CORRELATION ASPECTS OF STRATEGIC ORIENTATIONS OF INTERNAL MARKETING OF PRIMARY HEALTH CARE INSTITUTIONS

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Abstract: The business efficiency of a service company/institutions is based on recognition and appreciation of user requirements and expectations, as well as reviewing of the user perception of the of offered and provided services at the level of primary health care.

Customer expectations in mentioned field regard not only to direct users but also it affects the large number of individuals who are in family and/or emotional relationship with the users. Services from observed domain determine the quality of life of almost all member of the community.

Verification of user perception of service quality at the level of primary health care, gives opportunity for harmonization of the working code with user requests and expectations. Examining the degree and direction of quantitative agreement of variations of observed phenomena enables the correction of procedures and additional education of employees, which achieves the adaptation of the primary health care system with user expectations and requirements.

A research approach based on the empirical examination of respondents attitudes, aims to formulate adequate internal marketing strategies on the task of aligning system solutions based on correlation analysis.

Modeled menagements solutions have the potential of scientific answer to real problem and to facilitate primary care system providers to reduce the gap between users expectations and the quality of service delivered. The above is effectively achieved by understanding and appreciating the real factors regarding a coordinated approach to users, resulting from a correlative analysis of user observations and expectations, and comparisons of user satisfaction with the form of health care.

Keywords: customer expectations, correlation analysis, internal marketing strategies, primary care system.

INTRODUCTION

All management solutions, whether they are potential external or internal challenges, are aimed at adapting the business system to them, by defining the most adequate strategy of external, internal and interactive marketing, with an emphasis on service activities.

As primary healthcare facilities are classified as high-level customer service business systems, the challenge for the management structure is even greater, taking into account the external impacts and changes caused by the Covid 19 among users.

The best solution for improving the service quality and harmonization of the working code with the requirements and expectations of the end user in the field of primary health care is provided by the formulation of an adequate internal marketing strategy with concrete actions aimed at systemic solutions.

The research project is based on recognizing and considering user requests and expectations, as well as reviewing the user perception of the offered and provided services at the primary health care level, and the research approach is based on empirical examination of respondents' attitudes to reduce the gap between user expectations and service quality.

The reference values for comparing the results of the research refer to the research conducted a year before the pandemic.

Previous research (Landika, Sredojević, & Stanišljević, Istraživanje i analiza, 2019) was applied to institutions (public and private) that perform primary health care activities in order to critically use adequate empirical knowledge of user perception of health care systems and processes to promote, improve, protect and revitalize the business of the systems that were the subject of research, and the focus of the researchers was to cover the market segment of the territorial units of the former SFRY, including Bosnia and Herzegovina and the Republic of Serbia. The research hypothesis was defined in the form that responsibility for business success directly correlates with interest of customer satisfaction level.

Considering the primary requirement within health services and health care in general to provide the best possible care to each user, it makes examining the level of consumer satisfaction with the provided healthcare service an acceptable for evaluating the health service quality.

The survey questionnaire, as an instrument of the conducted research project, was applied to a randomly selected sample of population living in previously defined territorial units, and was designed to "eludicate the key factors of user satisfaction/dissatisfaction with primary health care services, and especially differences in the context of institutional framework for service provision". Only the adult population was surveyed, "assuming that user impressions do not refer exclusively to personal but also to the experiences of people relevant to the respondents or when the respondents have the role of stakeholders." The results of this research in the context of verification were tested at a significance level of 99%, and it is justified to use them with a high degree of confidence in our research project.

Estimation of the total population in the territory covered by the survey is 3,290,791 for 2020 (Wikipedia, 2021). The employment rate in the territory of Bosnia and Herzegovina is 25.29% (Wikipedija, 2021), the unemployment rate is 12.11% (Wikipedija, 2021), the pension beneficiaries rate is 12.66% (PIO/MIO, 2020), (Pension and Disability Insurance Fund), the students rate is 2.46% (KLIX, 2021), while the rest of the population (47.48%) make children under 18, and, possibly, people outside the health insurance system.

With the Covid 19 as an extremely strong external challenge which had a special impact on the health sector, from the research team standpoint it was justified to repeat all the above research steps in completely new and changed external conditions.

In order to reach even more concrete and precise results, the research team compared the respondent attitudes before and during the Covid 19; the research results were compared with the results of the previously conducted research, with the aim to identify a possible difference in the perception of the primary health care service quality.

All of the above provides a basis for the procedure correction, employee additional education and service delivery improvement, through the formulation of an adequate internal marketing strategy with the tasks of harmonizing system solutions based on correlation and comparative analysis.

LITERATURE REVIEW

It is important to evaluate the quality of each process, including the primary health care services, by applying adequate indicators of the healthcare institutions work quality. (Health care quality, Article 203 of the Health Care Law of the Republic of Serbia, 2020) (Kvalitet zdravstvene zaštite, član 203. Zakon o zdravstvenoj zaštiti Republike Srbije, 2020)

The quality of health care services includes the interaction of all participants in the process - healthcare workers, associates, management, patients, and service users as well.

Communication and interpersonal skills of healthcare workers are a key factor in the overall health care quality, determine the effectiveness of diagnostic and therapeutic treatment. . (VanZanten, Boulet, McKinley, DeChamping, & Jobe, 2007)

Patients expect trust, understanding, privacy and quality communication with the doctor. (Duffy, Whelan, Kelly, & Buffone, 2004)

The quality of health care services is expressed by the workers professional qualification, which ensures that they perform sensitive activity at the highest level, and by the level of education. Although frequent, patient assessments regarding the health care workers professionalism are not objective but subjective, and, as such, they are important in assessing the health care quality. "Quality medical care is the level of care at which healthcare services for individual patients and population increase the expectancy of desired health outcomes and which is in line with existing professional knowledge." (Tipurić, 2012)

Previous research shows correlations between the level of service quality and user expectations (Landika, Sredojević, & Stanišljević, Istraživanje i analiza, 2019) from which it is concluded that "Measures to improve certain aspects of health care service contribute equally to all user profiles, which means that approach to the formulation of marketing strategy is focused on the education of staff engaged in the primary health care service by contributing

to the level of user perception, regardless of user profile ... ", which contributes to attitudes about importance of the application of internal marketing as an indispensable link in the realization of optimal business results.

The health care quality belongs to the type of terms whose meaning seems close, understandable and clear, associating with a number of desirable health care features, which can include adequacy, efficiency, comprehensiveness, fairness, accessibility, satisfaction. (Šofranac & Šofranac, 2011) To date, there has been no universally accepted definition of health care quality among the scientific and professional public.

STOCHASTIC APPROACH TO ANALYSIS OF THE CUSTOMER SATISFACTION/DISSATISFACTION LEVEL WITH PRIMARY HEALTH CARE SERVICES

Empirical base of customer satisfaction metrics

For the realization of the research project and configuration of a new empirical database which would supplement the information obtained by descriptive statistical analysis in the context of quantitative valorization of consumer satisfaction/dissatisfaction level with primary health care service which would provide adequate comparative analysis of existing data, a questionnaire, as a research instrument, (https://docs.google.com/forms/d/1ugIdV3I 8vClqCv4UYBxd9KIhXw7dZpsRW3s-WEC4uB4/edit) was used from a previously conducted research (Landika, Sredojević, & Stanišljević, Istraživanje i analiza, 2019).

The questionnaire contains 13 (thirteen questions), of which three questions are related to the general data of the respondents, and relate to the age, place of residence and education of the respondents. This is followed by questions related to the frequency (4-point Likert scale of frequency with offered answers from very frequently to rarely) and the form (public, private sector and combined) of using the primary health care service.

The questionnaire refers to the consumer satisfaction level with the overall service and its aspects in terms of availability, timeliness, professionalism, price and necessity, as well as the medicines price and availability in the primary health care. The answers to the questions are formulated through 5-point Likert scale of satisfaction from 5 (very satisfied) to 1 (very dissatisfied).

The conduct of the questionnaire is in line with the ethical principles and human rights in the research.

Methodological approach of expressing and analyzing consumer satisfaction/ dissatisfaction

IBM SPSS Statistics 20 software package was used for data processing and analysis; the methodological approach to analysis and processing was adequately adapted to the data type and analysis methods.

Observing the behavioral regularities, the degree and direction of the variable relationship observed in a particular decision-making problem requires an analytical approach that adapts to variables that can be considered as ranked variables. Such variables are often encountered and explain a number of research issues in everyday life. The purpose and task of correlation analysis refer to the degree and direction of quantitative connection of the variations of the analyzed phenomena, and the selection of variables that have a significant or negligible impact. Degree and direction of the phenomena and processes connection indicate an adaptive reaction in terms of individual aspects, and according to the degree and direction of the connection.

The methodological approach to comparing the respondent attitudes regarding the characteristics of a certain process or the service is realized by testing the differences within individual groups. It is justified to compare the satisfaction level with the service and its individual aspects, taking into account the form of its implementation (public or private institution in the country or abroad).

Used methodology includes the intercorrelation matrix and the Chi - square test, whose results enable the formation of the basis for decision - making in further action.

STATISTICAL SYRVEY RESULTS AND ANALYSIS OF THE CONSUMER SATISFACTION/DISSATISFACTION Level With the Primary Health Care Service

Structure of empirical data collection

The survey included respondents from the territory of the Republic of Serbia and Bosnia and Herzegovina, as in the previous research project with which the results were compared. Respondents answers and attitudes are the

basis for recognizing the levels and sources of satisfaction/dissatisfaction with primary health care services, in order to create and redefine internal marketing strategies and tactics of primary health care institutions.

The conducted research project included a sample of 225 respondents, credibly completed questionnaires in the territory of the Republic of Serbia and Bosnia and Herzegovina. The survey was conducted through e-communication tools (e-mail) by which the research team rationalized both the costs and time of research activities. Respondents were included in the research by random selection, the size and structure of the respondents was harmonized with the research needs and conclusions.

The sample specifically consists of respondents aged 20-78 years, with an average age of 44 years, with a variance of 170.58, or a standard deviation of 13.06 years. The age structure of the respondents indicates the fact that the sample included all age groups relevant to examine phenomena and processes relevant to a particular research problem. Age groups that include the population under 20 and over 60 are included in the analyzed processes, mostly passively, in the sense that they are cared for by parents, children or spouses. Younger population is under parental care, although this population rarely has health problems, except in exceptional cases. In the older population, if a more serious health problem occurs, the care is taken by spouses or children, who belong to middle age group.

The structure of respondents by place of residence includes 40.2% of respondents living in the city center, 31.3% in the wider urban area, 15.6% in suburban areas and 13.3% in rural areas. Respondents are distributed according to the real situation, most population belongs to urban areas. It is true that the majority of the working age population inhabits urban areas, but they also overestimate the place of residence location, because of the picture (illusion) of social status.

The educational structure of the respondents corresponds to the real picture, with a smaller share of the population with a lower level of education (primary school only); this population uses less modern digital technologies, and often has no social status issues in terms of inclusion in the healthcare system. Respondent educational level includes 1.8% with primary education, 27.1% with secondary education, 6.2% with post-secondary education and 40.9% with higher education, while 24% of respondents with even higher educational degree (master, doctor of science or specialist of a certain profession).

The structure of respondents according to the frequency of consuming primary health care services shows that the most significant part of the surveyed population occasionally consume health services 45.8%, while often (25.3%) or very often (12.9%), and rarely or never 16% of them. The majority of respondents, 47.1%, consume health care services in private and public institutions, 38.2% in public and 14.2% in private institutions (in the country or abroad). It is reasonable to assume:

Service aspect Satisfaction level (% respondents)	Overall satis- faction level	Availability	Timeliness	Professiona- lism	Price	Necessity	Medicines availability	Medicines price
5 (Very Satisfied)	8,4	9,3	9,3	13,8	12,0	8,0	10,0	4,4
4 (Satisfied)	46,7	41,3	38,2	49,3	31,6	32,4	38,4	19,1
3 (Enough Satisfied)	37,3	35,6	36,9	29,4	36,9	40,0	32,0	30,7
2 (Dissatisfied)	5,3	10,2	9,4	5,3	13,3	15,1	14,5	27,6
1 (Very Dissatisfied)	2,3	3,6	6,2	2,2	6,2	4,5	5,1	18,2

 Table 1. Structure of respondents according to the perception of service quality at the level of primary health care (Landika, Sredojević, & Mihajlović, Istraživanje i analiza, 2021)

Respondent response is of acceptable scope and characteristics so that it is suitable for formulating conclusions in relation to the analyzed phenomena. In order to provide management structures with complete information that would maximize the agreement level between the level of service quality and the perception of customer expectations through quality strategic commitments and adequate marketing instruments, the examined phenomena were analyzed both partially and comprehensively.

Intercorrelation matrix

Based on the collected empirical data, intercorrelation matrix was designed to provide credible information to management structures in terms of the examined phenomena direction and intensity as well as the statistical testing results of its significance.

	v1	v2	v3	v4	v5	v6	v7	v8	v9	v10	v11	v12	v13
v1	1.000	278**	038	041	.095	.117	.160*	.108	.184**	.103	.089	.159*	026
v2		1.000	048	.139*	047	.003	.069	004	073	102	162*	064	.025
v3			1.000	.040	.147*	.166*	.182**	.083	.122	.200**	.109	.127	036
v4				1.000	.132*	.134*	.149*	.092	.177**	.121	026	.014	.004
v5					1.000	.786**	.706**	.675**	.510**	.530**	.406**	.359**	071
v6						1.000	.816**	.614**	.508**	.582**	.357**	.342**	017
v7							1.000	.582**	.471**	.518**	.302**	.312**	076
v8								1.000	.434**	.414**	.309**	.303**	047
v9									1.000	.593**	.397**	.474**	.015
v10										1.000	.377**	.467**	020
v11											1.000	.615**	032
v12												1.000	.004
v13													1.000

 Table 2. Intercorrelation matrix - interdependence of factors that we use to assess the quality and consumer satisfaction with primary health care service in RS / BiH. (Landika, Sredojević, & Mihajlović, Istraživanje i analiza, 2021)

The test value represents the sample realization of the rank correlation coefficient r_s , and the table value is read for the values of sampling distribution of the rank correlation coefficient for a given risk of error γ and the sample size n.

In the previous table, the fields with correlation coefficients above 0.5 are shaded, which indicates statistically significant correlation between the variables to which this dependence refers. The empirical data analysis results indicate the subjective sensitivity to certain elements of the primary health care service. Correction of the observed factors in the analyzed system significantly contributes to the level of customer satisfaction.

Statistical expression and measurement of the health care impact on the achieved level of consumer satisfaction/dissatisfaction

It is justified to check how the realized level of customer satisfaction is affected by the form of primary health care, which is effectively checked by Chi - square test, which we conduct taking into account the testing procedure, which relates to: (Landika, Metodi statističke analize - primjena u oblasti zdravstvenih, sportskih i inženjerskih nauka, 2015) (Landika, Methods of statistical analysis - application in health, sports and Engineering Sciences, 2015)

- Hypotheses formulation, where in this case are: H0: the level of satisfaction with the service is the same for all institutions (public, private, domestic and foreign) and H1: the level of satisfaction with the service is not the same for all institutions (public, private, domestic and foreign);
- Determining the theoretical value of Chi square test, which in this case is: = 21,03;
- Determining empirical test values of Chi square test, which is contained in the following table and
- Comparison of tabular and test values, and making a conclusion about the test outcome.

Service provider	Service aspect	Overall sa- tisfaction level	Availability	Timeliness	Professio- nalism	Cijena	Necessity	Medicines availability	Medicines price
Public institution		8.4	9.3	9.3	3.8	2.0	8.0	9.2	4.1
Private institution in the country		5.3	10.2	9.3	9.3	11.6	2.4	8.4	9.1
Private institution at	proad	2.2	3.6	6.9	9.4	6.9	4.4	2.0	0.7
Combined		12.4	5.6	6.2	5.3	3.3	5.1	4.5	7.6
	χ²	28.3	28.7	31.7	27.8	23.8	19.9	24.1	21.5
Total:	Degrees of freedom number – df	12	12	12	12	12	12	12	12
	Significance level – p	0.03	0.03	0.01	0.04	0.04	0.06	0.04	0.05

 Table 3. Chi - test square results- determining differences in the level of satisfaction with the service in relation to the service provider (Landika, Sredojević, & Mihajlović, Istraživanje i analiza, 2021)

The previous table shows that there are differences in terms of the form of the institution that provides the primary health care service with a high degree of reliability, 99% in the timeliness of the service provided, to at least 94% in the necessity of the primary health care service.

DISCUSSION OF FINDINGS

Based on the empirical data, descriptive and inferential statistical analysis was performed, which gave results that were presented in tables and graphs, and in the form of values and statistical significance of correlation coefficients.

The analysis results indicate that *the form of health care* (public or private) correlates with a large number of variables, which refers to the overall level of satisfaction with the service, its availability, timeliness, staff professionalism, and the level of satisfaction with the price. In the research conducted before the pandemic, the analysis showed that there were no differences in the quality evaluation of the realized service in relation to the form of health care (private or public) regarding any aspect of service.

Research results show that the respondent age does not affect the perception of the level of health care service quality, which is not the case in the research conducted in 2019 (Landika, Sredojević, & Stanišljević, Istraživanje i analiza, 2019)(Landika, Sredojević, & Stanišljević, Research and Analysis, 2019) where the results showed a significant correlation of the variable *respondent age* with "the largest number of variables, in terms of frequency, form and perception of staff professionalism in providing primary healthcare services". *The level of overall service satisfaction* significantly correlates with the perception of service availability, timeliness and staff professionalism which correlates with service price.

In addition, it is important to emphasize that the respondents' attitudes regarding the achieved level of satisfaction with the primary healthcare service are at least average in terms of overall perception and perception of certain service aspects expressed in cumulative percentage can be shown in the following table.

 Table 4. Empirical share of respondents with an average level of satisfaction or above it (fully, mostly or partially satisfied / with the service) in certain aspects of the service (Landika, Sredojević, & Mihajlović, Istraživanje i analiza, 2021)(Landika, Sredojević, & Mihajlović, Research and Analysis, 2021)

Aspect of service	Overall level	Service availability	Service timeliness	Staff profe- ssionalism	Service price	Necessity	Medicines availability	Medicines price
Share of respon- dents (%)	92.4	86.2	84.4	92.5	80.5	80.4	80.4	54.5

The only aspect that requires significant attention refers to the price of medicines used by the respondents, which is significantly higher than in the surrounding countries, which requires significant attention of the wider social system, and not employees engaged in the primary health care system. Certainly the price of medicines significantly refers to the primary health care issue.

Advanced analysis gives importance to the lack of causality within a certain number of observed variables, and it can be seen that *respondents education* and *place of residence* do not affect the perception of health care quality levels, whether observed comprehensively or segmented. Comparing the above with the previous research results, a coincidence of the analyzed results can be noticed. Research results in the context of verification have been tested at a significance level of 99%, and can be used with a high degree of confidence.

Using the Chi - square (χ^2) statistical test, it was found that the perception of the service quality at the level of primary health care depends on the form of health care, and differs significantly in the public and private sectors, as well as in the country and abroad.

CONCLUSION

Comparing the research results from the collected empirical data and previous research results in the context of subjective perception of sources and causes of satisfaction/dissatisfaction with services in primary care in different external circumstances, in order to create and redefine internal marketing strategies and tactics of primary health care, we came to the following conclusions; it follows from the above that the emerging epidemiological challenges have affected consumers' perception of the provided healthcare service and the level of their satisfaction, depending on the form of health care (public or private). Comparative analysis shows the connection between changed consumers' perception of the level of satisfaction with health services and the internal environment of the service provider caused by external circumstances, which can be objectively related to more patients, staff workload, staff concentration drop, lack of time for adequate empathy, lack of accommodation resources, fear, seriousness of the situation, etc. All management decisions based on derived evidence of existence/nonexistence, and the intensity and direction of quantitative variations agreement of the observed phenomena indicate a high degree of reliability.

Verification of user perception of service quality at the level of primary health care enables the harmonization of the working code with the user requests and expectations. Assessing the degree and direction of quantitative variations agreement of the observed phenomena enables the correction of procedures and additional education of employees, which achieves the adaptation of the primary health care system with user expectations and requirements. Quality combinatorics and synchronization of the mentioned elements (training, education, motivation and information) lead to motivated, competent and loyal staff oriented to the external user, which ultimately fits into the aspiration to achieve a given level of service quality that meets the consumer population expectations. Dimensioning of identified variables (training, education, motivation and information) as an integral part of the of internal marketing mix instruments, in practice, is conditioned by the specifics of each business system, emphasizing their management and organizational structure on one side and the specifics of external circumstances that management structure cannot influence on other side. The specificity of time and external circumstances in which a particular service is consumed, affects the perception of customer expectations, which requires sensibility and prompt response of management in the form of management decisions aimed at the internal market over which it has absolute control. The adaptive character of the conducted analysis gives the possibility of its implementation on numerous business processes.

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