#### Original article

# A Study of Patient Satisfaction With Healthcare in Zenica-Doboj Canton

Šeila Cilović Lagarija \*1, Elma Kuduzović 2, Nino Hasanica 2, Sead Begagić 2, Amela Džubur-Alić 3, Delila Lisica 3

- Public Health Institute of the Federation of Bosnia and Herzegovina, Sarajevo, Bosnia and Herzegovina,
- <sup>2</sup> Institute for Health and Food Safety Zenica, Zenica, Bosnia and Herzegovina,
- <sup>3</sup> Faculty of Medicine, University of Sarajevo, Sarajevo, Bosnia and Herzegovina

\*Corresponding author: Šeila Cilović Lagarija, seila.cilovic@gmail.com

## **Abstract**

**Aim:** Patient satisfaction and patient evaluation of healthcare can be seen as important results of provided care, as they reflect the level to which the patient's subjective and objective needs have been met. The aim was to evaluate patient satisfaction with healthcare and compare the results for 2017 with the results from 2011.

**Methods:** The study was conducted in the territory of Zenica-Doboj Canton in May 2011 and in October 2017. A questionnaire was filled out by 2,008 examinees in 2011 and by 2,000 examinees in 2017 outside healthcare institutions (in the street), using the EUROPEP questionnaire as a research instrument. The average age of the respondents was 38.4. The participants in the study were 52 % male and 48 % female. Student's T-test was used to compare the results between the two samples.

**Results:** A statistically significant difference was observed between the mean patient satisfaction in 2011 (3.19  $\pm$  0.3, min. = 2.6, max. = 3.83, P = 0.00032) and the mean patient satisfaction in 2017 (3.47  $\pm$  0.17, min. = 3.14, max. = 3.94, P = 0.000647), t(23) = 3.75. Increase in patient satisfaction in 2017 is evident compared to their satisfaction in 2011.

**Conclusion:** Surveying the satisfaction of healthcare recipients should be a common method of work as it gives the patients the impression that their opinion is valued, while at the same time it indicates to healthcare staff that their attitudes may need to be changed, their knowledge expanded and the organization of work improved, if they want to provide services of improved quality.

(Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D. A Study of Patient Satisfaction With Healthcare in Zenica-Doboj Canton SEEMEDJ 2020; 4(2); 129-135)

Received: Apr 7, 2020; revised version accepted: Jul 16, 2020; published: Nov 12, 2020

KEYWORDS: patient satisfaction, healthcare, EUROPEP

-

# Introduction

The patient is the one to be questioned whether the provided health care has helped to improve their health or quality of life. It is not only the results of healthcare that matter in terms of improved health; it is also important how the healthcare is provided: access to care, organization of services, staff education and their communication with the patient are all relevant factors. There is increased awareness among persons with health insurance policies and healthcare staff that patients can and must have a central role in defining optimal care and improved quality of healthcare. Engagement of patients in the process of improving healthcare is not only desirable; it is also a social, economic and technical necessity (1).

New concepts, such as the central role of patients, strengthening of patients, patients as partners and joint decisions, demonstrate an emancipation of patients. Engagement of patients is not only important from the ethical perspective. It is important to investigate not only the expectations, needs and priorities of patients within general healthcare practices, but also to gather information about the experiences of patients provided with care. Most patients can provide more than an opinion and assessment of care and treatment they received from a doctor or other healthcare staff. Such information may be very important. It may help the practitioners select those aspects care of improvement is necessary. On the other hand, patient satisfaction and their evaluation of care may be observed as important results of provided care, since they reflect the level to which their subjective and objective needs are met. This cannot be observed as the only relevant result, as sometimes the patients have unrealistic demands; however, satisfaction can generally be seen as an important addition to other types of measures (health status, quality of life or costs) required to evaluate the quality of general medical practice (2).

Information about the patient's evaluation of care is mainly collected through (written) questionnaires filled out by patients who go to see a doctor or get the questionnaire by mail. In principle, patient surveys are among the most popular methods of assuring quality in a healthcare system.

## **Material and Methods**

The EUROPEP instrument has been created to provide feedback to general practitioners / family doctors, general practitioner's offices as well as organizations of patients/healthcare recipients. It is a standardized instrument for evaluating patient satisfaction with healthcare. For this study, the EUROPEP questionnaire was translated into Bosnian (3).

The study was conducted in the territory of Zenica-Doboj Canton in May 2011 and in October 2017. The questionnaire was filled out by 2,008 examinees in 2011 and by 2,000 examinees in 2017 outside healthcare institutions (in the street). Student's T-test was used to compare the results between the two samples.

#### Results

The study was conducted in the territory of Zenica-Doboj Canton for the purpose of evaluating satisfaction with healthcare. The EUROPEP methodology (23 questions with a 5point answering scale), which was developed by an international consortium of researchers and general practitioners in 1995, was used. The research also used a modified form with questions relevant for our field of work (length of time spent waiting for an examination, evaluation of staff actions during the stay in a medical institution, payment of services and medication, and reason for payment). The research was conducted in May 2011 and in October 2017. The survey was performed on a sample of 2,000 respondents outside medical institutions (in the street) in order to get as many objective answers as possible. The aim of the research was to obtain results for 2017 and compare them with those from 2011 (4,5).

The average age of the respondents was 38.4 (age range 12-83). The study included 51.95% of male participants and 48.05% of female participants. The respondents' education

structure is shown in Table 1, indicating that the highest number of respondents had secondary school education. Figure 1 shows the distribution of respondents by municipalities.

Figure 1. Structure of respondents per municipality in 2017

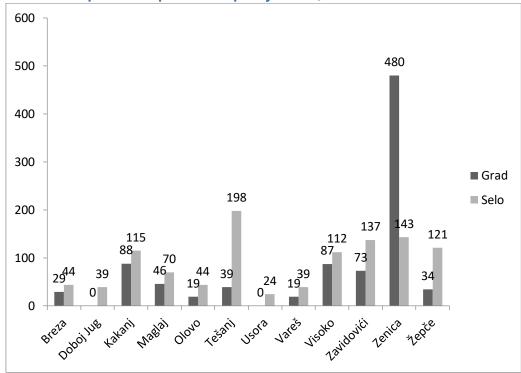


Table 1. Level of respondents' education in 2017

201/	
Level of education	No.
	10
Without primary school	13
Primary school	257
Secondary school	1.230
College	250
University	240
Total	2.000

Table 2 provides a classification of the respondents from Zenica-Doboj Canton, showing their occupation in numbers and percentages. According to the occupation classification, the highest number of respondents were employed in the public sector (23.55%).

Table 2. Respondents' occupation in 2017

rable 2. Respondents occupation in 2017			
Occupation	No.	%	
Unknown	16	0.8	
		15.7	
Student	315	5	
Unemployed	221	11.05	
Private entrepreneur	92	4.6	
Employed in the public sector	268	13.4	
Employed in the private			
sector	471	23.5	
Pensioner	204	10.2	
Farmer	76	3.8	
Freelance (artist)	43	2,15	
		12.9	
Housewife	259	5	
Other	35	1.75	
	2.00		
Total	0	100	

By comparing the results of the average grade for questions in Table 3 for the period 2011–2017, we obtained the following results: by using an Southeastern European Medical Journal, 2020; 4(2)

independent samples T-test, comparison of the results for 2011 and 2017 was made for patient satisfaction in regard to provided services and treatment by medical staff. A statistically significant difference was noted between the mean patient satisfaction in 2011 (3.19  $\pm$  0.3, min = 2.6, max = 3.83, p = 0.00032) and the mean patient

satisfaction in 2017 (3.47  $\pm$  0.17, min = 3.14, max = 3.94, p = 0.000647), t(23) = 3.75. The difference between mean values per group (mean difference of 0.41) was small (eta squared = 0.0468).

Table 3. Average grade per EUROPEP question (on a scale of 1 to 5 for each question)

Average grade per EUROPEP question	
Do you think that the doctor spends sufficient time with you?	3.33
Does the doctor show any interest in your problem?	3.41
Do you feel better when you tell the doctor about your problem?	3.46
Does the doctor involve you in making a decision about your treatment?  Does the doctor listen to you carefully while you are presenting your	3.36
problems?	3.52
Does the doctor provide you with all information about your diseases?	3.42
Does the doctor try hard to relieve your symptoms as soon as possible?	3.47
Does the doctor help you feel better and return to your everyday work?	3.49
Does the doctor perform a physical examination?	3.75
Does the doctor perform a detailed physical examination?	3.51
Does the doctor work on the prevention of various diseases?  Does the doctor explain why you need to undergo additional tests and	3.46
analyses?	3.44
Does the doctor provide explanation about your symptoms and disease?  Does the doctor help with your emotional problems related to your health	3.47
condition?	3.30
Does the doctor explain to you why it is important to comply with his/her instructions?	3.46
Does the doctor explain what he/she is doing during the examination?  Does the doctor explain what you can expect at a specialist examination in	3.43
hospital?	3.36
Are you assisted by other medical staff (nurse at the clinic)?	3.56
Can you make an appointment with the doctor?	3.80
Is it easy to make a phone call to the doctor?	3.31
Can you seek advice from the doctor by phone?	3.14
Do you wait long in the waiting room?	3.46
Does the doctor respond fast in emergency situations?	3.94

# **Discussion**

By comparing surveys conducted in Bosnia and Herzegovina and other countries from the 132 region, we reached the following conclusions: a survey conducted at the Healthcare Centre of Zenica in 2013 showed that patient satisfaction with general practice offices was statistically

Southeastern European Medical Journal, 2020; 4(2)

most significant with regard to making appointments with practitioners at a time suitable for the patients (p = 16.28), the possibility of making a phone call to the clinic (p = 32.55), and the length of time spent in the waiting room (p = 30.42). Obtained data confirmed a high level of patient satisfaction with units of general practice in primary healthcare. The EUROPEP questionnaire seems to be a useful tool for reviewing patient satisfaction with medical services (6).

In comparison to this study, in Bulgaria, 58.7% of respondents on average rated the level of care received as excellent. The waiting time in the waiting room was the most poorly rated item (33.8%). The item "keeping patients' records and data confidential" was the most highly rated item (88.8%). Patients were less satisfied with "providing quick services for urgent health problems" (78.5% excellent or good) and "getting an appointment to suit them" (76.2% excellent or good) (7).

In 2016, a cross-sectional study was performed among visitors of the Emergency Medical Service (EMS) of Gorenjska, Slovenia. It took into account the waiting time, which is considered to be associated with the success of the EMS organizational model. The **EUROPEP** questionnaire was used for rating the degree of patient satisfaction. Results showed a score higher than 4. Patients were least satisfied with the length of time spent waiting for an examination. Research results confirmed that the effectiveness of the EMS organizational model had an impact on the degree of patient satisfaction (8).

This study showed that most respondents had a positive opinion about the behavior of GPs, emphasizing their gentleness during medical examinations (83%), respect for privacy (82%), as well as a benevolent attitude towards patients (77%). However, despite the positive assessment of their behavior, in the opinion of 52% of the respondents, doctors did not offer them any preventive examinations, and in many cases (43%) did not provide information about a healthy lifestyle. A third of the patients (32%) was not informed about the side effects of medication by

a doctor. The results showed that fewer than half of the GPs were interested in the psychosocial sphere of their patients. Only 27% of the respondents received their doctor's help in regard to dealing with fears about their health. An even lower percentage of respondents stated that their doctor expressed interest in their personal (23%) or material (23%) situation, while 35% of patients received questions from their doctors about family members (9).

In the research conducted in Zenica-Doboj Canton in 2015, the questionnaire was made on the basis of the EUROPEP standardized questionnaire regarding patient satisfaction with healthcare. The older population evaluated secondary and tertiary healthcare practices better, they needed more time to reach health facilities, and they waited longer to receive healthcare services in primary healthcare practice (10).

Research conducted across Turkey's 81 provinces over the period 2010-2012, using the European Patients Evaluate General/Family Practice (EUROPEP), showed that the Family Medicine Model significantly improved patient satisfaction across a range of dimensions (11-12). This study has shown great similarity with the results of this research, showing evident increase in patient satisfaction. Numerous studies conducted in the area of the Federation of Bosnia and Herzegovina have shown significant improvement and increase in patient satisfaction with healthcare (6, 13-17).

## Conclusion

As expected, the analysis of data obtained in the study of patient satisfaction in the area of Zenica-Doboj Canton shows that there was a significant increase in satisfaction in 2017 in comparison with 2011. Surveying the satisfaction of healthcare recipients should be a common method of work as it gives the patients the impression that their opinion is important and serves as an indication for medical staff in terms of required changes of attitudes, expansion of knowledge and organization of work.

# Acknowledgement. None.

#### **Disclosure**

**Funding.** No specific funding was received for this study.

## References

- 1. Guadagnoli E, Ward P. Patient Participation in Decision-Making. Soc Sci Med 1998; 47(3):329-39.
- 2. Grol R, Wensing M, Mainz J, Jung HP, Ferreira P, Hearnshaw H, Hjortdahl P, Olesen F, Reis S, Ribacke M, Szecsenyi J. European Task Force on Patient Evaluations of General Practice Care (EUROPEP). Patients in Europe Evaluate General Practice Care: An International Comparison. Br J Gen Pract 2000; 50(460);882-7.
- 3. Grol R, Wensing M. Patients evaluate general/family practice. The EUROPEP instrument. Mediagroep KUN/UMC, 2000.
- 4. Kantonalni zavod za javno zdarvstvo Zenica. Izvještaj o zdravstvenom stanju stanovništva i organizaciji zdravstva na području Zeničko-dobojskog kantona u 2011. godini. Zenica. 2012.
- 5. Institut za zdravlje i sigurnot hrane. Informacija o zdravstvenom stanju stanovništva i organizaciji zdravstva na područiju Zeničkodobjskog kantona u 2017. godini. Zenica, 2019.
- 6. Gavran L, Jašarević E, Hasanica N. Patient satisfaction with primary care: are there differences between the approaches in family and general medicine? Med Glas 2013; 10(2):379-84.
- 7. Dimova R, Stoyanova R, Keskino D. The EUROPEP Questionnaire for Patient's Evaluation of General Practice Care: Bulgarian Experience. Croat Med J 2017; 58(1):63-74.
- 8. Jaklič TK. Analysis of Patient Satisfaction With Emergency Medical Services. Open Med (Wars) 2018; 13:493-502.

# Competing interests. None to declare.i

- 9. Plentara R, Knyszyńska A, Bazydło M, Zabielska P, Kim A, Kotwas A, Rotter I, Kamola J, Karakiewicz B. Patient Satisfaction Measure of the Quality of Primary Health Care. Pomeranian J Life Sci 2015; 61(3):335-40.
- 10. Spasojević N, Hrabač B, Huseinagić S. Patient's Satisfaction With Health Care: A Questionnaire Study of Different Aspects of Care. Mater Sociomed 2015; 27(4):220-4.
- 11. Aktürk Z, Ateşoğlu D, Çiftçi E. Patient satisfaction with family practice in Turkey: Three-year trend from 2010 to 2012. Eur J Gen Pract 2015; 21(4):238-45.
- 12. Sparkes SP, Atun R, Bärnighausen T. The impact of the Family Medicine Model on patient satisfaction in Turkey: Panel analysis with province fixed effects. PLoS One 2019;14(1). (ahead of print)
- 13. Mašić I. Service quality in health care. In: Mašić I, ed. Family medicine. Sarajevo: Avicena, 2007: 95-114.
- 14. Toromanović S. User satisfaction with primary health care as a parameter for assessing quality. Sarajevo: University of Sarajevo, 2002. Master's thesis.
- 15. Toromanović S, Mašić I, Novo A. Measuring the quality of primary health care: methodology, variables, techniques, assessment. AIM 2004; 12:11-6.
- 16. Mašić I, Nikšić D. Quality and quality assurance in health care. Med Arh 2003; 57:189-96.

Toromanović S. Research of the quality of primary care by measuring user satisfaction of health services. Sarajevo: University of Sarajevo, 2005. Ph.D. dissertation thesis.

Administrative, technical or logistic support: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D

Analysis and interpretation of data: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D

Conception and design: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D Critical revision of the article for important intellectual content: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D

Drafting of the article: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D Final approval of the article: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D

Guarantor of the study: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D Provision of study materials or patients: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D

Statistical expertise: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D

<sup>&</sup>lt;sup>i</sup> **Author contribution.** Acquisition of data: Cilović Lagarija Š, Kuduzović E, Hasanica N, Begagić S, Džubur-Alić A, Lisica D