doi: 10.5455/aim.2015.23.53-56 ACTA INFORM MED. 2015 FEB 23(1): 53-56 Received: 11 January 2015 • Accepted: 16 February 2015 © AVICENA 2015

# **PROFESSIONAL PAPER**

# Predictors of Patients' Satisfaction with Health Care Services in Three Balkan Countries (Macedonia, Bulgaria and Serbia): a Cross Country Survey

Vladimir Lazarevik<sup>2</sup>, Blasko Kasapinov<sup>1,2</sup>

<sup>1</sup>Department of social medicine; Faculty of medicine, University of Skopje, Macedonia <sup>2</sup>Healthgrouper Summit, Health and social policy research, Skopje, Macedonia

Corresponding author: Vladimir Lazarevik. Address: 50 Divizija 26-3/3, 1000 Skopje, Macedonia. E-mail: vlazarevik@healthgrouper.com; www.healthgrouper.com

#### **ABSTRACT**

Background: Patients' satisfaction with provided healthcare services is one of the factors to measure the overall quality of the delivered health care. Main objective of our study was to determine the common predictors associated with patients 'satisfaction in three Balkan countries. Methods: We conducted web based survey among population in Macedonia, Serbia and Bulgaria using paid campaign over the social network Facebook. A questionnaire consisted of 31 questions was developed following studies on patients' satisfaction conducted elsewhere. Descriptive analysis was performed to assess the predictors associated with patients' satisfaction. In addition we performed content analysis to all open-ended responses. Results and discussion: In total 4118 respondents participated in the survey. Main predictors associated with low users satisfaction with the health care services in three surveyed countries are waiting time to appointments, huge administrative procedures, and attitudes of the medical personnel towards the patients. The analysis showed that there are many similarities in user experiences in three countries, but also there are some differences. Conclusions: The health care systems in these three counties are organized around centralized and monopolistic position of one health insurance fund that serves as main purchaser of health care services. Top three indicators of patients' satisfaction across three countries are trust and overall satisfaction with the attention of the doctors, as well as satisfaction with the outcome of the treatment. Long waiting time and huge administrative procedures are determined as common predictor for lower patients' satisfaction across these Balkan countries. Patients' privacy protection is issue for concern in all three countries.

Key words: Patients satisfaction, predictors, waiting time, administration, privacy protection,

#### 1. BACKGROUND

Patients' satisfaction with provided healthcare services is one of the factors to measure the overall quality of the delivered health care and a vital determinant of quality of care per se. With the growing need to improve the quality of care, it is of paramount importance for the health care providers, insurance companies and health authorities to better define and measure quality of health care (1). Measurement of patient's experiences with their use of health care services is essential component of health services evaluation (2). However, one of the problems with patients' satisfaction studies is lack of clear definition or measurement among researchers what constitutes users' satisfaction (3-8). Patient satisfaction is multifaceted and a very challenging outcome to define. Patient expectations of care and attitudes greatly contribute to satisfaction; other psychosocial factors, including pain and depression are also known to contribute to patient satisfaction scores. In addition, patients' satisfaction is not always measured over the experience only with the doctors, but it may be associated with the overall organization of the health care system. Two main tracks of patients' satisfaction may be distinguished: patients' satisfaction with the health care services received, and users' satisfaction with overall health care system (9). Satisfied patients are more adherent to physician recommendations and more loyal to physicians (10). A satisfied patient is more

likely to develop a longer lasting relationship with their medical provider, leading to improved compliance, continuity of care, and ultimately better health outcomes (11). On the other hand, patients often request discretionary services that are of little or no medical benefit, and physicians frequently accede to these requests, which is associated with higher patient satisfaction (12). Lower patients' satisfaction within the health services increases the probability patients to ask for treatment at the private health care providers or to look for health care services abroad.

The three Balkan countries covered with this survey are post-communist countries; Macedonia and Serbia emerged from former Yugoslavia, while Bulgaria gained its' independence since 1946. With the emerging pluralism and democratic societies in early 1990's, and under influence of western developed countries, the issue of patients' satisfaction slowly, but steadily gained increasing attention with the health authorities and with the general population itself. The expectations and demands of population as potential consumers of the health sector have grown, which led to raised awareness of the health authorities to comply with these expectations; as an example, the Macedonian government has endorsed a Law on protection of patients' rights (13). Despite that, the issue of patients' satisfaction in these three countries has not been extensively researched. Main objective of our study was

Country Population Indicator	Macedonia N=929			Bulgaria N=537			Serbia N=382		
	Appointment	62	7.6	30.4	60.8	12.6	26.6	42.81	6.85
Waiting time	59	3.8	37.2	50.4	12	37.6	36.55	4.83	58.62
Administration	58	7.6	34.4	58.7	19.6	21.7	32.05	11.5	56.45
Hygiene	61	9	30	69.8	11.3	18.9	50.2	14	35.8
Trust	71.5	8.5	20	83.5	3.1	13.4	72.6	8.1	19.3
Attention	70	7	23	77.6	3.7	18.7	65.2	7	27.8
Outcome	66	13	21	73.5	10.1	16.4	63	11	26
	Yes	I don't know	No	Yes	I don't know	No	Yes	I don't know	No
Privacy protected	35.5	45.5	19	47	39.1	13.9	26.2	50.7	23.1
Recommend facility	50	30.5	19.5	50.53	38.3	11.17	35	46	19
Recommend doctor	74.6		25.4	80.26		19.74	76		24

Table 1. Distribution of patients' satisfaction across 10 indicators in three Balkan countries

to determine the common predictors associated with patients' satisfaction in three Balkan countries.

#### 2. METHODS

We conducted cross-country survey using the social network Facebook. In order to reach the respondents, we created paid campaign called "Help to get better" in duration of seven working days, using identical logo, motto and questions in all three countries. The campaign was set to target participants who are older than 18 years of age, in all cities of the selected countries. The questionnaire, consisted of 31 questions, was developed to determine patients' satisfaction with health care services provided at public and private facilities. The questions addressed specific factors of patients' satisfaction grouped into sections [demographic characteristics (age, sex, place of residence, education, employment status, and income), type of provider where service was provided, ten indicators to assess patients' satisfaction]. Questionnaire was translated into three local languages and tested in a pilot study in each of the countries for clarity. All three surveys were conducted in April 2012. Only one response per user's IP address was allowed.

The development and type of questions followed the experience of similar researches conducted elsewhere. Special attention was put to use questions that are relevant for the three neighboring countries. The responses for the patient satisfaction indicators were presented over seven points Likert scale ranging from highly unsatisfied to highly satisfied. All three surveys were conducted in the same period in each of the three selected countries. In the end, data sets were merged into one file.

# 2.1. Indicators of patients' satisfaction

For the purpose of the study we developed a list of ten indicators of perceived patients' satisfaction with the health care services. Each indicator was defined in the wording of each question and translated into local languages. The pilot surveys were conducted in each of the countries to enable final adaptation of the wordings for each of the questions used. The indicators we developed and used in our survey were: *Appointment* – satisfaction with the ability to meet doctors; *Waiting time* – the time patient spent from the moment of setting ap-

pointment till the time of meeting the doctor; Administration — the time patient spent on administrative purposes; Hygiene — perceived perception of the hygiene at the health care facility where the services have been delivered; Confidence/trust in the doctor — patient's confidence in doctor's recommendations and treatment; Attention doctors paid towards their patients; Outcome — self perceived satisfaction with the results of the treatment/services patients received. The last three indicators are related to the Privacy protection in the health care facilities, and for the recommendation of the patients for their doctors and for the facility where the treatment was provided.

### 2.2. Eligibility criteria

In total 4118 respondents participated in the survey from the three countries. For the purpose of analysis and to get the most trustful answers, we filtered responses to those respondents who claimed to use health care services personally and for the period over the last three months before they opt to participate in the survey. All other responses were disregarded from further analysis. In total our study results are based on analysis of 1848 participants from the three selected countries. All responses that were recorded over the seven point Likert scale were merged into three groups (satisfied, neutral and unsatisfied).

#### 3. RESULTS

We analyzed data for 1848 respondents from the three selected countries. Great majority of the respondents in each of the surveyed countries were females (80% in Macedonia, 94.6% in Bulgaria, and 91% in Serbia), and average age of the respondents was 34, 38, and 39 years, respectively. This sex distribution may bias our results due to the over representation of women in our sample. We analyzed results to each country across ten indicators of patients' satisfaction: appointment, waiting time, administration, hygiene, confidence/trust in the doctor, attention doctors towards their patients, outcome, privacy protection, and perceived patients recommendations for the facility and doctor. Table 1 shows the percentage distribution of perceived patients' satisfaction across 10 indicators.

Looking over the percentage distribution of expressed patients' satisfaction across 10 indicators the overall impres-

sion is that patients across these three Balkan countries tend to have more positive experiences with care provided by the doctors in health care facilities. Their responses to all indicators suggest that majority of participants in our survey selected more positive options with regards to their satisfaction with the health care services. Top three indicators of patients' satisfaction across three countries are trust and attention of the doctors, and self-perceived outcome of the treatment. Thus the indicator that was evaluated most positively among patients across three countries is trust/confidence in their doctors. In Bulgaria over 83.5% of the respondents stated they have high confidence in their doctors. The results are slightly lower, but again very positive for Macedonia (71.5%) and Serbia (72.6%). Next to patients' trust in their doctors' judgment, is attention doctors have for their patients. Again, in Bulgaria 77.6% of patients stated they are satisfied with the attention doctors have devoted for treating their medical condition. In Macedonia 70%, while in Serbia 65.2% are satisfied with the attention they received from the doctors. The last on the list of top ranked patients' satisfaction indicators is the outcome of the treatment/service received. In Bulgaria 73.5% of the patients expressed their satisfaction with the outcome, while in Macedonia and Serbia, 66% and 63% of the participants in the survey expressed their satisfaction, respectively. Similarly, there is consistency across the three Balkan countries in the responses over the indicators that were ranked lowest by the respondents in our survey. Thus, the highest percentage of negative responses in the three countries is for the waiting time. In Serbia 58.6% of the respondents, great majority of who are women, expressed high dissatisfaction with the waiting time to get to doctors. In Bulgaria and Macedonia, 37.6% and 37.3% of the respondents also expresses dissatisfaction with the waiting time, respectively. Complex and cumbersome administrative procedures are also predictor of lower patients' satisfaction in all three countries. Again, in Serbia over 56% of the respondents expressed their dissatisfaction with the administrative procedures. The results for Macedonia and Bulgaria are rather similar, where 34% and 32% of the respondents in these two countries expressed their dissatisfaction with the administration. Finally, hygiene as indicators is ranked lowest in Serbia, followed by respondents from Macedonia, while this is not the case for Bulgaria, where almost 70% of the respondents in the "Help to get better" survey expressed their satisfaction with the hygiene in the health care facilities.

The results for the last three indicators also show similarities across three countries. Privacy protection at the level of health care provider is rather unknown issue for patients in the three countries. Majority of the respondents in each of the countries when asked if their privacy was protected at the health care facilities, have chosen option "I don't know". More specifically, over 50% in Serbia, 45.5% in Macedonia, and 39% in Bulgaria have chosen I don't know options as their preferable response. Finally, across all three countries respondents were more likely to recommend doctors, compared to health care facilities where the treatment was provided.

#### 3.1. Content analysis

Beside the possibility for the patients to range their satisfaction with the health care services over the list of ten indicators, last question in the survey was left open asking respon-

dents hypothetical question what would they like to change or improve in their health systems? In each of the surveyed countries great majority of the respondents chose to provide their comments, views and suggestions for improvements that need to be undertaken within their health care systems. We listed all comments and grouped most frequently occurring in to relevant subgroups for each country. For Macedonia 436 comments divided into three major groups of problems expressed by the respondents in the survey were defined: the need to change the attitude of health care personnel (nurses), to improve waiting time and easy administration, and to improve poor hygiene condition in the health care facilities. For Bulgaria 235 participants in our survey expressed their written comments. The major groups of problems, most frequently repeated were: corruption, long waiting times and administrative procedures, need for referrals, and the need to improve the attitude of the medical personnel. For Serbia respondents left 222 written comments and major group of problems were: attitude of the medical personnel, long waiting time for appointments and administration. Overall, in all three countries the problems expressed by the respondents/patients in the survey related to three major issues: the need to shorten waiting times and improve the system of making appointments for doctors' visit, the need to relax the complex administrative procedures and finally the need to improve the attitude of the medical personnel for the patients.

# 4. DISCUSSION

Women are much higher users of health care services, and thus more likely to respond to patients satisfaction surveys (14). Also it is important to note that women are more socially active, and much more willing to participate in surveys. Patients, once in need of health care want to receive their appointment and treatment as soon as possible. Therefore, any delays in this regard reflect over patients' dissatisfaction with the services and it is expected that this indicator may be ranked lower compared to others. However, our cross-country analyses suggest extremely high dissatisfaction with the waiting time in Serbia. This finding should raise concerns for Serbian policy makers. Protection of patients' privacy seems to be serious issues in the three countries. Our findings may suggest that patients in these three countries are not aware of their rights and for the protection of the privacy over the provision of health care services (15). Since these issues have not been vastly examined, there is a window of opportunity to move further research studies in this direction. Patients have high confidence in their doctors in all three countries, and they tend to recommend their doctors much more compared to the institutions where the services were provided. This finding corresponds to the high confidence and overall satisfaction expressed by respondents in all three countries for their doctors and it also corresponds with trust patients show for their doctors elsewhere (16). However, the difference in our study is that patients' trust in their doctors is not automatically transferred into trust for the health institution where the service was provided, which opens the need for more detailed analysis of this issue.

The content analysis shows again there are striking similarities expressed by patients in all three countries. Patients complain on long waiting times and administration, and attitudes over doctor/patient relationship and more likely attitude of the middle medical personnel towards the patients. These groups of problems combined with the analysis of the indicators may suggest that major concerns of the patients for the health care systems refers for the organization of the health system delivery, and not directly for the health care services they have received. Once patients get to the doctor, majority of them in all three countries are satisfied with the service provided and pleased with the outcome of the treatment.

#### 5. FINAL REMARKS

Our study has certain limitations. First and foremost, the study was conducted over Facebook where the possibility to respond was left open for all subscribers to this social network who have reply to the advert and clicked on the link. We assumed that all participants who decided to respond in fact were actual users of health care services. Second, the overall representation of the population is predominated by females, while males are underrepresented across all three countries. Thus our results may be biased towards the experiences of female patients.

Our survey questions refer to the health care services experiences that patients expressed with health care facilities, and not for specific condition or disease. The patient satisfaction survey "Help to get better" conducted in three Balkan countries using the social network Facebook provided the possibility to compare patients' experiences with the health care services they have received over the last three months in these countries. The health care systems in these three counties are organized around centralized and monopolistic position of one health insurance fund that serves as main purchaser of health care services. This organization, although different in some aspects, shows many similarities expressed over patients/users experiences. Top three indicators of patients' satisfaction across three countries are trust and overall satisfaction with the attention of the doctors, as well as satisfaction with the outcome of the treatment. The indicator that was evaluated most positively among users across three countries is trust/confidence in their doctors. This finding is not unexpected, but it is encouraging both for the doctors working in these countries, as well as for the health policy makers and planners. Patients have faith in their doctors' judgment and they are also satisfied with the outcome of the treatment they have received. They are much more dissatisfied with the overall organization of the health care facilities and overall systems that results in long waiting times and huge administrative procedures. In Bulgaria this is additionally supported by strongly expressed concerns for corruption among respondents. Also, important finding in our research across all three countries is the need to explore new ways to stimulate change in health care systems, and to change the attitude and relations with the patients towards more client/consumer oriented health care services.

#### CONFLICT OF INTEREST: NONE DECLARED.

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