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**Problem of Unsafe Health Care: A Sociological Study.** 

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### **ABSTRACT**

One of the most contemporary problems of the health care system is unsafe methods of the medical care. In this study, we examined the problem of receiving medical care. This study is the first of its kind. Methods: an anonymous survey questionnaire of the sample population of 3,750 adults. Results: 24.1% of respondents stated the fact of the pure service by the medical workers. 13.2% complained personally about the quality of the medical care. Conclusions: There shall be a systematic change in the health care system. **Keywords:** medical care, security, health, sociological study

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# INTRODUCTION

The World Health Organization has conclude five factors that lead to pure quality of the medical care. As a consequence, it may result in the high rates of hospital infections, medication errors and other preventable negative effects. [1]

There are 40 million cases of ill treatment detected every year around the globe. [2]

Therefore, patient safety is a serious problem which should be prioritized by the national health systems [3,4,5].

This sociological survey was conducted to study the public's awareness about the risks of the health care system and to identify effective measures to the problem.

# **MATERIALS AND METHODS**

Sociological survey covered the entire territory of the Republic of Kazakhstan: fourteen provinces and cities of Astana and Almaty.

The target group was the adult population. The sample population was 3750 people with the confidence level of 97% and 2% of the confidence interval. To ensure the objectiveness of the survey the sample size was distributed proportionately to the number of the resident population of each region.

According to the Agency of the Republic of Kazakhstan of Statistics, there are 48% of men and 52% women; 55% of urban and 45% rural residents. Accordingly, these data formed by quota sampling.

Table 1: The formation of the sample size of respondents based on the size and structure of the population of Kazakhstan

Administrative-territorial unit	Population	Proportion	Sample size
	16675392	100%	3750
The Republic of Kazakhstan			
Akmola region	731 328	4%	164
Aktobe region	786349	5%	177
Almaty region	1909362	11%	429
Atyrau region	542987	3%	122
East Kazakhstan region	1395059	8%	314
West Kazakhstan region	612551	4%	138
Zhambyl region	1055976	6%	237
Karaganda region	1358064	8%	305
Kostanay region	879579	5%	198
Қуzylorda region	712992	4%	160
Mangystau region	545724	3%	123
Pavlodar region	747055	4%	168
North Kazakhstan region	583598	3%	131
South Kazakhstan region	2621523	16%	590
Astana (city)	742918	4%	167
Almaty (city)	1450327	9%	326

Source: Website of the Agency of the Republic of Kazakhstan on Statistics www.stat.gov.kz The sampling process included the population in each region of Kazakhstan, sex and the place of residence.

The interview was defined as the best method for collecting the primary information for the survey... Pre-trained interviewers interviewed respondents using standardized tools - a specially designed questionnaire.



The interviews were anonymous. Profile begins with a brief information about the respondents' consent to participate in the survey, in which the respondent was guaranteed anonymity. The questionnaire consisted of two parts. The first part included the respondent's general characteristics, such as gender, age, education, social status. The second (main) part of the questionnaire was designed to obtain information on the availability of the fact of injury respondent or his relatives, the fact of filing a complaint about this and other questions which included 14 questions closed and semi-closed.

Time of the field phase (survey respondents) - March 2013.

Analysis of the results was conducted by SPSS.

# **RESULTS**

As a result, 3781 people were surveyed, including 1826 men (48.3%) and 1955 women (51.7%).

Respondents' age ranged from 16 to 94 years, mean - 36 years (according to official statistics in 2012 the average age of the population of Kazakhstan was 31.6 years).

By level of education, respondents were as follows: secondary education - 27.8%, professional vocational - 28.7%, higher - 35.8%, the presence of an academic degree - 6.3% Other - 1.4%.

Social status of the respondents represented as follows: 36.3% of state employees, 24.9% of workers, 11.8% self-employed, 9.4% retired, 5.6% of students, 5.3% of executives, entrepreneurs 5.3%, 1, 4% of people with social benefits.

Every fourth respondent states that the pure medical care is caused by the medical workers (25.8%): this category is rated as "Very urgent". "Urgent" - another half (49.7%). To 18.1% given problem is "not very relevant." "Do not see the relevance of this issue" - 5.7% of respondents. "Abstained" - 0.7% (Table 1).

Table 2: Distribution of answers to the question: How do you think, how urgent is the problem of complications in patients due to the fault of medical worker in our country?

		The absolute number	Percent	Valid Percent	Cumulative interest rate
	Very Actual	974	25,8	25,9	25,9
	Actual	1881	49,7	50,1	76,0
VALID	Not very actual	683	18,1	18,2	94,2
	Not actual	217	5,7	5,8	100,0
	Total	3755	99,3	100,0	
Missing	System				
		26	0,7		
	Missing				
Total		3781	100,0		

Accordingly, you can see that there is a strong correlation between the social status of the respondent and the rating of the problem. Among those who believe the problem is not urgent are students (12%), then, self-employed (7.9%) and pensioners (7.6%). In contrast, 38.8% of citizens who have social benefits, and 32.7% of managers think that the problem is very urgent (Table 2).

Interestingly, only 7.2% of respondents completely deny the possibility to suffer from the fault of the medical worker, others admit such a possibility with varying degrees of probability: possible - 50.3%, unlikely - 28.1% Mandatory - 13.7% (Table 4).



Table 3: Distribution of answers to the question: How do you think, how urgent is the problem of complications in patients due to the fault of medical worker in our country taking into account the social status of the respondent (% of total)

Social status	Very Actual	Actual	Not very actual	Not actual	Total
Head	32,7	42,9	18,4	6,1	100
Employee	29,6	50,2	16,4	3,7	100
Working	20,6	52,8	20,4	6,1	100
Pensioner	23,5	49,7	19,2	7,6	100
Citizen	38,8	46,9	10,2	4,1	100
preferential					
category					
Student	23,9	45,9	18,2	12,0	100
Self-employed	22,5	49,9	19,7	7,9	100
Entrepreneur	27,4	51,8	16,2	4,6	100
Total	25,8	50,2	18,2	5,8	100

Table 4: Distribution of answers to the question: Do you think that may suffer as a result of complications caused by medical worker in Kazakhstan? (% of total)

		The absolute	Percent	Valid Percent	Cumulative interest
		number	reiteilt	Valid i Cicciit	rate
	Codes in any case	274	7,2	7,3	7,3
	Mandatory	515	13,6	13,7	21,0
Valid	Unlikely	1062	28,1	28,3	49,3
	May	1901	50,3	50,7	100,0
	Total	3752	99,2	100,0	
Missing	system missing	29	0,8		
	Total	3781	100,0		

This is a distribution of the harm caused by the medical workers: respondents assume that pediatrician - 19.3%, the therapist - 18.9%, the anesthesiologist - 16%, the dentist - 15.9% surgeon - 14.65%, an obstetrician-gynecologist - 14.3% will cause no harm by any means.

Another statics show that the respondents will suffer from theses medical workers: surgeon - 8.2%, an obstetrician-gynecologist - 7.35%, the dentist - 6.3%, the anesthesiologist - 5.4%, the therapist - 4.65%, pediatrician - 3.9%.

Every fifth respondent (24.1%) pointed out the fact the family members or themselves had personally experienced the harm by the medical workers . 75.9% of respondents did not experience such cases (Table 5).

Table 5: Distribution of answers to the question: Have you or your family facts of injury as a result of guilt health care provider? (% of total)

		The absolute	Percent	Valid Percent	Cumulative interest
		number			rate
	yes	906	24,0	24,1	24,1
Valid	no	2861	75,7	75,9	100,0
	total	3767	99,6	100,0	
Missing	System Missing	14	0,4		
To	otal	3781	100,0		

Gender analysis of the distribution of the responses showed that women are faced with similar facts more often (27.1%) than men (20.8%). Accordingly, 72.9% of women and 79.2% of men did not experience such cases (Table 6).



Table 6: Distribution of answers to the question: Have you or your family facts of injury as a result of guilt health care provider by gender of respondent (% of total)

Gender	Yes	No	Total
male	20,8	79,2	100,0
female	27,1	72,9	100,0
Total	24,1	75,9	100,0

The most suffering group from the pure medical care were citizens with social benefits - 32%, descending order of leaders - 28.4%, employees - 26.6%, pensioners - 26%, entrepreneurs - 25,5% students - 22.5%, working - 21%, self - 17.3% (Table 7).

Table 7: Distribution of answers to the question: Have you ever had / relatives facts of injury as a result of guilt health care provider? taking into account the social status of the respondent (% of total)

Social status	Yes	No	Total
Head	28,4	71,6	100,0
Employee	26,6	73,4	100,0
Working	21,0	79,0	100,0
Pensioner	26,0	74,0	100,0
Citizen preferential category	32,0	68,0	100,0
Student	22,5	77,5	100,0
Self-employed	17,3	82,7	100,0
Entrepreneur	25,5	74,5	100,0
Total	23,9	76,1	100,0

The results of the survey show that 13.2% of the interviewers complained about the pure quality of the health care (Table 7). So, 23.9% of respondents complained about the healthcare worker.

Table 7: Distribution of answers to the question: Have you or any of your relatives with complaints of personal injury caused by health care provider? (% of total)

		The absolute	Percent	Valid Percent	Cumulative interest
		number			rate
	yes	500	13,2	13,3	13,3
Valid	no	3257	86,1	86,7	100,0
	Total	3757	99,4	100,0	
Missing	System missing	24	0,6		
	Total	3781	100,0		

Most often complained about the damage to health caused by medical worker citizens with social benefits (18.4%), entrepreneurs (17.9%), students (17.8%), at least - heads (15.5%), work (13.2%) serving (13%) of less than - self (8.5%). (Table 8).

Table 8: Distribution of answers to the question: Have you or any of your relatives with complaints of personal injury caused by health care provider? taking into account the social status (% of total)

Social status	Yes	No	Total
Head	15,5	84,5	100,0
Employee	13,0	87,0	100,0
Working	13,2	86,8	100,0
Pensioner	14,2	85,8	100,0
Citizen preferential category	18,4	81,6	100,0
Student	17,8	82,2	100,0
Self-employed	8,5	91,5	100,0
Entrepreneur	17,9	82,1	100,0
Total	13,4	86,6	100,0

2014



One of the most popular complaints: not immediate health care (13.5% of respondents), incorrect diagnosis (12.6%), incorrect treatment assignment (8.2%), incorrect prescription of drugs (5.4%), infection during of medical procedures (2.5%).

In addition, there was the question regarding specific occupation of the health care worker. 53.4% did not answer, because of the absence of complaints. 1762 respondents expressed a desire to answer this question, 26.8% of respondents as a source of complaints noted "therapist", 21.2% identified "dentist", about 14.8% of the respondents complained about the obstetrician-gynecologist, 13.1% complained on "surgeons" (Table 9).

Table 9: Distribution of answers to the question: For what expert you or your relatives were complaints of personal injury patient health worker? (% of total)

	The absolute number	Percent	Valid Percent	Cumulative interest rate
nurse	100	2,6	5,7	9,0
Anesthesiologist	30	0,8	1,7	10,7
Surgeon	231	6,1	13,1	23,8
Obstetrician	260	6,9	14,8	38,5
Pediatrician	189	5,0	10,7	49,3
Therapist and obstetrician-gynecologist	13	0,3	0,7	50,0
Therapist and pediatrician	12	0,3	0,7	50,7
Therapist	472	12,5	26,8	77,5
Dentist and surgeon	11	0,3	0,6	78,1
Dentist and therapist	12	0,3	0,7	78,8
Dentist	374	9,9	21,2	100,0
Own version	58	1,5	3,3	3,3
Total	1762	46,6	100,0	
System-missing	2019	53,4		
Total	3781	100,0		

Men often complain about the therapist, dentist, surgeon, and women complained on the therapist, dentist and obstetrician.

19.3% of respondents had to spend personal funds for the elimination of the consequences caused by pure treatment of the medical worker.

Another important issue that was studied was the process of the elimination of the ill treatment of the patient. Respondents most often turn to medical organization where they were ill treated, to the specialist (12.8%) or to another specialist (10.9%). Next on the list, patients go to other medical organizations: private (8.8%) and national (7.4%).

The question: "Did you demand compensation of the pure service?" Only 11.3% of the respondents claimed the reimbursement. Only 7% of respondents received a refund of money. 50.4% of respondents did not even think about compensation. 16% did not require compensation. 21.4% of respondents chose not to answer the question.

# DISCUSSION

According to our research, Kazakhstan has a widespread problem of pure health care which is caused by the medical worker, 93,6 % of respondents support this argument. 92,8% of population believe that they experience a high risk of the health deteriorations due to pure treatment of the medical worker. Every fifth respondent (24.1%) experienced persaonally or relative suffered from the medical care. As a result, we would like to give recommendations regarding this problem. There is a strong need for systemizing the health care system to improve a high quality the medical care [3,4,5].



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# CONCLUSION

Thus, our study is the first of its kind in Kazakhstan.. We thoroughly studied the public opinion about the problem and came to conclusion that there shall be a systematic improvement of the health care system.

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