



Patients' trust in the health-care system and physiotherapists

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ABSTRACT

Introduction: The assessment of the health-care system by its beneficiaries is based on evaluation of the public perception in regards to the performance of healthcare workers, the functioning of the health system, the effectiveness of health policy measures, and a number of other components. The aim of this study was to determine patients' trust in the work of physiotherapists and the health-care system; determine the quality of communication between the patient and the physiotherapist; and determine the quality of cooperation between healthcare workers in the provision of health services.

Methods: The study is descriptive, conducted in five cities: Banja Luka, Bihać, Herceg Novi, Nikšić, and Podujevo. The confidence in health-care questionnaire developed by Calnan and Sanford (2004) was used as a research instrument, containing six areas of research: Attitude toward the patient, Health policy and patient care, Professionalism and expertise, Quality of health care, Communication and information, and Quality of cooperation.

Results: The mean age of the subjects was 41 years, 24 females and 26 males. Subjects expressed the greatest satisfaction on subscales I - Attitude toward the patient (27.44 ± 3.59 out of 30) and IV - Quality of health care (36.60 ± 4.19 out of 40), which represents 91.5% of the possible maximum. This is followed by subscale V - Communication and information (20.8 ± 3.17 out of 25) corresponding to 83.2% of the possible maximum, followed by subscale III - Professionalism and expertise (15.68 ± 3.29 out of 20) which represents 78.4% of the possible maximum. Subjects showed the least satisfaction on subscales II - Health policy and patient care (16.94 ± 5.56 out of 25), which represents 67.8% of the possible maximum, and subscales VI - Quality of cooperation (9.94 ± 0.42 out of 15) which corresponds to 66.3% of the possible maximum.

Conclusions: The research showed a high degree of satisfaction of subjects in various fields, which indicates a high degree of confidence in the work of physiotherapists and the health-care system. Research on a larger sample is needed for creation and implementation of the guidelines in the strategic documents of the countries in the region and for improvement of health policies and patient care.

Keywords: Patient trust; physiotherapist work; health-care system

INTRODUCTION

Physical therapy involves services for individuals and the general populations, which aim to develop, maintain and restore maximum mobility, and functional ability throughout life (1). A physiotherapist is a health professional who manages the process of planning, organizing, leading, and overseeing physical therapy. The procedure itself is a complex process that begins with the assessment of postural relationships, cardiovascular, nervous, and muscular systems. It continues with physiotherapy diagnosis and definition of the desired goals, followed by development of

the plan and program of intervention in regard to health improvement, prevention, treatment, or rehabilitation (2). A physiotherapist is trained to apply the knowledge and skills in terms of therapeutic exercises, therapeutic agents, manual and other physical techniques, and diagnostic procedures, as well as evaluation before and after the application of therapy (3).

The assessment of the health system by its users is based on evaluation of the public perception of the performance of health workers, the functioning of the health system, the effectiveness of health policy measures, and a number of other components (4).

The trust of health service beneficiaries and assessment of the functioning of the system is based primarily on the personal experiences of patients in contact with health professionals (5). Numerous studies indicate that trust is a

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fundamentally important aspect of the treatment relationship and an important determinant in different health-care outcomes. The level of trust is a significant variable in the models of examining the effectiveness of prevention, the scope of contracted health insurance schemes, the level of satisfaction with health services, and the success of health policy measures (6).

In their work, Hall *et al.* (2001) gave an extensive overview of the concept and examination of trust in health-care institutions, pointing out that it is necessary to distinguish trust in a health-care professional or individual institution personally from general trust in health-care professionals or trust in the system (7).

The trust of health-care beneficiaries in a health-care professional, organization, or system has several dimensions. Confidence in expertise and competence is most commonly examined, ensuring the avoidance of error in diagnosis and treatment, optimization of choice of recommended and prescribed therapy for the patient, and leading to the most effective treatment results. The most important component is trust in health-care staff and services that act solely in the best interest of the patient (7).

Research on the perception of clients and the input of physiotherapists working in healthcare has shown that physiotherapists make an important contribution which lays the foundation for the development of physiotherapeutic practice in health services and can help clients achieve better health results (8).

The systematic review of Barrett and Terry (2018) provided a detailed perspective on current physiotherapy practice and supported it with a number of components: Patient and health-care experience, physiotherapy perception and patient, and healthcare worker exposure. It was observed that physiotherapists have professional clinical skills and an educational role, which has a significant impact on the development of new methods of care and the clinical role of physiotherapeutic practice. However, a lack of integration is noticeable, which is crucial for the development of physiotherapy services in the future (9).

Establishing the quality of health services, information about their improvement, awareness of fulfilled and unfulfilled patient expectations should enable staff to understand the patient's perspective and improve communication (10). Thus, the trust and expectation of the service of the institution and professionals to be in the interest of patients will contribute to the efficiency of medical care (11).

The aim of this study was to determine patients' trust in the work of physiotherapists and the health-care system; determine the quality of communication between the patient and the physiotherapist; and determine the quality of cooperation among healthcare workers in the provision of health services.

METHODS

The total number of subjects included in the study was 50, comprised of 21 males and 19 females. The research was carried out during the period from October 18, 2020, to November 20, 2020.

The study included subjects who received physiotherapy, selected by the method of random selection of both sexes, aged over 18 years, who were diagnosed with an injury or disease and prescribed physiotherapy in the system of healthcare.

The study did not include subjects who did not receive physiotherapy, who were under 18 years of age, as well as those subjects whose injury or illness did not involve physiotherapeutic treatment in the health-care system.

The research is descriptive and was conducted in five cities: The Department of Physical Medicine and Rehabilitation "Dr Miroslav Zotović" in Banja Luka, Bosnia and Herzegovina, the Cantonal Hospital "Dr. Irfan Ljubijankić" in Bihać, Bosnia and Herzegovina, Public Health Center in Herceg Novi, Montenegro, Non-Governmental Organization "Ljepota zdravlja" in Nikšić, Montenegro, and private clinic for physiotherapy "Rehabilitimi" in Podujevo, Kosovo. It included a total of 50 subjects (ten in each research site). The study was approved by the ethics committees of the above institutions.

The questionnaire was prepared according to the Guide for assessment of patients' trust in the work of doctors and the health-care system and it contains six areas of research:

1. Attitude toward the patient
2. Health policy and patient care
3. Professionalism and expertise
4. Quality of health service
5. Communication and information
6. Quality of cooperation (12).

The examiners in all five institutions where the research was conducted individually provided instructions to all subjects regarding the filling of the questionnaire. Before filling questionnaire respondents signed a formal consent to participate in the study.

The research was conducted by analyzing the data obtained from the questionnaire, with optimal respect for the provisions of the Law governing the protection of personal data, as well as the confidentiality of the obtained data. The collection of relevant data was used for the purpose of scientific research.

The questionnaire used in this study contained questions/statements and opinions of subjects regarding the trust in the work of physiotherapists and the health-care system. Instructions for completing the questionnaire were carefully read to each subject. All subjects gave answers that roughly described the situation, opinion, or attitude in relation to the question. The subjects were not obliged to sign the questionnaire and all of them provided permission for obtained data to be used for the purpose of scientific research.

The results of the research are presented in tables including the number of cases, percentage, arithmetic mean with standard deviation, and the range. Testing the influence of individual socio-demographic variables on scores of individual scales was performed using Spearman's rank correlation test, with a significance level of 95%.

The analysis was performed using a statistical package for sociological research, IBM Statistics SPSS v23.0.

RESULTS

The subjects had a mean age of 41 years, 24 were females while 26 were males. The largest number of subjects was

aged 31-40 years or 28%, followed by 20-30 or 22%, 51-60 or 20%, 41-50 or 16%, 61-70 or 8%, and 71-80 or 6% (Table 1).

The largest number of subjects finished high school with a diploma or 48%, whereas those who finished 4-year Bachelor study were 36%, elementary school 4%, 3-year Bachelor study 6%, and professional high school 6%.

A large number of subjects were married 40%, single 24%, widowed 22%, divorced 6%, separated 4%, and with a partner (unmarried) 4%.

Out of total, 76% of subjects were employed and 24% were unemployed, while 66% of subjects had previous contact with a physiotherapist.

On subscale I – Attitude toward the patient, the subjects responded with a high score on all questions, that is, physiotherapists and patients always or almost always respect each other. They also rated the answer to question 1 that the patient is always taken seriously with the highest mean score of 4.76 ± 0.56 and the answer to question 6 that patients respect physiotherapists with the lowest mean score of 4.02 ± 0.94 . The mean cumulative score on the scale was 27.44 ± 3.59 of a possible maximum of 30 (Table 2).

On subscale II - Health policy and patient care, subjects did not answer any questions with the highest score. Question 1 was answered with the lowest score, which refers to the impact of shortening the waiting list on physiotherapeutic care and patient care, 2.64 ± 1.53 respectively. The question on the possibility of patients to pay for physical therapy if they are forced to do so was answered with the highest score of 3.76 ± 1.17 . The mean cumulative score on the scale was 16.94 ± 5.56 of a possible maximum of 25 (Table 3).

On subscale III - Professionalism and expertise of physiotherapists, the subjects did not answer any of the questions with a score of 5. Question 4 about the physiotherapist's awareness of all sorts of patient's conditions was answered with the highest mean score of 4.20 ± 1.05 . The mean cumulative score on the scale was 15.68 ± 3.29 of a possible maximum of 20 (Table 4).

On subscale IV - Quality of health service was rated with a high mean score of 36.60 ± 4.19 out of a possible maximum of 40. The lowest score of 4.48 ± 0.65 corresponds with the answer to the question of whether physiotherapists always make the correct diagnosis (Table 5).

On subscale V - Communication and information, the highest mean score of 4.74 ± 0.59 was found in answers to question 1 whether patients are given comprehensible information, while the lowest score of 2.86 ± 1.37 was found in answers to question 5 on patient's information about effects of therapy. The mean cumulative score on the scale was 20.8 ± 3.17 of the possible maximum of 25 (Table 6).

On subscale VI - Quality of cooperation (Table 7), the highest mean score of 4.32 ± 0.13 was depicted in the statement that health workers cooperate well with each other in providing health services, and subjects partially agreed with the statements that they receive different or opposite information, 2.96 ± 0.19 , and that the high level of specialization of physiotherapists is not a problem in the health system, 2.66 ± 0.21 .

- Subjects expressed the greatest satisfaction on subscales I - Attitude toward the patient (27.44 ± 3.59 out of

30) and IV - Quality of healthcare (36.60 ± 4.19 out of 40), which represents 91.5% of the possible maximum

- It is followed by subscale V - Communication and Information (20.8 ± 3.17 out of 25), corresponding to 83.2% of the possible maximum
- Subscale III - Professionalism and expertise (15.68 ± 3.29 out of 20) representing 78.4% of the possible maximum
- Subjects showed the least satisfaction on subscales II - Health policy and patient care (16.94 ± 5.56 out of 25), corresponding to 67.8% of the possible maximum
- Subscales VI - Quality of cooperation (9.94 ± 0.42 out of 15) which represents 66.3% of the possible maximum.

The only recorded impact was on subscale V - Communication and information in a way that a higher level of education had a favorable impact on higher scores of communication and information ($r = 0.376$; $p < 0.01$) and that the previous contact with a physiotherapist also had a favorable impact on communication (-0.339 ; $p < 0.05$) (Table 8).

Comparing the mean score on subscale I, the attitude toward the patient, based on marital status, it is shown that the highest mean score of 29.50 ± 0.71 was given by subjects living with an unmarried partner, then by divorced subjects 29.33 ± 0.58 , then by single subjects 28.75 ± 1.54 , and then by widowed subjects 28.64 ± 2.42 , followed by married subjects 26.35 ± 3.79 , whereas those separated scored the least 19.0 ± 7.07 . One-way analysis of variance showed that there is a statistically significant difference in mean scores according to marital status ($p < 0.05$) (Table 9).

A comparison of the mean score on subscale IV - The quality of healthcare, based on the marital status shows that the highest mean score of 39.50 ± 0.71 was given by unmarried subjects with a partner, and the lowest by subjects who were divorced 28.00 ± 9.90 . One-way analysis of variance shows that there is a statistically significant difference in mean scores according to marital status ($p < 0.05$) (Table 9).

A statistically significant impact ($p < 0.05$) of the previous contact with a physiotherapist is found on Subscale III - Professionalism and expertise. The same impact was recorded on Subscale V - Communication and Information ($p < 0.05$) (Table 10).

In subscale I - The attitude toward the patient, the highest mean score of 29.40 ± 1.26 was given by the subjects in Herceg Novi, while the lowest of 23.30 ± 5.40 by subjects in Banja Luka. Statistical analysis by One-way analysis of variance showed a statistically significant difference in the mean scores according to the place of research ($p < 0.05$) (Table 11).

In subscale II - Health Policy and Patient Care, the highest mean score of 19.90 ± 1.60 was given by subjects in Bihać, while the lowest score of 12.80 ± 6.11 was noted in Nikšić. There is a statistically significant difference in health policy assessments in regard to the place of research ($p < 0.05$) (Table 11).

In subscale IV - The quality of healthcare according to the place of research, it is shown that the highest mean score was given by subjects in Nikšić (39.10 ± 1.52), and the lowest in Banja Luka (32.70 ± 6.33). There is a

TABLE 1. Basic characteristics of the subjects

Basic characteristics of the subjects	n	%
Sex		
Male	26	52.0
Female	24	48.0
Total	50	100.0
Age		
$\bar{x} \pm SD$ (min.-max.)	43.66 \pm 15.6	(20-80)
20-30	11	22.0
31-40	14	28.0
41-50	8	16.0
51-60	10	20.0
61-70	4	8.0
71-80	3	6.0
Total	50	100.0
Education		
Elementary	2	4.0
Professional high school	3	6.0
High school with diploma	24	48.0
3-year Bachelor studies	3	6.0
4-year Bachelor studies	18	36.0
Total	50	100.0
Marital status		
Single	12	24.0
Separated	2	4.0
Married	20	40.0
Divorced	3	6.0
Has a partner (unmarried)	2	4.0
Widow/widower	11	22.0
Total	50	100.0
Employment status		
Employed	38	76.0
Unemployed	12	24.0
Previous contact with a physiotherapist		
Yes	33	66.0
No	17	34.0
Total	50	100.0

TABLE 2. Overview of mean scores – subscale I - Attitude towards the patient

Subscale I - Attitude towards the patient	$\bar{x} \pm SD$	Median	Range
I1 Patients are taken seriously	4.76 \pm 0.56	5.0	3-5
I2 Patients get enough attention	4.64 \pm 0.75	5.0	2-5
I3 Physiotherapists provide their patients with good guidance	4.70 \pm 0.58	5.0	3-5
I4 Patients are listened to carefully	4.66 \pm 0.74	5.0	1-5
I5 Physiotherapists spend enough time on their patients	4.66 \pm 0.77	5.0	2-5
I6 Patients will show physiotherapists respect	4.02 \pm 0.94	4.0	2-5
I Attitude toward the patient (min 6. - max. 30)	27.44 \pm 3.59	29.0	14-30

statistically significant difference in the assessments of the quality of healthcare depending on the place of research ($p < 0.05$) (Table 11).

In subscale V - Communication and information according to the place of research, the highest mean score was found in Podujevo (22.90 \pm 3.21), while the lowest in Bihać (18.70 \pm 2.41). A statistically significant difference was found among

TABLE 3. Overview of mean scores – subscale II - Health policy and patient care

Subscale II - Health policy and patient care	$\bar{x} \pm SD$	Median	Range
II1 Will the physiotherapeutic help and patient care be compromised by the shortening of waiting lists?	2.64 \pm 1.53	2.0	1-5
II2 Will patients be the victim of rising costs of healthcare?	3.50 \pm 1.15	4.0	1-5
II3 Waiting times are never too long	3.52 \pm 1.27	4.0	1-5
II4 Will the cost cutting disadvantage patients?	3.52 \pm 1.26	4.0	1-5
II5 Will the patients be able to pay for their own healthcare if they have to?	3.76 \pm 1.17	4.0	1-5
II Health policy and patient care (min. 5 - max. 25)	16.94 \pm 5.56	18.0	6-25

TABLE 4. Overview of mean scores – subscale III - Professionalism and expertise

Subscale III - Professionalism and expertise	$\bar{x} \pm SD$	Median	Range
III1 Are new treatments put into practice in the system of physiotherapeutic service?	3.88 \pm 1.11	4.0	2-5
III2 Is the education and training of physiotherapists in this country one of the world's best?	3.90 \pm 0.86	4.0	2-5
III3 Can physiotherapists can do everything?	3.70 \pm 1.37	4.0	1-5
III4 Do physiotherapists know everything about all sorts of conditions?	4.20 \pm 1.05	4.5	1-5
III Professionalism and expertise (min. 4 - max. 20)	15.68 \pm 3.29	16.0	8-20

TABLE 5. Overview of mean scores – subscale IV - Quality of health service

Subscale IV - Quality of health service	$\bar{x} \pm SD$	Median	Range
IV1 Will patients always get the best physiotherapeutic treatment?	4.70 \pm 0.68	5.0	2-5
IV2 Do physiotherapists always make the right diagnosis?	4.48 \pm 0.65	5.0	3-5
IV3 Are patients informed on time?	4.54 \pm 0.68	5.0	2-5
IV4 Do patients always get the right dose of therapy?	4.52 \pm 0.81	5.0	2-5
IV5 Do patients always get the right/recommended therapy?	4.68 \pm 0.62	5.0	3-5
IV6 Is a lot of care taken to keep patients' medical information confidential in the health service?	4.48 \pm 0.89	5.0	2-5
IV7 Do physiotherapists always carry out sufficient number of tests and research?	4.64 \pm 0.72	5.0	2-5
IV8 Do physiotherapists apply therapies timely?	4.56 \pm 0.79	5.0	1-5
IV Quality of health service (min. 8 - max. 40)	36.60 \pm 4.19	38.5	21-40

the scores of communications and information depending on the place of research ($p < 0.05$) (Table 11).

TABLE 6. Overview of mean scores – subscale V - Communication and information

Subscale V - Communication and information	$\bar{x}\pm SD$	Median	Range
V1 Is the information given to patients clear and understandable?	4.74±0.59	5.0	3-5
V2 Do patients get sufficient information about the cause of their problem?	4.18±1.02	5.0	1-5
V3 Do physiotherapists discuss things fully with their patients?	4.38±0.92	5.0	1-5
V4 Do patients get sufficient information about the various treatments that are available?	4.64±0.66	5.0	2-5
V5 Do patients get insufficient information about the effects of their treatments?	2.86±1.37	3.0	1-5
V Communication and information (min. 5 - max. 25)	20.8±3.17	21.0	13-25

TABLE 7. Overview of mean scores – subscale VI – Quality of cooperation

Subscale VI – Quality of cooperation	$\bar{x}\pm SD$	Median	Range
V11 Healthcare providers are good at cooperating with each other	4.32±0.13	5.0	2-5
V12 Patients are not given conflicting information	2.96±0.19	3.0	1-5
V13 High levels of specialization of physiotherapists do not cause problems in the health-care system	2.66±0.21	2.0	1-5
VI Quality of cooperation (min. 3 - max. 15)	9.94±0.42	11.0	4-15

TABLE 8. Correlation analysis of score effects in all research fields

Effects in all research fields	Place of research	Sex	Age	Education	Marital status	Employment status	Previous contact with a physiotherapist
I Attitude toward the patient (max. 30)							
Ro	0.092	-0.123	-0.060	0.161	0.135	-0.202	-0.145
p	0.523	0.395	0.680	0.265	0.349	0.159	0.316
II Health policy and patient care (max. 25)							
Ro	-0.111	-0.131	0.090	-0.007	0.087	-0.096	-0.183
p	0.443	0.365	0.532	0.964	0.547	0.507	0.202
III Professionalism and expertise (max. 20)							
Ro	0.093	-0.166	0.059	0.136	0.095	-0.136	-0.249
p	0.520	0.250	0.683	0.345	0.512	0.345	0.082
IV Quality of health service (max. 40)							
Ro	0.049	-0.135	-0.048	0.185	0.153	-0.103	-0.197
p	0.735	0.351	0.742	0.198	0.289	0.478	0.170
V Communication and information (max. 25)							
Ro	0.211	-0.062	-0.073	0.376**	0.070	-0.238	-0.339*
p	0.141	0.670	0.617	0.007	0.628	0.096	0.016
VI Quality of cooperation (max. 15)							
Ro	-0.240	-0.202	0.146	-0.072	0.125	-0.061	-0.252
p	0.093	0.160	0.313	0.617	0.387	0.674	0.078

** p < 0.01

With regard to the place of research, no statistical significance was found in the mean scores of subscale III - Professionalism and expertise, and subscale VI - The quality of cooperation.

DISCUSSION

Subjects in this study had a mean age of 41 years, of whom 24 were females and 26 males. The largest number of subjects, 48%, had finished high school with a diploma, 36% had completed 4-year Bachelor studies, 6% graduated from 3-year Bachelor studies, and 6% had completed professional high school, while 4% had finished only elementary school. As for marital status, 40% of subjects were married, 24% single, 22% widowed, 6% divorced, 4% separated, and 4% with a partner (unmarried). Out of total, 76% of subjects were employed, while 24% were unemployed. A large number of subjects had a previous contact with a physiotherapist, 66%.

On Subscale I - Attitude toward the patient, subjects rated with a high mean score of 4+ out of a maximum of 5. It is demonstrated that physiotherapists and patients respect each other almost always, that the patient is given enough attention, that the patient is always taken seriously and devoted sufficient time by a physiotherapist.

In a study conducted in Brazil on a sample of 403 patients with the help of the MedRisk instrument, patient satisfaction with the work of a physiotherapist was assessed. Demographic and clinical characteristics were collected using the global perceived effect (GPE) scale. The results showed a great satisfaction with the work of physiotherapists, with a mean score of 4.5 (SD = 0.4). A moderate

TABLE 9. Effect of marital status on fields of research

Marital status	n	Mean	SD	Minimum	Maximum
I Attitude toward the patient (max. 30) F=4.778; p=0.001					
Single	12	28.75	1.54	26	30
Separated	2	19.00	7.07	14	24
Married	20	26.35	3.79	17	30
Divorced	3	29.33	0.58	29	30
Has a partner (unmarried)	2	29.50	0.71	29	30
Widow/widower	11	28.64	2.42	22	30
Total	50	27.44	3.59	14	30
II Health policy and patient care (max. 25) F=0.173; p=0.971					
Single	12	16.17	5.32	8	25
Separated	2	16.00	5.66	12	20
Married	20	17.65	4.58	8	25
Divorced	3	15.67	8.62	8	25
Has a partner (unmarried)	2	15.50	13.44	6	25
Widow/widower	11	17.27	6.47	6	23
Total	50	16.94	5.57	6	25
III Professionalism and expertise (max. 20) F=0.603; p=0.698					
Single	12	15.67	3.31	8	20
Separated	2	12.00	5.66	8	16
Married	20	15.60	2.85	10	20
Divorced	3	15.67	5.13	10	20
Has a partner (unmarried)	2	16.00	5.66	12	20
Widow/widower	11	16.45	3.24	10	20
Total	50	15.68	3.29	8	20
IV Quality of health service (max. 40) F=3.651; p=0.008					
Single	12	37.92	2.94	30	40
Separated	2	28.00	9.90	21	35
Married	20	35.30	3.81	26	40
Divorced	3	38.00	3.46	34	40
Has a partner (unmarried)	2	39.50	0.71	39	40
Widow/widower	11	38.18	3.40	29	40
Total	50	36.60	4.19	21	40
V Communication and information (max. 25) F=1.884; p=0.116					
Single	12	21.75	2.05	18	25
Separated	2	16.50	3.54	14	19
Married	20	19.90	3.58	13	25
Divorced	3	23.00	2.65	20	25
Has a partner (unmarried)	2	22.50	3.54	20	25
Widow/widower	11	21.27	2.76	16	25
Total	50	20.80	3.17	13	25

TABLE 10. Impact of previous contact with a physiotherapist on the field of research

Previous contact with a physiotherapist	n	Mean	SD	Minimum	Maximum
I Attitude towards the patient (max. 30) F=0.618; p=0.436					
Yes	33	27.73	3.32	17	30
No	17	26.88	4.11	14	30
Total	50	27.44	3.59	14	30
II Health policy and patient care (max. 25) F=2.311; p=0.135					
Yes	33	17.79	5.33	6	25
No	17	15.29	5.82	6	22
Total	50	16.94	5.57	6	25
III Professionalism and expertise (max. 20) F=4.063; p=0.049					
Yes	33	16.33	3.08	10	20
No	17	14.41	3.41	8	20
Total	50	15.68	3.29	8	20
IV Quality of health service (max. 40) F=2.114; p=0.152					
Yes	33	37.21	3.69	26	40
No	17	35.41	4.94	21	40
Total	50	36.60	4.19	21	40
V Communication and information (max. 25) F=4.431; p=0.041					
Yes	33	21.45	3.29	13	25
No	17	19.53	2.55	14	24
Total	50	20.80	3.17	13	25
VI Quality of cooperation (max. 15) F=3.771; p=0.058					
Yes	33	10.52	2.80	6	15
No	17	8.82	3.15	4	15
Total	50	9.94	3.00	4	15

When it comes to subscale II - Health policy and patient care, the subjects did not answer any of the questions with the highest score. The highest mean score of 3.76 ± 1.17 was observed on the answer to the question regarding patients' ability to pay for physical therapy if they are forced to do so, which may indicate that patients are aware of the importance of physical therapy and are willing to invest in this type of treatment. The question related to the impact of shortening the waiting list on physiotherapeutic and patient care was rated with 2.64 ± 1.53 . The lower score could indicate that patients feel that the quality of health-care will not be reduced due to the reduction of the waiting list. The mean cumulative score on the scale was 16.94 ± 5.56 of a possible maximum of 25.

Research conducted in Germany, the Netherlands, England, and Wales show how a negative experience with the health system creates a lack of confidence in the provision of medical care. Individuals who have experienced cost barriers, that is, those who had given up healthcare had not been

correlation was observed between overall satisfaction and GPE (from -0.31, $p < 0.001$) (13).

TABLE 11. Impact of place of research on fields of research

Place of research	n	Mean	SD	Minimum	Maximum
I Attitude toward the patient (max. 30) F=7.054; p=0.0001					
Banja Luka	10	23.30	5.40	14	30
Herceg novi	10	29.40	1.26	26	30
Nikšić	10	29.20	0.92	27	30
Bihać	10	27.40	1.84	23	29
Podujevo	10	27.90	2.85	23	30
Total	50	27.44	3.59	14	30
II Health policy and patient care (max. 25) F=3.071; p=0.026					
Banja Luka	10	19.20	4.39	12	25
Herceg novi	10	17.10	6.19	8	25
Nikšić	10	12.80	6.11	6	22
Bihać	10	19.90	1.60	18	22
Podujevo	10	15.70	5.93	8	25
Total	50	16.94	5.57	6	25
III Professionalism and expertise (max. 20) F=0.258; p=0.904					
Banja Luka	10	15.00	4.35	8	20
Herceg novi	10	15.20	4.18	8	20
Nikšić	10	16.10	3.28	10	20
Bihać	10	15.90	0.32	15	16
Podujevo	10	16.20	3.22	11	20
Total	50	15.68	3.29	8	20
IV Quality of health service (max. 40) F=4.983; p=0.002					
Banja Luka	10	32.70	6.33	21	40
Herceg novi	10	38.20	3.46	30	40
Nikšić	10	39.10	1.52	35	40
Bihać	10	35.40	1.35	34	38
Podujevo	10	37.60	3.20	30	40
Total	50	36.60	4.19	21	40
V Communication and information (max. 25) F=3.906; p=0.008					
Banja Luka	10	19.20	3.65	14	25
Herceg novi	10	21.50	1.96	18	25
Nikšić	10	21.70	2.71	16	25
Bihać	10	18.70	2.41	13	20
Podujevo	10	22.90	3.21	15	25
Total	50	20.80	3.17	13	25
VI Quality of cooperation (max. 15) F=2.208; p=0.083					
Banja Luka	10	11.50	2.51	7	15
Herceg novi	10	9.10	3.25	6	15
Nikšić	10	10.30	3.77	6	15
Bihać	10	10.70	0.67	9	11
Podujevo	10	8.10	3.07	4	12
Total	50	9.94	3.00	4	15

able to pay for health care, had less confidence in the quality of health care (14).

In a public poll which was carried out for the purpose of examining health reform in the United Kingdom, patients rated the area of health service quality the best, and expressed the least confidence in health policy measures. More than 60% of participants disagree with claims that streamlining the system will not diminish patients' rights and the level of quality or availability of healthcare (12).

The results of a study among patients in hospital (aged 50.9 ± 18.81 years, 58% males) included in the physiotherapy program, also surveyed using the MedRisk instrument, and rated the respect of the physiotherapist toward the patient with a very high score of 4.75. The lowest rated was guidelines which are given to a patient on discharge from the hospital, with a score of 1.82 (15).

On subscale III - Professionalism and expertise, the subjects did not answer any question with a score of 5. The highest mean score of 4.20 ± 1.05 was depicted at the question on physiotherapist's information about all patient conditions, which indicates that physiotherapists are interested in their patient's condition and that patients are aware of it. The mean cumulative score on the scale is 15.68 ± 3.29 out of a possible maximum of 20, indicating that patients are quite satisfied with the professionalism and expertise of the physiotherapist.

Correlation analysis shows that patients who had had previous contact with a physiotherapist rated the subscale professionalism and expertise with higher scores.

Jensen *et al.* identified patients as a key source of knowledge during the consultation. They reported that physiotherapists recognize the importance of understanding the social and psychological context of the patient, rather than just focusing on the diagnostic process. To achieve this, they note that physiotherapists effectively listen to and adopt a patient-centered approach (16).

Subscale IV - The quality of healthcare was rated with a high mean score of 36.60 ± 4.19 out of a possible maximum of 40. The highest mean score of 4.70 ± 0.68 on the question whether patients always receive the best physiotherapeutic treatment confirms satisfaction with the work of physiotherapists. The lowest score of 4.48 ± 0.65 was found on the answer to the question whether physiotherapists always give the correct diagnosis, which may indicate the need for continuous education of physiotherapists with special emphasis on the diagnosis of various diseases and injuries.

The results of a study conducted in Ireland showed a high level of satisfaction with all components of physiotherapy treatment, except costs, and provided valuable patient feedback regarding their physiotherapy treatment (17).

A survey on satisfaction with the public health system in Croatia found that patients are largely satisfied with the work of medical staff. This is supported by a 2010 study developed by the Institute of Economics Zagreb and UNODC conducted on 3000 respondents, which showed that about 40% of citizens think that the quality of service in Croatia is "very good," and an additional 40% think that the service is "good." In addition to the fact that 80% of Croatian citizens rated the quality of medical services in public health as good and very good, in the same survey, health workers were the best rated public employees among all public services in Croatia (5).

A high score of 4.74 ± 0.59 on the question whether patients always receive clear and understandable information indicates good communication between the physiotherapist and the patient, which will certainly improve mutual trust and the quality of health care. The question whether subjects consider that they receive insufficient information about the effects of therapy received the lowest score of 2.86 ± 1.37 , which means that patients do not consider that they receive sufficient information about the effects of therapy.

In England and Wales, 62% of participants believe that patients do not get enough information about the different therapies that are available, while 54% that patients do not get enough information about the effects of therapy (12).

In Croatia, a quantitative study was conducted on a sample of 31 physiotherapists. A questionnaire on the basic characteristics of responsibility in physiotherapy was used. The results showed that 96.8% ($n = 30$) of participants provide their patients with information about the plan, interventions, and goals of physiotherapy while 87.1% ($n = 27$) ask the patient for consent to physiotherapy. A large number of physiotherapists, 82.8% ($n = 24$), have the opportunity to be with their patients during the entire physiotherapy procedure. All participants confirmed that they are able to adhere to the Code of Physiotherapeutic Ethics in their daily work. The majority of participants, that is, 75% ($n = 21$), affirmed that they had too many patients (18).

Another study examined 24 physiotherapists from four hospital clinics who worked with patients with back pain. Physiotherapists were divided into two groups of which one attended 8 hours of communication skills training. The trained group showed greater commitment to the needs of clinical practice (19).

Regarding subscale VI - Quality of cooperation, the highest mean score of 4.32 ± 0.13 was recorded in the statement that health workers cooperate well with each other in providing health services. This type of cooperation contributes to a good exchange of information about the patient's health condition and improves the quality of healthcare. This data shows that an interdisciplinary approach has been developed to some extent. Patients partially agree with the statement that they receive different or opposite information, 2.96 ± 0.19 , which indicates that errors still occur when patients are being given information about their health condition.

Cooperation in healthcare implies complementary roles for health workers who work together, share responsibility for problem solving, and make decisions to formulate and implement patient care plans (20). Collaboration between physicians, nurses, and other health professionals increases awareness of team members about the type of knowledge and skills each team member possesses, thus contributing to continuous improvement in decision-making (21).

Concerning the correlation analysis of the impact of socio-demographic characteristics on research areas, the only impact was recorded on the subscale communication and information in such a way that higher education has a favorable impact on higher scores on communication and information ($r = 0.376$; $p < 0.01$). This data may indicate

that physiotherapists are willing to share information about the causes of the disease, therapy and the effects of therapy with patients with a higher level of education.

Furthermore, the previous contact with a physiotherapist has a favorable effect on communication (-0.339 ; $p < 0.05$). It is clear that meeting an already known person makes communication easier and builds mutual trust. In practice, it often happens that the patient seeks the service of a physiotherapist who had treated him/her previously.

A study of patients' affinity toward physiotherapy treatment conducted at the physiotherapy clinic in Gothenburg shows that the therapeutic encounter between a physiotherapist and a patient is a complex process and reflects a multidimensional construct of satisfaction. Determining the needs of patients, especially in the psychosocial aspect compared to the physical one, paves the way to a greater focus on the patient and a more productive physiotherapy experience (22).

A comparison of the subscales in relation to the research site shows that patients in Herceg Novi are the most satisfied with the attitude toward the patient, while the lowest level of satisfaction was shown by patients in Banja Luka.

The subjects in Bihac are the most satisfied with health policy and patient care, while the lowest level of satisfaction was shown by patients in Nikšić.

Subjects in Nikšić are most satisfied with the quality of health care, while subjects in Banja Luka expressed the lowest level of satisfaction.

Comparison of the mean scores on subscale V - Communication and information according to the place of research showed the highest mean score in Podujevo, and the lowest in Bihac.

Comparison of the mean score on subscale III - Professionalism and expertise, and subscale VI - The quality of cooperation showed no statistical significance with respect to the place of research.

Patient satisfaction is key to improving and providing high quality healthcare (13). In general, patients are satisfied with the interpersonal, technical, and organizational aspects of care but less satisfied with the clinical outcome (14). Therefore, work collaboration is considered crucial. For clients, the relationship of cooperation, productive work, active commitment of the physiotherapist, invested funds, goals, and reliable progress are important, while for physiotherapists, cooperation, personal trust and commitment, commitment, and work ability of the client are important. Despite the similarities, the attitudes of therapeutic partnerships differ, so patients place more emphasis on helpfulness and joint participation in the provision of therapy (15).

In developed countries around the world, assessments of public opinion regarding the health system are systematically conducted. Therefore, there exists abundant literature which is based on empirical data on patients' trust in the work of the health system (5).

CONCLUSIONS

The research showed a high degree of satisfaction of subjects in various domains, which indicates a high degree of trust

in the work of physiotherapists and the health-care system. High scores depicted in answers to questions about the exchange of clear and understandable information, the causes of their health problem, therapies and the effects of therapy, attention, and respect, demonstrate there is a very good communication between the patient and the physiotherapist. The high level of education of the patient and previous experience of being treated by a physiotherapist also contribute to improvement of mutual communication. Good information of physiotherapists about the overall health condition of the patient can indicate quality cooperation between healthcare workers when providing health services.

Patient satisfaction is very important for better motivation, reporting on the effects of therapy, improvement, and the final success of the physiotherapy program.

It is necessary to conduct research on larger samples which would enable creation and implementation of guidelines in strategic documents, and improvement of health policies, and patient care in countries of the region.

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COMPETING INTERESTS

The authors declare no conflict of interest

REFERENCES

- Parliament Institute Research Center of Assembly of Montenegro, the Method of Organization of Physiotherapy Activity in Some Countries of the Region and European Union. Available from: http://www.skupstina.me/images/dokumenti/biblioteka-i-istranjanje/2020/Na%C4%8Din_organizovanja_fizioterapeutske_djelatnosti_u_zemljama_regiona_i_Evropske_unije.pdf. [Last accessed on 2020 Feb 03].
- Standard Zanimanja-Fizioterapeut. Available from: <https://www.hko.srce.hr/registar/standard-zanimanja/detalji/31>. [Last accessed on 2020 Feb 04].
- Fizioterapeuti, Physiotherapy Chamber of Montenegro. Available from: <https://www.komorafizioterapeuta.me/fizioterapija/fizioterapeuti>. [Last accessed on 2020 Feb 10].
- Monitoring the Building Blocks of Health Systems: A Handbook of Indicators and Their Measurement Strategies. Available from: https://www.who.int/healthinfo/systems/WHO_MBHSS_2010_full_web.pdf. [Last accessed on 2020 Feb 10].
- Budak J. Ocjena pacijenata o kvaliteti rada zdravstvenog osoblja. In: Vehovec M, editor. *Ozdravstvu iz Ekonomske Perspektive*. Zagreb: Ekonomski Institut; 2014. p. 271-81.
- Thom DH, Hall MA, Pawlson LG. Measuring patients' trust in physicians when assessing quality of care. *Health Aff* 2004;23(4):124-32. <https://doi.org/10.1377/hlthaff.23.4.124>.
- Hall MA, Dugan E, Zheng B, Mishra AK. Trust in physicians and medical institutions: What is it, can it be measured, and does it matter? *Milbank Q* 2001;79(4):613-39. <https://doi.org/10.1111/1468-0009.00223>.
- Chetty L. Calling on the client's perceptions about the contributions of physiotherapists working in occupational health services. *J Patient Exp* 2020;7(2):155-9. <https://doi.org/10.1177/2374373519831447>.
- Barrett R, Terry L. Patients' and healthcare professionals experiences and perceptions of physiotherapy services in the emergency department: A qualitative systematic review. *Int J Emerg Med* 2018;11(1):42. <https://doi.org/10.1186/s12245-018-0201-z>.
- Bowling A, Rowe G, Lambert N, Waddington M, Mahtani KR, Kenten C, et al. The measurement of patients' expectations for health care: A review and psychometric testing of a measure of patients' expectations. *Health Technol Assess* 2012;6(30):1-509. <https://doi.org/10.3310/hta16300>.
- La Puma J. Anticipated changes in the doctor-patient relationship in the managed care and managed competition of the health security act of 1993. *Arch Fam Med* 1994;8(8):665-71. <https://doi.org/10.1001/archfami.3.8.665>.
- Calnan M, Sanford E. Public trust in health care: The system or the doctor. *Qual Saf Health Care* 2004;13(2):92-7. <https://doi.org/10.1136/qshc.2003.009001>.
- Medeiros FC, Costa LO, Oliveira NF, Costa LC. Satisfaction of patients receiving physiotherapy care for musculoskeletal conditions: A cross-sectional study. *Fisioter Pesq* 2016;23(1):105-10.
- Schee E, Braun B, Calnan M, Schnee M, Groenewegen PP. Public trust in health care: A comparison of Germany, the Netherlands, and England and Wales. *Health Policy* 2007;81(1):56-67. <https://doi.org/10.1016/j.healthpol.2006.04.004>.
- De Paula DA, Piatti NC, Costa LM, Chiavegato LD. Satisfaction levels with physical therapy in hospitalized patients. *Braz J Phys Ther* 2020;24(2):118-23. <https://doi.org/10.1016/j.bjpt.2019.02.012>.
- Jensen GM, Gwyer J, Shephard KF, Hack LM. Expert practice in physical therapy. *Phys Ther* 2000;80:28-43. <https://doi.org/10.1093/ptj/80.1.28>.
- Casserley-Feeney SN, Phelan M, Duffy F, Roush S, Cairns MC, Hurley DA. Patient satisfaction with private physiotherapy for musculoskeletal pain. *BMC Musculoskelet Disord* 2008;9:50. <https://doi.org/10.1186/1471-2474-9-50>.
- Begić M. Kvaliteta fizioterapijske djelatnosti i profesionalna odgovornost fizioterapeuta. *Physiother Croat* 2018;16(1):87-92. Available from: <https://www.hrcak.srce.hr/200459>. [Last accessed on 2020 Apr 12].
- College for Physiotherapy Ontario. The Go-To Clinical Skill-communications. Available from: <https://www.collegept.org/rules-and-resources/communication-skills>. [Last accessed on 2020 Mar 04].
- Baggs JG, Schmitt MH. Collaboration Between Nurses and Physicians. Dostupno na. Available from: <https://www.sigmaphys.onlinelibrary.wiley.com/doi/10.1111/j.1547-5069.1988.tb00055.x>. [Last accessed on 2020 Mar 30].
- Christensen C, Larson JR Jr. Collaborative medical decision making. *Med Decis Making* 1993;13(4):339-46. <https://doi.org/10.1177/0272989x9301300410>.
- Bernhardsson S, Larsson ME, Johansson K. In the Physio We Trust: A Qualitative Study on Patients' Preferences for Physiotherapy. Available from: https://www.researchgate.net/publication/317391549_In_the_physio_we_trust_A_qualitative_study_on_patients_preferences_for_physiotherapy. [Last accessed on 2020 Mar 30]. <https://doi.org/10.1080/09593985.2017.1328720>.