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5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემა- ჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები,ნახაზები,დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტო- სურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი,ანათლების შედგების ან იმპრეგნაციის მეთოდი და აღნიშნოთ სუ- რათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხო- ური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი,წელი,ჟურნალის №,პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანე- ლის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა,მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა,რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შე- ჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

<p align="center">*Содержание:*</p>

SATISFACTION WITH THE QUALITY AND AVAILABILITY OF MEDICAL SERVICES IN RURAL AREAS OF KAZAKHSTAN

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Abstract.

Background: Measuring the level of patient satisfaction is a useful tool for providing quality medical care that aligns with consumer preferences. We aimed to study the satisfaction with the quality and availability of medical services among the rural population of the Republic of Kazakhstan.

Methods and Materials: This study is a cross-sectional analysis. It was conducted in the Republic of Kazakhstan using data from an original questionnaire designed to assess patient satisfaction among those living in rural areas. The study involved interviews conducted in medical institutions, with patients recruited randomly. A total of 737 rural and 219 urban respondents participated.

Results: The results of the study indicated that half of the respondents (348 or 47.2%) reported poor health. Regarding changes in health status over the past three years, half of the respondents indicated a significant deterioration (338 or 45.9%). When a disease occurs, 44.1% of the population seeks care at public clinics. A comparison of two regions in terms of satisfaction with the quality and outcomes of medical care revealed statistically significant differences between regions (χ^2 = 4.419; p = 0.03553).

Conclusion: The study concludes that, in general, the majority of residents in rural areas are dissatisfied with the quality and outcomes of medical care.

Key words. Accessibility of medical services, healthcare organization, patient satisfaction, quality of medical care, rural areas.

Introduction.

The problems of access to medical care in rural areas are always relevant and require a special approach to their solution. The main goal of reforming the healthcare system is to create a new healthcare model that meets the needs of the population and increases the availability of quality medical care to the residents of remote settlements. At the same time, access to quality medical care should be ensured through maximum proximity to the rural population.

Confirming the importance and relevance of the Alma-Ata Declaration, the Astana Declaration was adopted in 2018, which approved new ways of developing Primary Health Care (PHC) worldwide [1]. It is increasingly recognized that achieving the Sustainable Development Goals related to health, including universal access to healthcare, is impossible without strong primary health care systems. The main criteria determining the quality of medical care provided to patients are accessibility, safety, optimality, and patient satisfaction with the results of treatment [2,3].

The modern healthcare system is becoming increasingly consumer-oriented, as healthcare providers take into account the opinions and expectations of patients. Measuring the level of patient satisfaction is a useful tool for aligning quality medical care with consumer preferences [4]. Assessment of the quality of medical services provided is an integral part of the development of medical organizations. The quality of services provided by medical organizations is a multidimensional indicator that includes various factors, one of which is patient satisfaction.

The degree of patient satisfaction is a purely subjective indicator and depends on many factors: the level of professionalism of medical personnel, the technical equipment of medical institutions, the development of medical science, the effectiveness of organizational decisions, and public sentiment regarding the activities of medical workers. Most studies on patient satisfaction have been conducted in the US and European countries, assuming that patients in prosperous regions tend to evaluate the quality of medical care based on waiting times, the qualifications of medical staff, the hospital environment, and the patient's participation in medical decision-making [5-9]. Patient satisfaction studies in some developing countries have shown that when evaluating medical services, patients are most concerned about the location of medical facilities, a comfortable stay in the hospital, and access to relevant services [10-13]. The perception of patients depends on their level of education, age, income, and place of residence [14].

The most important components of patient satisfaction are indicators of the quality of care [15], among which the quality of interpersonal care provided by healthcare workers seems to be of great importance [16-18].

Patient satisfaction encompasses many dimensions and is related to several factors such as socioeconomic status, cultural values, environmental characteristics of healthcare facilities, availability and accessibility of healthcare, patients' previous healthcare experiences, quality and effectiveness of treatment, and the attitudes of healthcare providers, as well as their

experience and knowledge [19]. Various socio-demographic factors can be considered potential predictors of patient satisfaction, such as gender, age, social status, marital status, or place of residence [20,21].

Despite the growing homogenization of modern societies, some differences in health experiences can still be determined by where a person lives: in rural or urban areas. For example, access to necessary medical care is more difficult among the rural population [22-25], while urban residents tend to have higher expectations regarding the quality of medical care [26-28].

Patient satisfaction can also be useful in predicting use and compliance as satisfied consumers are more likely to continue using health care services and adhere to medical regimens [29].

To ensure sufficient access to health care, health policy primarily focuses on objective spatial measurements of potential access to health services. It uses indicators such as the ratio of physicians to the population to identify underserved areas and allocate policy actions.

The purpose of this study is to quantify the satisfaction of the rural population with the quality and availability of medical services. The results illuminate the challenges of organizing affordable and high-quality medical care for residents of rural areas, identifying areas of deficiency to develop effective policy measures when planning the development of the health system at the regional level.

Materials and Methods.

Study design and participants: This study is a cross-sectional study. The study was conducted in the Republic of Kazakhstan using the data of the original questionnaire designed to study the satisfaction of patients living in rural areas. Inclusion criteria were the rural population, over 18 years of age. Sampling was carried out by the method of simple random sampling.

The questionnaire was approved by the Local Bioethics Committee of the Non-Commercial Joint Stock Company "Astana Medical University". The questionnaire consists of two parts - passport data and patient satisfaction survey questions. The study was conducted in accordance with the Good Clinical Practice Standard and the principles of the Declaration of Helsinki.

The study was conducted by interviewing in medical institutions, patients were recruited randomly. The study involved 956 respondents, of which 737 respondents were rural and 219 were urban. 737 respondents from rural areas (from Akmola region - 349 (47.3), Turkestan region - 388 (52.7)) of both sexes aged 18-70 years, the main part of the respondents, in particular 28.62% (n=211) at the age of 40-49 years. The social status and professional affiliation of the respondents were different. The next step was to compare the satisfaction with medical care of patients in rural areas with patients living in the city. We carried out a comparative analysis of the survey data obtained between samples of the urban and rural population. The number of respondents among the urban population was 219, of which men - 34.45% and female respondents - 65.55%. Most of the respondents were aged 40-49 years.

Statistical analysis:

Statistical analysis was carried out using IBM SPSS Statistics v. 20. Descriptive statistics were presented by the socio-demographic characteristics of the respondents. Chi-square test (Pearson) was used to identify statistically significant differences between the samples. For all statistical tests used, a p value <0.05 was considered statistically significant.

Results.

General characteristics and descriptive results: The study involved 956 respondents of various ages, including 737 from rural areas and 219 from urban areas. In total, 349 respondents were from the Akmola region and 388 from the Turkestan region. These are two significant regions of Kazakhstan, characterized by different population densities and demographic indicators. The Akmola region is noted for its sharply continental climate, low population density, and large territorial area, while the Turkestan region has a high population density and the highest birth rates in the republic. Therefore, it was important to compare the availability of medical services for residents of villages in these regions.

Most respondents (69.46%) were female, with 28.62% aged 40-49 years. The majority (86.48%) of respondents were married, and nearly 45% were unemployed or housewives. Almost half of all respondents, specifically 321 individuals (43.3%), had secondary specialized education.

In the Akmola region, 67.7% of participants were women and 32.3% were men, while in the Turkestan region, 70.3% were women and 29.7% were men. The age composition of the two regions during the survey also differed; the Turkestan region had a higher proportion of young people compared to the Akmola region ($\chi^2 = 11.8$; $p = 0.03761$) (see Table 1).

Analysis of the results of studying the distribution of respondents by age showed that there were 92 (12.49%) young people. The largest numbers were in the age groups of 40-49 years and 50-59 years, accounting for 28.62% and 27%, respectively. The remaining categories included 30-39 years old - 123 (16.68%), 60-69 years old - 66 (8.95%), and 70+ years old - 46 (6.25%). The results of the study regarding respondents' assessments of their current state of health showed that half of the 348 respondents (47.2%) reported poor health, while 165 (22.4%) rated their health as good, 95 (12.9%) as average, 9 (1.2%) as excellent, and 120 (16.3%) found it difficult to answer.

As it turned out, 523 (71%) of all respondents were registered for chronic diseases, with the majority registered with a therapist (100, or 13.6%), a cardiologist (113, or 15.3%), and a gynaecologist (92, or 12.5%). In terms of changes in the state of health of the population over the past 3 years, half of the respondents reported a significant deterioration in their health (338, or 45.9%).

When asked why they visited a doctor in the last 12 months, the majority of respondents (401, or 54.4%) indicated that it was due to a period of poor health, while 210 (28.5%) went for a preventive examination, and 83 (11.3%) treated themselves. When a disease occurs, 44.1% of the population turn to public clinics, 33.2% to private medical centers, 6.1% treat themselves,

Table 1. Gender and age characteristics of respondents.

Options	Total n (%)	Place of residence		P*
		Akmola region	**Turkestan region**	
		n, %	n, %	
Total n (%)	737 (100)	349 (47,3)	388 (52,6)	
Age				0,00787
18-29	92 (12,49)	32 (34,78)	60 (65,21)	
30-39	123 (16,68)	59 (47,96)	64 (52,03)	
40-49	211 (28,62)	97 (45,97)	114 (54,02)	
50-59	199 (27,00)	107 (53,76)	92 (46,23)	
60-69	66 (8,95)	34 (51,51)	32 (48,48)	
>70	46 (6,25)	21 (45,65)	25 (54,34)	
Gender				0,5919
male	226 (30,54)	117 (51,76)	109 (50,76)	
female	511 (69,46)	255 (49,90)	256 (50,09)	
Family status				0,12325
Married	641 (86,48)	338 (52,73)	303 (47,26)	
Not married	96 (13,52)	50 (52,08)	46 (47,91)	
Social status				0,00397
Works	227 (31,04)	118 (51,98)	109 (48,01)	
Unemployed	84 (11,51)	43 (51,09)	41 (48,80)	
Housewife	244 (33,42)	130 (53,27)	114 (46,72)	
Farmer	44 (5,63)	25 (56,81)	19 (43,18)	
Pensioner	124 (16,65)	47 (37,90)	77 (62,09)	
Student	14 (1,75)	12 (85,71)	2 (14,28)	
Education				<0,0001
Average	202 (27,9)	105 (51,98)	97(48,01)	
Medium-Special	321 (43,3)	128 (39,87)	193 (60,12)	
Higher unfinished	22 (3)	17 (77,27)	5 (22,72)	
Higher	192 (25,8)	124 (64,58)	68 (35,41)	

Note: - Presented for the criterion χ2 – Pearson.*

Table 2. Results of the analysis of the comparison between the two regions according to the assessments of the work of the polyclinic (feldsher-obstetric station, medical center).

Options	Total n (%)	Place of residence		χ²	P*
		Akmola region	**Turkestan region**		
		n, %	n, %		
Total n (%)	737 (100)	349 (47,3)	388 (52,7)		
Are you satisfied with the quality and results of medical care?				4,419	0,03553
Yes	173 (23,5)	26,9%	20,4%		
No	564 (76,5)	73,1%	79,6%		
How long do you have to wait for the procedures (specialist consultations, laboratory tests, instrumental tests) prescribed by the doctor?				2,408	0,12073
Yes	442 (60)	57%	62,6%		
No	295 (40)	43%	37,4%		
Are you satisfied with the equipment of your polyclinic with medical and technical equipment?				3,043	0,08107
Yes	220 (29,8)	32,9%	27,1%		
No	517(70,2)	67,1%	72,9%		
Are you satisfied with the work schedule of doctors and polyclinic offices (feldsher-obstetric station, medical center)?				0,195	0,65806
Yes	359 (48,7)	49,6%	47,9%		
No	378 (51,3)	50,4%	52,1%		
Are you satisfied with the waiting time for a doctor's appointment?				3,341	0,06755
Yes	128 (17,4)	20,1%	14,9%		
No	609 (82,6)	79,9%	85,1%		
Are there all specialists or can you get all the procedures in your clinic?				3,341	0,06755
Yes	128 (17,4)	20,1%	14,9%		
No	609 (82,6)	79,9%	85,1%		

and 16.6% seek help from traditional healers, shamans, and psychics. According to the evaluations of the polyclinic's (medical and obstetric station, medical center) performance, the two regions were compared using the χ^2-Pearson criterion (see Table 2).

As can be seen from Table 2, there are statistically significant differences between regions (p=0.03553) regarding the question, "Are you satisfied with the quality and results of medical care?" No significant differences were found for other questions in this category.

A comparison of the two regions in terms of satisfaction with the quality and results of medical care revealed statistically significant differences ($\chi2 = 4.419$; p = 0.03553). In the Akmola region, satisfaction was slightly higher (26.9% of the population) than in the Turkestan region (20.4%).

One hundred fifteen (32.9%) respondents from the Akmola region and 105 (27.1%) respondents from the Turkestan region were satisfied with the equipment of medical institutions. Overall, 359 respondents were satisfied with the work schedule of doctors and offices, accounting for 48.7% of all respondents, while 51.3% (n=378) expressed dissatisfaction. Satisfaction with the waiting time was reported by 128 (17.4%) respondents.

Respondents' answers to the question about the availability of all specialists and the possibility of receiving all services and procedures were distributed as follows: 128 (17.4%) patients were satisfied, while almost 83% were not satisfied. Among the difficulties in obtaining medical services, 13.9% of patients noted the remoteness of medical institutions, 342 (46.4%) respondents cited a lack of specialists, and 293 (39.7%) respondents mentioned waiting times. The majority of respondents (64.2%) expect an ambulance within 30-60 minutes, while 20.4% expect it within 20-30 minutes, and a very small portion (1.1%) indicated they are waiting for ambulance assistance in less than 15 minutes.

Four hundred twenty-five respondents from the two regions knew that it is possible to make an appointment with a doctor using electronic devices and the Internet, while the other half, comprising 312 respondents, were unaware of this service. However, only 12.7% of respondents utilized this service. As can be seen from Table 3, there is a statistically significant difference (p = 0.03589) between the variable "Do you use the online service to make an appointment with a doctor directly through the website of a medical institution?" across the two regions. Based on our data, the online service is mainly used by residents of the Akmola region (57.5% of the population) compared to the Turkestan region (see Table 3).

More than half of all patients who took part in the study, specifically 56.9%, noted a general "low" availability of medical services, while 32.4% indicated "average" availability and 10.1% reported "high" availability. Additionally, 0.5% of respondents found it "difficult to answer" this question.

The lack of free medicines in medical organizations was reported by residents of both the Akmola region (48.4%) and the Turkestan region (51.6%). In total, 77% of the rural population across both regions do not have access to free medicines. There were no statistical differences between the respondents from the Akmola and Turkestan regions when comparing the response values (p=0.29008).

Furthermore, the majority (71.4%) of villagers indicated the absence of pharmacies in their villages, and the responses from the Akmola and Turkestan regions did not differ statistically (p=0.52262).

Rural residents of the Turkestan region (54.8%) expressed a greater need for rehabilitation and palliative services compared to rural residents of the Akmola region (45.2%). However, there were no statistically significant differences between the respondents from the two regions on this issue (p=0.26855).

The next stage of our study was to compare urban and rural populations in terms of satisfaction with the availability of medical services. The study involved 219 urban respondents, of which 34.45% were women and 65.55% were men. Most

Table 3. *Comparison of the availability of electronic, online services and medicines in settlements.*

Options	Total n (%)	Place of residence		χ^2	P*
		Akmola region	Turkestan region		
		n, %	n, %		
Total n (%)	737 (100)	349 (47,3)	388 (52,7)		
Did you know that you can make an appointment with a doctor using electronic devices and via the Internet?				0,01237	0,91144
Yes	425 (57,7)	47,5	52,5		
No	312 (42,3)	47,1	52,9		
Do you use the online doctor appointment service directly through the website of the medical institution?				4,40224	0,03589
Yes	94 (12,7)	57,5	42,5		
No	643 (87,3)	45,9	54,1		
Are there always free prescription drugs in your clinic?				1,11925	0,29008
Yes	169 (22,9)	43,8	56,2		
No	568 (77,1)	48,4	51,6		
Is there a pharmacy in your locality?				0,40873	0,52262
Yes	211 (28,6)	45,5	54,5		
No	526 (71,4)	48,1	51,9		
Do you or your loved ones need rehabilitation and palliative services?				1,22411	0,26855
Yes	341 (46,3)	45,2	54,8		
No	396 (53,7)	49,2	50,8		

of the urban respondents were aged 40-49 (25.11%) and 30-39 (21.91%). Among the rural population, the majority of respondents were also aged 40-49 (28.62%) and 50-59 (27.00%) (p=0.2761).

Below is a table comparing the urban and rural populations according to the main socio-demographic characteristics (Table 4).

Also, according to Table 4, the proportion of respondents among the urban population with higher education (40.18%) was almost twice as high as that of the rural population (25.8%) (p<0.01). In terms of social status, the majority of respondents among the rural population were unemployed (44.93%), while among the urban population, the number of employed respondents prevailed, accounting for almost half (48.84%). There were no significant differences in marital status.

According to the data presented in Table 5, it was revealed that 73.71% of patients in the rural population and 63.18%

of respondents in the urban population have chronic diseases (p<0.01).

The rural population was less satisfied with the schedule of doctor appointments (30.38%) compared to the urban population (78%) (p<0.0001). Additionally, satisfaction with the availability of specialists and procedures is much lower among rural residents (17.17%) than among the urban population (54.09%) (p<0.0001). About 73% of respondents from urban areas were satisfied with the quality and results of medical care, which is almost three times more than among rural respondents (23.82%) (p<0.0001). Among the rural population, 73.78% were registered at the dispensary for any disease. The presence of a pharmacy in the settlement was confirmed by almost all respondents from the urban population (99%), while only 28% of villagers noted the presence of a pharmacy in their settlement. Furthermore, only 22.72% of villagers reported the availability of free prescription drugs in their settlements.

Table 4. *Comparison of urban and rural population by socio-demographic characteristics.*

Options		Rural sample		Urban sample		P value
		N	%	N	%	
Gender	male	226	30,54%	76	65,55%	0,2761
	female	511	69,46%	143	34,45%	
Age	18-29	92	12,49%	45	20,54%	<0,01
	30-39	123	16,68%	48	21,91%	
	40-49	211	28,62%	55	25,11%	
	50-59	199	27,00%	45	20,54%	
	60-69	66	8,95%	12	5,47%	
	70	46	6,25%	14	6,39%	
Education	general secondary and specialized secondary	523	70,96%	113	51,59%	<0,01
	Higher unfinished	22	3%	18	8,21%	
	higher	192	25,8%	88	40,18%	
Social status	pensioner	124	16,65%	26	11,87%	<0,001
	student	14	1,75%	16	7,30%	
	unemployed, including housewives	328	44,93%	70	31,96%	
	works	271	36,67%	107	48,84%	
Marital status	married	641	86,48%	173	79,09%	0,6667
	not married	96	15,57%	46	20,09%	

Confidence interval=95%, p=0,05

Table 5. *Comparison of urban and rural patient satisfaction with the availability and quality of medical care.*

Outcomes	Total N (%)	Urban N (%)	Rural N (%)	P value
Chronic diseases	697 (70,69%)	139 (63,18%)	558 (73,71%)	<0,01
Satisfaction with medical equipment	572 (58,55%)	119 (54,09%)	453 (59,84%)	0,1481
Satisfaction with doctor appointments	402 (41,15%)	172 (78%)	230 (30,38%)	<0,0001
Satisfaction with having access to specialists and procedures	249 (25,49%)	119 (54,09%)	130 (17,17%)	<0,0001
Using an online doctor appointment service	491 (50,26%)	38 (17,27%)	453 (59,84)	<0,0001
Do you or your loved ones need rehabilitation and palliative services?	219 (22,42%)	47 (21,36%)	172 (22,72%)	<0,0001
Are you satisfied with the quality and results of medical care?	262 (40,68%)	161 (73,18%)	101 (23,82%)	<0,0001
How long do you have to wait for procedures?	249 (25,49%)	70 (31,81%)	179 (26,64%)	0,01825
Are you satisfied with the waiting time for a doctor's appointment?	426 (43,6%)	46 (20,9%)	380 (50,19%)	<0,0001
Are you registered with any specialist?	695 (71,17%)	137 (62,27%)	558 (73,78%)	<0,001
Is there a pharmacy in your locality?	430 (44,01%)	218 (99%)	212 (28%)	<0,0001
Are there always free prescription drugs in your clinic?	357 (36,54%)	185 (84,09%)	172 (22,72%)	<0,0001

Table 6. Results of logistic regression using a binomial distribution model for the dependent variable "Satisfaction with health care", "Age", "Gender", "Education", "Chronic diseases".

	Estimate	Standard error	Z value	Pr (>|z|)
age 30-39	0.3858	0.4892	0.789	0.4303
age 40-49	0.5619	0.4739	1.186	0.2357
age 50-59	0.2488	0.5368	0.463	0.6430
age 60-69	0.4027	0.6057	0.665	0.5062
age 70	1.1849	0.5949	1.992	0.0464
sex	0.2648	0.2673	0.991	0.3218
education average general	12.0620	535.4112	0.023	0.9820
education higher	12.3879	535.4113	0.023	0.9815
incomplete higher education	13.2833	535.4115	0.025	0.9802
education specialized secondary	11.9363	535.4112	0.022	0.9822
chronic diseases	0.1783	0.3325	0.536	0.5918

Below are the results of logistic regression using a binomial distribution model for the dependent variable "Satisfaction with health care" and several independent variables: "Age," "Gender," "Education," and "Chronic diseases" (Table 6).

The regression coefficients indicate how much the probability of satisfaction with medical care changes when the corresponding independent variable changes. For example, the coefficient for "age70" is 1.1849, which means that people older than 70 have a higher probability of being satisfied with medical care, as confirmed statistically ($p < 0.05$).

Discussion.

When comparing the two regions in terms of the main indicators, differences were revealed by age ($p = 0.00787$), with a higher proportion of young individuals in the Turkestan region. In terms of education, higher levels of education prevailed in the Akmola region ($p < 0.0001$), and differences were also found in social status ($p = 0.00397$). No differences were found by sex or marital status.

Most of the respondents were female, aged 40-49, and almost all were married, while nearly half of all respondents were unemployed. The majority had a secondary special education. Social status, which influences the quality of life and living conditions, significantly affects the health of residents. There was a slight difference between the respondents of the two regions in terms of socio-demographic characteristics. The study areas were similar in terms of gender, but the inhabitants of the Akmola region were somewhat more educated than those in the villages of the Turkestan region.

In general, the majority of respondents were not satisfied with the quality and results of medical care; however, residents of the Akmola region were more satisfied with the quality and results of medical care (58.64% of the population) than respondents from the Turkestan region (41.36%). Most respondents attributed the decline in the quality of medical care to factors such as insufficient equipment in medical institutions and low staffing levels of specialists. Long waits for specialist consultations (long queues and/or a long wait for the arrival of an ambulance team), as well as a shortage of specialists with the required qualifications, are primarily associated with the understaffing of healthcare institutions [30,31]. Territorial accessibility of medical institutions for rural residents and a shortage of qualified medical workers became important criteria for respondents when receiving medical care. It should be pointed out that one of the basic indicators of the availability of medical services—the waiting time for an ambulance team—is also a critical issue in the organization of healthcare services for residents of rural areas, which was also confirmed in our study. Among the rural population, the use of online services to make appointments with a specialist is more relevant than among the urban population; this phenomenon is likely due to the remoteness of medical organizations.

Participants from the rural area had a higher proportion of women compared to the urban sample, while the urban sample had a higher proportion of men. The age distribution also differed, with a higher proportion of older individuals in the rural sample. The level of education varied significantly between the groups, with a higher proportion of people with secondary general education in the rural sample, whereas the urban sample had a higher proportion of individuals with tertiary education. Social status also differed significantly between the groups, with a higher proportion of unemployed individuals in the rural sample, while the urban sample had a higher proportion of employed people.

The conducted studies show that there are significant differences in the assessment of the quality of medical care between residents of cities and rural areas. Residents in rural areas are more likely to suffer from chronic diseases but are less satisfied with the availability of specialists and procedures, as well as the waiting time for a doctor's appointment and the availability of medicines. Nevertheless, regression analysis has shown that rural residents over the age of 70 are more satisfied with the quality of medical care than younger residents. In contrast, urban residents are generally more satisfied with the quality and results of medical care and have greater access to pharmacies and rehabilitation services. It is also worth noting that satisfaction with doctor appointment schedules, availability of specialists and procedures, as well as long waiting times for procedures and the level of availability of medicines, were statistically significant, with p-values less than 0.05.

Conclusion.

Patient satisfaction is an important indicator of health outcomes. It has been found that patient satisfaction is the most important and most basic tool for making managerial decisions when improving the healthcare system.

As a result of the study, it can be said that in general, the majority of residents of rural areas are not satisfied with the quality and results of medical care. The factors of low satisfaction of respondents in receiving medical care were the territorial accessibility of medical institutions, the waiting time for emergency medical care, the lack of qualified medical workers, and the low staffing of medical institutions with medical equipment.

The study also found low availability and provision of rural residents with medicines, and in some settlements, there were no pharmacies. In connection with the increase in demand, there is a need to organize rehabilitation and palliative services for the population of rural areas at the level of primary health care.

The results of this survey will serve as a guide for future research and highlight the importance of ongoing feedback for policy decision making.

Journalism Ethics Considerations.

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

Acknowledgments.

Conflict of Interest.

The authors declare that there is no conflict of interests.

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УДОВЛЕТВОРЕННОСТЬ КАЧЕСТВОМ И ДОСТУПНОСТЬЮ МЕДИЦИНСКИХ УСЛУГ В СЕЛЬСКОЙ МЕСТНОСТИ КАЗАХСТАНА

Абстракт

Введение: Измерение уровня удовлетворенности пациентов является полезным инструментом для обеспечения качественной медицинской помощи с учетом потребительских предпочтений. Целью нашего исследования было изучение удовлетворенности качеством и доступностью медицинских услуг сельского населения Республики Казахстан.

Методы и материалы: Данное исследование представляет собой перекрестное исследование. Исследование проведено в Республике Казахстан с использованием данных оригинального опросника, предназначенного для изучения удовлетворенности пациентов, проживающих в сельской местности. Исследование проводилось методом интервьюирования в медицинских учреждениях, пациенты набирались случайным образом. В исследовании приняли участие 737 сельских и 219 городских респондентов.

Результаты: Результаты изучения ответов респондентов по оценке состояния здоровья показали, что половина из 348 (47,2%) имеют плохое здоровье. По изменению состояния здоровья населения за последние 3 года существенно ухудшилось у половины опрошенных 338 (45,9%). При возникновении заболевания в государственные поликлиники обращаются 44,1% населения. Сравнение двух регионов по удовлетворенности качеством и результатами медицинской помощи выявило статистически значимые различия между регионами (χ2 = 4,419; p = 0,03553).

Заключение: По итогам исследования можно сказать, что в целом большинство жителей сельской местности не удовлетворены качеством и результатами медицинской помощи.

Ключевые слова: доступность медицинских услуг, организация здравоохранения, удовлетворенность пациентов, качество медицинской помощи, сельская местность.

კმაყოფილება ყაზახეთის სოფლად სამედიცინო მომსახურების ხარისხითა და ხელმისაწვდომობით

აბსტრაქტი

შესავალი: პაციენტის კმაყოფილების გაზომვა სასარგებლო ინსტრუმენტია ხარისხიანი ჯანდაცვის უზრუნველსაყოფად მომხმარებლის პრეფერენციებზე დაყრდნობით. ჩვენი მუშაობის მიზანი იყო ყაზახეთის რესპუბლიკის სოფლის მოსახლეობის სამედიცინო სერვისების ხარისხითა და ხელმისაწვდომობით კმაყოფილების შესწავლა.

მეთოდები და მასალები: ეს კვლევა არის ჯვარედინი კვლევა. კვლევა ჩატარდა ყაზახეთის რესპუბლიკაში ორიგინალური კითხვარის მონაცემების გამოყენებით, რომელიც შექმნილია სოფლად მცხოვრები პაციენტების კმაყოფილების შესასწავლად. კვლევა ჩატარდა სამედიცინო დაწესებულებებში გასაუბრების გზით, პაციენტები დაკომპლექტდა შემთხვევითობის პრინციპით. კვლევაში მონაწილეობდა 737 სოფლის და 219 ქალაქის რესპონდენტი.

შედეგები: ჯანმრთელობის შეფასებაზე რესპონდენტთა პასუხების შესწავლის შედეგებმა აჩვენა, რომ 348-დან ნახევარი (47.2%) იყო ცუდი ჯანმრთელობის მდგომარეობაში. ბოლო 3 წლის განმავლობაში მოსახლეობის ჯანმრთელობის მდგომარეობის ცვლილების კუთხით, გამოკითხულთა ნახევარი (338 (45.9%)) მნიშვნელოვნად გაუარესდა. როდესაც დაავადება ხდება, მოსახლეობის 44,1% მიდის საჯარო კლინიკებში. სამედიცინო მომსახურების ხარისხითა და შედეგებით კმაყოფილების თვალსაზრისით ორი რეგიონის შედარებამ გამოავლინა სტატისტიკურად მნიშვნელოვანი განსხვავებები რეგიონებს შორის (χ2 = 4,419; p = 0,03553).

დასკვნა: კვლევის შედეგებიდან გამომდინარე, შეგვიძლია ვთქვათ, რომ ზოგადად სოფლის მცხოვრებთა უმრავლესობა არ არის კმაყოფილი სამედიცინო მომსახურების ხარისხითა და შედეგებით.