywords: Hospital Services, Patient Satisfaction, Quality of healthcare, Cardiology services, Medical outcomes study, Socioeconomic determinants.

1. INTRODUCTION

Quality is a key determinant of market share and the ability of an organization to meet or exceed customer expectations [1, 2]. There are two forms of quality: technical quality and functional quality [3]. Technical quality in the healthcare environment is defined primarily on the basis of the technical accuracy of the diagnoses and procedures [4]. Functional quality refers to the manner in which the healthcare service is delivered to the patient [5]. Since patients are often unable to accurately assess the technical quality of a health care service, the functional quality is usually the primary determinant of patients' quality perceptions [5].

* Address correspondence to this author at the School of Business, Public Health and Insurance Institute, Ilia State University, Kakutsa Cholokashvili

Ave 3/5, Tbilisi 0162, Georgia; Tel: +995 32 577294849; E-mail: tengiz.verulava@iliauni.edu.ge

Patient satisfaction is widely used in the modern world as an important component in evaluating the quality of healthcare as well as the health care system [6]. Some countries have implemented policies to monitor patient approaches through surveys [7]. At the same time, private insurance providers regularly measure patient satisfaction and patient experience as indicators of a performance [8]. It is used for measuring the compliance between the patients' preferences, expectations and received medical care. Medical service providers use the patient satisfaction research studies to constantly improve the quality of healthcare in a competitive market. It is an important tool to identify why the patient chooses a given hospital compared to others and how it assesses services that are provided.

The information obtained as a result of research studies on patient satisfaction increases the level of awareness of healthcare services. The results of the research enable the patient ability to compare the clinics and study the information about the quality of healthcare at medical institutions. Accordingly, it has a significant impact on their decision regarding the medical services, and it also increases the patient's confidence in the medical institution [9].

Patient satisfaction has a significant impact on the continuity of medical care. Satisfied patients are more likely to develop a deeper and long-lasting relationship with their medical provider, leading to an improved compliance, continuity of care [10], which increases the adequacy of the services and consequently results in better health outcomes [11 - 13].

A concept of patient satisfaction is relatively new in Georgia. However, in today's highly competitive healthcare environment, medical organizations are more aware of the need to focus on the quality of service. In 2013, Georgia introduced the Universal Health Care Program to increase an accessibility of healthcare services by removing financial barriers [14]. As a result, there has been a drastic increase in service utilization at ambulatory and hospital levels. For instance, after introduction of the Universal Health Program the number of visits to family doctors has increased by 43%, to specialized doctors – by 18%; the number of a laboratory analysis taken in hospitals has increased by more than 17%, and the number of instrumental examinations has increased by 9% [15].

However, such increase in utilization did not provide considerable improvements in quality of service provision [15]. According to the studies conducted in hospitals over the years, the quality assurance and quality-related activities were unreliable. Therefore, the quality of healthcare services in Georgia is inadequate both by objective measures and by the opinion of patients [15]. The percentage of respondents reporting trust to the services at their clinic was lower at approximately 65% [15].

It is worth to note, that according to the Decree of the Ministry of Labor, Health and Social Affairs of Georgia adopted on 2012, the medical institution is obliged to evaluate the satisfaction of patient and personnel in order to improve the quality of medical care. Surveys conducted in Georgia on patient satisfaction confirm that patients are more focused on communication with the medical personnel than on treatment [16]. While assessing a satisfaction, the patients also attached importance to the duration of the waiting period when visiting doctors, although making a preliminary appointment is considered as one of the means of solving the problem [17].

Some countries use patient satisfaction research as an instrument of accreditation for medical organizations. The National Committee for Quality Assurance requires the healthcare organizations to provide data on patient satisfaction research as a requirement for accreditation [18]. This enables the patients to make a more informed choice according to the quality of services.

Low financial accessibility of medical services has a negative impact on patient satisfaction [19 - 21]. In 2013, the Government of Georgia launched the Universal Health Care Program to improve the accessibility of health care services and strengthen financial protection [14]. After enactment of the Universal Health Care Program, accessibility to medical services by the population has been significantly increased [22]. As a result, there has been a drastic increase in service utilization at all levels. Patients are more likely to consult a health care provider, when there are sick, than before; financial barriers to access and out-of-pocket payments have fallen, especially for outpatient visits and hospital care; and user experience of the health system has improved [23]. Georgia's significant movement towards the universal healthcare coverage was made possible by a much-needed increase in public spending on health [22]. In regard to this, further studies are needed to evaluate customer satisfaction with the quality of healthcare.

Thus, our focus is to empirically assess patient satisfaction with the quality of healthcare delivery. Specifically, the present study examines how communication, showing courtesy towards patients and an environment of the facility significantly predicts patients' satisfaction with the quality of healthcare. It is also important to study how the

introduction of the Universal Health Care Program in Georgia and the measures taken by medical organizations to obtain an international accreditation influences patient satisfaction.

2. METHODS

The present, cross-sectional study was carried out during the last 5 years (2012-2016) to evaluate the hospitalized patient satisfaction with provided services. The research was conducted in different units of Emergency Cardiology Center (Tbilisi, Georgia). The center was selected because it is the largest cardiology hospital in Georgia.

The respondents of this research include patients who have been hospitalized at least for 24 hours. All patients were interviewed before the release, after obtaining informed consent from them. The Ethical Committee of G. Chapidze Emergency Cardiology Center had approved the study.

Study tools were prepared on the basis of specially developed “Medical Outcomes Study, Patient Satisfaction Questionnaire” (MOS PSQ-III), third edition. It consists of 50 points and includes seven aspects: general satisfaction of medical service, technical quality, interpersonal aspects, communication, financial aspects of service, time spent with physician and availability of services [24]. Each variable was measured by asking respondents to rate their overall satisfaction with the quality of services rendered in the hospitals using a five-point Likert scale: Poor (1), average (2), good (3), very good (4), excellent (5). The collected data were analyzed by SPSS program.

3. RESULTS

3.1. Demographic Characteristics

The main characteristics of the participants are summarised in Table 1. The study was carried out during the 2012-2016 years. Over 500 patients were interviewed each year. Overall, women accounted for 35-41% and men - 58-65%. Majorities of patients were 65 years or older (38-42%) and married couples (65-75%). In terms of education, 59-66% of the respondents attained higher education while 34-41% had a secondary level of education.

Table 1. Distribution of patients according to the characteristics and survey periods (unit = %).

-	2012 (n = 500)	2013 (n = 500)	2014 (n = 500)	2015 (n = 500)	2016 (n = 500)
Age (years)	n (%)	n (%)	n (%)	n (%)	n (%)
20-34	70 (14)	45 (9)	40 (8)	55 (11)	50 (10)
35-49	90 (18)	100 (20)	105 (21)	90 (18)	95 (19)
50-64	150 (30)	160 (32)	145 (29)	155 (31)	150 (30)
> 65	190 (38)	195 (39)	210 (42)	200 (40)	205 (41)
Gender					
Female	175 (35)	205 (41)	195 (39)	210 (42)	185 (37)
Male	325 (65)	295 (59)	305 (61)	290 (58)	315 (63)
Marital status					
Never married	50 (10)	40 (8)	30 (6)	20 (4)	25 (5)
Currently married	325 (65)	340 (68)	370 (74)	375 (75)	360 (72)
Widowed or separated	125 (25)	120 (24)	100 (20)	105 (21)	115 (23)
Education					
No	0	0	0	0	0
Secondary	195 (39)	205 (41)	175 (35)	180 (36)	170 (34)
High	305 (61)	295 (59)	325 (65)	320 (64)	330 (66)

3.2. The Domains of Satisfaction with Health Care

The level of satisfaction with health-care services is shown in Table 2. Most of the patients positively evaluate the organization and quality of health care. The number of “very dissatisfied” and “dissatisfied” patients decreased drastically compared to 2012 and the number of “very satisfied” and “satisfied” patients was increased.

In comparison with previous years, there were increased number of patients who have noted that the doctor carefully examines their health condition. Patients were satisfied with the competence, professionalism and knowledge of the latest medical achievements of their doctors. We also noticed that communications and interpersonal relationships are an important factor in patient satisfaction. According to the survey, the patients are satisfied with the polite and respectful attitude from doctors. However, it should be noted that waiting time it is still a problem. The study

showed that the patients' financial accessibility of medical services has increased.

Table 2. Evaluation of the quality of medical services by respondents from the 5-point scale: poor (1), average (2), good (3), very good (4), excellent (5).

General Satisfaction	2012	2013	2014	2015	2016
Very satisfied with care	4	4.3	4.5	4.6	4.6
Some things could be better	2	1.5	1.4	1.3	1.2
Medical care is excellent	4.1	4.4	4.5	4.6	4.7
Things need improvement	2.1	2	1.9	1.8	1.6
Care just about perfect	4.1	4.2	4.5	4.6	4.6
Dissatisfied with some things	2.1	1.7	1.6	1.4	1.3
Technical Quality					
Careful to check everything	4	4.3	4.5	4.6	4.6
Doctors need to be more thorough	1.6	1.2	1.1	1	0.8
Doctor's office has everything needed	4.3	4.4	4.5	4.6	4.6
Wonder if diagnosis is correct	1.3	1.1	0.8	0.7	0.5
Know latest medical developments	4.1	4.2	4.3	4.4	4.5
Lack experience with my problems	1.4	1.2	0.9	0.6	0.5
Doctors are competent, well-trained	4.2	4.3	4.3	4.4	4.5
Doubt about ability of doctors	1.2	1.2	0.9	0.6	0.5
Never expose me to a risk	4	4.3	4.3	4.4	4.5
Doctors rarely give advice	1.1	1.1	0.8	0.7	0.5
Interpersonal Aspects					
Too business-like, impersonal	0.9	0.8	0.8	0.6	0.5
Do best to keep me from worrying	4	4	4	4.1	4.1
Should pay attention to privacy	1	1.1	1	0.6	0.5
Genuine interest in me	4.1	4.1	4	4.2	4.2
Make me feel foolish	0.3	0.3	0.2	0.1	0.1
Very friendly and courteous	4	4	4.1	4.1	4.2
Should give me more respect	1	1.1	0.8	0.5	0.5
Communication					
Explain the reason for tests	4	4	4.1	4.2	4.2
Use terms without explaining	1.2	1.2	0.9	0.6	0.5
Say everything that's important	3.9	4	4	4.2	4.3
Ignore what I tell them	0.5	0.4	0.4	0.3	0.3
Doctors listen carefully	4	4	4.1	4.1	4.2
Financial Aspects					
Care without financial setback	3.1	3.9	4	4.1	4.2
Worry about large bills	2.3	1	0.8	0.7	0.6
Protected from financial hardship	3	3.5	3.9	4	4
Problem to cover share of cost	2.4	1.2	0.9	0.8	0.6
Insured, protected financially	2	4.2	4.3	5	5
Pay more than I can afford	2.5	1	0.8	0.5	0.3
Amount I pay is reasonable	2	4.1	4.2	4.4	4.5
Go without care because too expensive	0.5	0.2	0	0	0
Time Spent with Doctor					
Doctors spend plenty of time with me	4.2	4.4	4.4	4.4	4.6
Hurry too much	1	0.8	0.8	0.7	0.5
Access/Availability/Convenience					
Get hospital care without trouble	3.9	4.2	4.1	4.3	4.3
Hard to get care on short notice	1.1	1	0.8	0.7	0.5
Easy to get care in an emergency	4	4.2	5	5	5
Office should be open for more hours	1.5	1	0.8	0.4	0.3
Care conveniently located	4	4.1	4.2	4.2	4.3
Wait too long for emergency treatment	1	0.8	0.8	0.7	0.5

(Table 4) contd.....

Can reach doctor for help with medical question	4	4.1	4.2	4.2	4.3
Hard to get appointment right away	1.1	1	0.8	0.7	0.5
Office hours are convenient	4.2	4.4	4.4	5	5
Kept waiting at doctor’s office	4.3	4.4	4.3	4.2	4.2
Easy access to specialists	4.1	4.1	4.2	4.3	4.3
Get medical care whenever need it	4.1	4.2	4.3	4.3	4.4

Table 3 shows the sociodemographic correlations with patient satisfaction. We’ve found weak evidence that the age significantly correlates with satisfaction with healthcare provision, thus suggesting a nonlinear link between age and satisfaction with health care.

Table 3. The link between the level of patient satisfaction and social factors Evaluation of the quality of medical services by respondents from the 5-point scale:

	Very satisfied with care	Some things could be better	Medical care is excellent	Things need to be improved	Dissatisfied with some things
Age (years) %					
20-34	4.6	1.2	4.7	1.6	1.3
35-49	4.3	1.4	4.4	1.3	1.2
50-64	4.1	1.3	4.5	1.4	1.4
65 <	4.4	1.2	4.8	1.3	1.3
Gender %					
Female	4.4	1.5	4.6	1.5	1.4
Male	4.2	1.3	4.4	1.3	1.2
Marital status %					
alone	4.3	1.4	4.4	1.3	1.2
married	4.1	1.3	4.5	1.4	1.4
Widow / Divorce	4.4	1.2	4.8	1.3	1.3
Education %					
No	4.4	1.6	4.6	1.4	1.1
Secondary	4.3	1.3	4.3	1.2	1.4
High	4.5	1.3	4.5	1.5	1.2

We’ve also noticed that a gender has an effect on patient satisfaction. According to the research, females were more satisfied with the quality of health care than males. Finally, we’ve found weak evidence for the education/satisfaction with healthcare provision.

4. DISCUSSION

Patients' satisfaction is one of the most important factors for the promotion of the quality of health services. This study assessed the level of client satisfaction from 2012 to 2016 years. Analysis of the data of this period is important because the universal health care program that was launched in Georgia in 2013 allows us to evaluate its impact on patient satisfaction.

We’ve found an evidence of high satisfaction with healthcare services in Georgia. Access to services provided is one of the most important factors for the satisfaction of patients. In regard to this, we should especially note the satisfaction of patients with financial accessibility of health services. This may be related to the introduction of the Universal Health Care Program in 2013, which has increased the coverage of population. However, our study showed that there was a moderate level of satisfaction with accessibility to services. It indicates that the accessibility of medical services in Georgia is not so good and further revisions and actions are needed to expand the Universal Health Care Program.

Our results regarding the link between the Universal Health Care Program and satisfaction were compatible with other research findings. In 2014, experts of WHO with the technical assistance of USAID/HSSP carried out the telephone survey of the population on the satisfaction of obtained services and qualitative study of service providers and beneficiaries (Focus groups) for assessment of Universal Health Program [25]. The survey showed that majority (96.4%) of the beneficiaries of Universal Health program are satisfied or highly satisfied with hospital and outpatient service, 80.3% of beneficiaries are satisfied or highly satisfied with planned outpatient service [25]. 84.1% of

respondents indicated that the financial support of population is the most positive part of the Universal Health [25]; also, most of the beneficiaries mentioned the rights of a free choice as one of the core positive factors of Universal Health.

The international quality accreditation of the Emergency Cardiology Center has also played an important role in raising patient's satisfaction levels and in achieving higher standards in the sectors of patient safety and quality management. In regard of this, it should be noted that in recent years, medical organizations in Georgia are trying to gain international accreditation of medical quality, one of the major requirements of which is to evaluate the quality of patient satisfaction. One of the first medical institutions that gained international accreditation is Acad. G. Chapidze Emergency Cardiology Center. In November 2016 the certificate from one of the most authoritative organization "Cooperation for Transparency and Quality in Health Care" (KTQ) was awarded to the Emergency Cardiology Center. Over the course of almost one year, the experts of KTQ supported the Cardiology Center in aligning the already well-established quality standards with those expected in European hospitals. Chapidze Emergency Cardiology Center is the first medical facility in the South Caucasus region that received a KTQ certificate. Aspiration of medical institutions to receive an international accreditation quality certificate will enhance the quality of medical services.

We've also found an evidence that gender, age and education act as the main socioeconomic determinants of satisfaction with healthcare quality. The results of our analysis is consistent with some of the findings from other studies. Other studies confirm a similar link between age and satisfaction with health care [26, 27]. Some studies show that patient satisfaction level decreases with the increase in age [28, 29]. However, according to other studies, age is not a significant determinant of satisfaction [30]. Gender is in a particularly significant correlation with satisfaction [31]. However, according to other studies, gender is not a significant determinant of satisfaction [32]. According to our research, there is a weak evidence for the education/satisfaction with healthcare provision. Other studies confirm a similar connection [28].

CONCLUSION

Satisfaction with quality of medical services in cardiology patients is characterized by increasing tendency. Efforts to obtain international accreditation by the medical organization and attempts to improve the quality contribute to this progress. The positive role of Universal Health Care Program introduced in 2013, which has increased financial availability of medical services and therefore the population's satisfaction should also be taken into consideration.

In highly competitive healthcare environment, hospitals are more aware of a need to focus on the quality of service. The quality of medical care is perceived as an opportunity to improve their competitive position. Patient-oriented services and focus on the improvement of quality increase the motivation of medical personnel to provide high-quality medical services, as well as the patient's trust towards the medical institution.

It is necessary to motivate hospital managers and staff to use the results of patient satisfaction surveys for the improvement of the quality of healthcare services and not merely as an audit instrument for assessing the work of hospital personnel.

The research has shown that some aspects of medical care still need an improvement. It is advisable to conduct training for health personnel to deepen interpersonal relationships and communication skills, regularly assess and report information on components of health system responsiveness and patient satisfaction. Patient satisfaction research can be used as a hospital instrument in terms of accountability with patients. This will facilitate the financial sustainability of the hospital in the long term.

Patient satisfaction study, as one of the important quality indicators, should be developed throughout the country. It will promote the development of healthy competitive environment among medical organizations and it will also improve the quality of medical services.

ETHICS APPROVAL AND CONSENT OF PARTICIPANTS

The Ethical Committee of G. Chapidze Emergency Cardiology Center had approved the study.

HUMAN AND ANIMAL RIGHTS

No Animals were used in this research. All human research procedures followed were in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2008.

CONSENT FOR PUBLICATION

A written informed consent was obtained from all patients when they were enrolled.

CONFLICTS OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

ACKNOWLEDGEMENTS

Declared none.

REFERENCES

- [1] Anderson C, Zeithaml CP. Stage of the product life cycle, business strategy and business performance. *Acad Manage J* 1984; 27: 5-24.
- [2] Parasuraman A, Zeithaml V, Berry L. SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *J Retailing* 1988; 64(1): 12-40.
- [3] Gronroos CA. Service quality model and its marketing implications. *Eur J Mark* 1984; 18(4): 36-44. [<http://dx.doi.org/10.1108/EUM000000004784>]
- [4] Babakus E, Mangold WG. Adapting the SERVQUAL scale to hospital services: An empirical investigation. *Health Serv Res* 1992; 26(6): 767-86. [PMID: 1737708]
- [5] Donabedian A. The Definition of Quality and Approaches to Its Assessment. *Explorations in Quality Assessment and Monitoring*. Ann Arbor, MI: Health Administration Press 1980; 1.
- [6] Healy JM Jr, Govoni LA, Smolker ED. Patient reports about ambulatory care. *Qual Manag Health Care* 1995; 4(1): 71-81. [<http://dx.doi.org/10.1097/00019514-199504010-00009>] [PMID: 10151629]
- [7] Confederation NHS. Patient Involvement in the new NHS, Action Points 25. London: NHS Confederation 2010.
- [8] Jennings BM, Heiner SL, Loan LA, Hemman EA, Swanson KM. What really matters to healthcare consumers. *J Nurs Adm* 2005; 35(4): 173-80. [<http://dx.doi.org/10.1097/00005110-200504000-00006>] [PMID: 15834256]
- [9] Bennett PD, Mandell RM. Prepurchase information seeking behavior of new car purchases – the learning hypothesis. *J Mark Res* 1969; 430-3. [<http://dx.doi.org/10.2307/3150076>]
- [10] Jones RB, Carnon AG, Wylie H, Hedley AJ. How do we measure consumer opinions of outpatient clinics? *Public Health* 1993; 107(4): 235-41. [[http://dx.doi.org/10.1016/S0033-3506\(05\)80502-5](http://dx.doi.org/10.1016/S0033-3506(05)80502-5)] [PMID: 8356205]
- [11] Cleary PD, McNeil BJ. Patient satisfaction as an indicator of quality care. *Inquiry* 1988; 25(1): 25-36. [PMID: 2966123]
- [12] DiMatteo MR, Hays R. The significance of patients' perceptions of physician conduct: A study of patient satisfaction in a family practice center. *J Community Health* 1980; 6(1): 18-34. [<http://dx.doi.org/10.1007/BF01324054>] [PMID: 7430419]
- [13] Larsen DE, Rootman I. Physician role performance and patient satisfaction. *Soc Sci Med* 1976; 10(1): 29-32. [[http://dx.doi.org/10.1016/0037-7856\(76\)90136-0](http://dx.doi.org/10.1016/0037-7856(76)90136-0)] [PMID: 1265486]
- [14] Asatiani M, Verulava T. Georgian welfare state: preliminary study based on Esping-Andersen's typology. *Econ Sociol* 2017; 10(4): 21-8. [<http://dx.doi.org/10.14254/2071-789X.2017/10-4/2>]
- [15] Verulava T, Jorbenadze R, Barkalaia T. Introduction of universal health program in Georgia: Problems and perspectives. *Georgian Med News* 2017; 262(262): 116-20. [PMID: 28252441]
- [16] Verulava T, Jorbenadze R, Dangadze B, Karimi L. Nurses' work environment characteristics and job satisfaction: Evidence from Georgia. *Gazi Medical Journal* 2018; 29(1): 12-6.
- [17] Verulava T, Maglakelidze T, Jorbenadze R. Hospitalization timeliness of patients with myocardial infarction. *East J Med* 2017; 22(3): 103-9.
- [18] Terry K. How to get the best reading of patient satisfaction. *Med Econ* 1996; 73(13): 101-122, 105-106, 108 passim. [PMID: 10158799]
- [19] Verulava T, Gabuldani M. Accessibility of urgent neurosurgery diseases by the state universal healthcare program in Georgia (country). *Gazi Medical Journal* 2015; 26(2): 42-5.
- [20] Verulava T, Sibashvili N. Accessibility to psychiatric services in Georgia. *Afr J Psychiatry* 2015; 18(3): 1-5.
- [21] Verulava T, Jincharadze N, Jorbenadze R. Role of primary health care in re-hospitalization of patients with heart failure. *Georgian Med News* 2017; 264(264): 135-9. [PMID: 28480866]

- [22] Verulava T, Maglakelidze T. Health financing policy in the south caucasus: Georgia, Armenia, Azerbaijan. *Bulletin of the georgian national academy of sciences* 2017; 11(2): 143-50.
- [23] Zoidze A, Rukhazde N, Chkhatarashvili K, Gotsadze G. Promoting universal financial protection: Health insurance for the poor in Georgia--a case study. *Health Res Policy Syst* 2013; 11: 45. [<http://dx.doi.org/10.1186/1478-4505-11-45>] [PMID: 24228796]
- [24] Hays RD, Davies AR, Ware JE. Scoring the medical outcomes study patient satisfaction questionnaire, PSQ-III. 1987.
- [25] The Government of Georgia Universal Health Programme: Annual assessment report . 2015.
- [26] Senarath U, Gunawardena N, Lankamali ELS, Senanayake A, Seneviratne A, Sebastiampillai B. Measuring patient perception of the quality of nursing care at the National Hospital Sri Lanka.
- [27] Tayefi B, Sohrabi MR, Kasaeian A. Patients' satisfaction with the diabetes control and prevention program in Tehran, Iran: A cross sectional study. *J Res Health Sci* 2015; 15(4): 239-43. [PMID: 26728910]
- [28] Margolis SA, Al-Marzouq S, Revel T, Reed RL. Patient satisfaction with primary health care services in the United Arab Emirates. *Int J Qual Health Care* 2003; 15(3): 241-9. [<http://dx.doi.org/10.1093/intqhc/mzg036>] [PMID: 12803352]
- [29] Ruberu TRC, Dayasiri MBKC. Determinants of patient satisfaction at National Hospital of Sri Lanka College of Oto Rhino laryngologists of Sri Lanka. Peter Meredith 2009.
- [30] Cho SH, Kim CY. Trends in patient satisfaction from 1989-2003: Adjusted for patient characteristics. *Taehan Kanho Hakhoe Chi* 2007; 37(2): 171-8. [<http://dx.doi.org/10.4040/jkan.2007.37.2.171>] [PMID: 17435400]
- [31] Al-Borie HM, Damanhour AM. Patients' satisfaction of service quality in Saudi hospitals: A SERVQUAL analysis. *Int J Health Care Qual Assur* 2013; 26(1): 20-30. [<http://dx.doi.org/10.1108/09526861311288613>] [PMID: 23534103]
- [32] Mpinga EK, Verloo H, Chastonay P. Patient satisfaction and the right to health: A survey in a rehabilitation clinic in Switzerland. *Open Public Health J* 2013; 6: 51-8. [<http://dx.doi.org/10.2174/1874944501306010051>]

© 2018 Verulava *et al.*

This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International Public License (CC-BY 4.0), a copy of which is available at: <https://creativecommons.org/licenses/by/4.0/legalcode>. This license permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.