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A. S. Biduchak <https://orcid.org/0000-0003-3475-1497>  
 Zh. A. Chornenka <https://orcid.org/0000-0003-2314-1976>

## ASSESSMENT OF CORRELATION LEVELS IN THE STRUCTURE OF CONFLICTS WITHIN THE DOCTOR–PATIENT SYSTEM

Bukovinian State Medical University, Chernivtsi, Ukraine

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A. S. Biduchak, Zh. V. Chornenka

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*Bukovinian State Medical University, Chernivtsi, Ukraine*

**Actuality.** Doctors face difficulties every day in their practical work, communicating with patients who have different emotional and psychological conditions. In most cases, patients visit the doctor not because they want to; often they are brought to the hospital unwillingly by relatives or friends. Medical care is now perceived as a service that a healthcare facility provides to a patient. Therefore, it is quite logical that the patient visiting a doctor or starting treatment has certain expectations, that is, creates an idealized image of the doctor and the treatment process in general.

**The aim of the study.** Analyze and evaluate relationships in conflict situations in the “doctor–patient” system.

**Materials and methods.** With the use of statistical and medical-epidemiological methods, an analysis of anonymous questionnaires of 48 medical heads and 1146 patients was carried out in order to study the relationship between conflict situations and the effective work of medical institutions.

**The results.** The average strength of the relationship regarding the assessment of conflict situations among doctors showed ( $C=0.044$  ( $p=0.762$ )) that the respondents often and actively participate in conflicts arising in the team and do not consider it necessary to learn how to resolve such conflict situations. The weak connection of doctors demonstrated ( $C=0.151$  ( $p=0.295$ )) that there are 2 groups of respondents – some believe that this does not prevent them and other people from solving conflicts with profit for both sides, others – who need to try to reach a compromise or not to conflict. Evaluating the responses of patients, it was established that different groups of patients are in conflict, but those who are not satisfied with sanitary and hygienic conditions ( $C=0.208$  ( $p<0,001$ )) and stand in line for more than half an hour ( $C=0,247$  ( $p<0,001$ )) often dissatisfied with the results of the provision medical care, and vice versa.

**Conclusion.** In medical teams, conflicts often arise and doctors actively participate in them. Among patients who have conflicts, there are only those who are not satisfied with the results of medical care.

**Key words:** conflict situations, structure of conflict, correlation, doctor, patient.

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А. С. Бідучак, Ж. В. Чорненко

### ОЦІНКА РІВНІВ КОРЕЛЯЦІЇ У СТРУКТУРІ КОНФЛІКТІВ У СИСТЕМІ ЛІКАР–ПАЦІЄНТ

*Буковинський державний медичний університет, Чернівці, Україна*

Метою дослідження було оцінювання стосунків у конфліктних ситуаціях у системі «лікар–пацієнт». Проаналізовано анонімні анкети 48 медичних керівників та 1146 пацієнтів з метою вивчення взаємозв'язку конфліктних ситуацій з ефективною роботою медичних закладів. Середня сила взаємозв'язку щодо оцінки конфліктних ситуацій серед лікарів показала ( $C=0.044$  (at  $p=0.762$ )), що респонденти часто та активно беруть участь у конфліктах, які виникають у колективі. Слабкий зв'язок лікарів показав ( $C=0.151$  (at  $p=0.295$ )), що існує 2 групи респондентів: які вирішують конфлікти з користю для обох сторін, і які намагаються досягати компромісу чи не конфліктувати. Оцінка відповідей пацієнтів показала, що конфліктують переважно ті, які не задоволені санітарно-гігієнічними умовами ( $C=0.208$  ( $p<0.001$ )), стоять у чергах більше півгодини ( $C=0.247$  ( $p<0,001$ )), часто не задоволені результатами надання медичної допомоги, і навпаки.

**Ключові слова:** конфліктні ситуації, структура конфлікту, співвідношення, лікар, пацієнт.

**Actuality.** Conflicts are an integral part of human that arise in all spheres of business activity, including medicine [1]. The relationship between a doctor and a patient is multifaceted: it is a complex of psychological and moral and ethical problems that doctors have to constantly face [2]. Questions of a psychological nature often arise, which somehow affect treatment efficacy. Thus, the doctor must possess not only purely medical knowledge but also be able to talk to his patients, considering their psychological

characteristics and mental state. In recent years, there have been essentially revolutionary changes in the doctor-patient relationship. Based on the Convention on Human Rights and Biomedicine [3], patients have received the right to participate in the process of diagnosis and treatment, and therefore they are increasingly actively striving for an open dialogue with medical professionals.

One of the most important conditions for establishing mutual understanding between a doctor and a patient is a feeling of support [4]. If the patient realizes that the doctor intends to help him personally, and not just do what he should do according to the protocol, he will probably participate more actively in the treatment process. When

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the doctor shows understanding, the patient is sure that his complaints are not just expressed, but also heard. Understanding is impossible without respect. Respect involves recognizing the value of a person as an individual [5].

Any conflict is possible in the presence of participants in the conflict – opposing sides, taking active actions against each other. One of the conditions for the emergence and development of a conflict is the scarcity, inaccessibility for the entire object of the conflict, which is involved in the process of interaction between the sides to the conflict [6]. The situation caused by the accumulation of contradictions between the sides to the conflict, which is the basis for the emergence of a real conflict, is called a conflict situation [7].

In a conflict situation, opponents defend their goals, interests, which do not coincide with other ones, regarding the object of the conflict. Conflict situations are also characteristic of relations between employees and patients of medical institutions. Such conflict situations go beyond professional activity and affect the sphere of interpersonal relations [8].

In turn, the doctor, being “on the other side of the barricade”, during the first meeting with the patient, also has certain expectations about how the patient should behave, how he will react to the proposed treatment, etc.

These representations of the patient and the doctor are based on the life experience of each of them and social norms. However, the expectations of patients and medical professionals often differ from reality, because the doctor does not choose the patients, and it is difficult for patients to predict who the doctor they came to see will turn out to be.

It is the discrepancy between reality and expectations that causes most “medical” conflicts [9].

Patients may express dissatisfaction with the organization of medical care, qualifications of medical personnel, lack of necessary equipment and medicines, sanitary conditions in the institution, etc. [10]. However, most often conflicts arise precisely at the psychological level and are related to the behavior of each of the sides. After all, for example, a patient can subjectively perceive business communication as indifference, and friendliness as familiarity.

When assessing managerial conflicts, it is essential to identify its structure. Therefore, it is important to choose a certain system and dominant signs of management conflicts in the activities of medical institutions. To build an effective conflict management system, it is crucial to identify their root cause, and this will make it possible to implement a number of measures aimed at avoiding or reducing the negative consequences of management conflicts [11].

For a timely response to conflicts in a medical institution, it is advisable to use a set of methods for their assessment, which will allow developing preventive measures for its avoidance or settlement even at the early stages of the development of a conflict situation.

**The aim of the study is to** analyze and evaluate correlation level in structure of conflict within the “doctor–patient” system.

**Materials and methods.** The study of the correlation level in the structure of conflict in the teams of the regional clinical hospital of Chernivtsi and primary care centers of the Chernivtsi region during 2021–2022 was carried out using the medical and sociological method. The opinions

of 48 leading medical institutions (medical directors and heads of departments) and 1146 patients who were treated in the respective medical institutions during the specific period were studied via the method of direct individual survey. The research was conducted in the form of individual interviews based on an anonymous questionnaire developed by us, emphasizing the in-depth study of conflict situations in medical teams, allowing participants to express their opinions freely, without pressure. The interviews began by gathering general information about the participant and his/her work experience. The age group of respondents: from 18 to 54 years. Education: secondary, secondary special, and higher. After that, we considered more specific points regarding the definition of the relationship between conflict situations and the effective work of medical institutions.

**Results of research and their discussion.** In our study, we used the correlation coefficient to analyze the relationship between the respondents’ answers, and the Cramer’s correlation coefficient to assess the strength of this relationship. As you know, a correlation relationship exists when a certain value of one quantity corresponds to a set of values of another; it is revealed when the phenomenon under study is influenced by not one, but many factors. Thus, we were interested in the behavior of both heads of medical institutions and patients in certain conflict situations and ways of solving them.

Evaluating the relationship among the questions for leading doctors (Table 1) – “Do you try to take the opponent’s side in a conflict situation?” and “Do you try to prove your right in any conflict situation?”, the Cramer’s correlation coefficient was  $C=0.044$  ( $p=0.762$ ), which indicates the absence of a connection. Respondents who have chosen the answer “constantly prove their right” most often choose the answer “yes” to the question “Do you try to take the opponent’s side in a conflict situation?”, which indicates a lack of agreement in the answers.

Table 1  
**Evaluation of correlation between the groups of questions: “Do you try to take the opponent’s side in a conflict situation?” and “Do you try to prove your right in any conflict situation?”**

Answers		Do you try to take the opponent’s side in a conflict situation?		
		Yes, I do	No, I do not	Total
Do you try to prove your right in any conflict situation?	Answer options			
	Compromise or do not conflict	17	13	30
	You constantly prove your right	11	7	18
Total		28	20	48

The next group of questions for managing doctors (Table 2) “How often do conflicts arise in your team?” and “Have you participated in a conflict situation?” established an average relationship when calculating the Cramer’s correlation coefficient  $C=0.457$  ( $p= 0.002$ ), which indicates that respondents believe that conflicts in the team occur often and actively participate in them.

No correlation was established for the group of questions “Do medical workers need to learn how to resolve

Table 2

**Evaluation of correlation between the groups of questions: “How often do conflicts arise in your team?” and “Have you participated in a conflict situation?”**

Answers		How often do conflicts arise in your team?		
Have you participated in a conflict situation?	Answer options	Actively	Did not participate or an observer	Total
	Often or constantly	17	3	20
	Sometimes or rarely	11	17	28
	Total	28	20	48

conflict situations?” and “Is it possible to resolve the conflict without infringing the rights and sense of dignity of all people involved in the conflict?” (Table 3) – Cramer’s correlation coefficient  $C=0.151$  ( $p=0.295$ ). This shows that both groups of respondents (and those who believe that it is possible to resolve the conflict without infringing the rights and sense of dignity of all people involved in the conflict, and those who believe that it is not possible) believe that medical workers (especially managers) need to learn how to resolve conflict situations.

Table 3

**Evaluation of correlation between the groups of questions: “Do medical workers need to learn how to resolve conflict situations?” and “Is it possible to resolve the conflict without infringing the rights and sense of dignity of all people involved in the conflict?”**

Answers		Do medical workers need to learn how to resolve conflict situations?		
Is it possible to resolve the conflict without infringing the rights and sense of dignity of all people involved in the conflict?	Answer options	Yes, they do	No, they do not	Total
	Yes	18	2	20
	No	22	6	28
	Total	40	8	48

The average strength of the connection (Table 4) was obtained when calculating the Cramer’s correlation coefficient  $C=0.416$  ( $p=0.004$ ) for the following group of questions – “Do medical workers need to learn how to resolve conflict situations?” and “Do you try to take the opponent’s side in a conflict situation?”. The obtained result shows that the group of interviewed medical managers who believe that medical workers do not need to learn how to solve conflict situations is dominated by respondents who do not try to take the opponent’s side in a conflict situation.

The calculated Cramer’s correlation coefficient  $C=0.274$  ( $p=0.058$ ) for the block of questions: “What prevents you and other people from solving conflicts with profit for both sides?” and “Do you try to prove your right in any conflict situation?” revealed a weak relationship for physician managers (Table 5). This shows that one group of respondents who constantly prove their right do not think that this prevents them and other people from resolving conflicts with profit for both sides. Among the second group, who believe

Table 4

**Evaluation of correlation between the groups of questions: “Do health workers need to learn how to resolve conflict situations?” and “Do you try to take the opponent’s side in a conflict situation?”**

Answers		Do health workers need to learn how to resolve conflict situations?		
Do you try to take the opponent’s side in a conflict situation?	Answer options	Yes, I do	No, I do not	Total
	Yes	27	1	28
	No	13	7	20
	Total	40	8	48

that the desire to prove the right prevents from resolving conflicts with profit for both sides, respondents who try to reach a compromise or do not conflict predominate.

Table 5

**Evaluation of correlation between the groups of questions: “What prevents you and other people from solving conflicts with profit for both sides?” and “Do you try to prove your right in any conflict situation?”**

Answers		What prevents you and other people from solving conflicts with profit for both sides?		
Have you participated in a conflict situation?	Answer options	Selfishness or unwillingness to lose	A desire to prove the own right	Total
	constantly prove your right	15	3	18
	compromise or not conflict	17	13	30
	Total	32	16	48

Simultaneously with the survey of the heads of medical institutions, a survey of patients who were treated in the respective institutions was conducted.

A correlation analysis was carried out for a group of questions that were asked to the interviewed patients “Are you satisfied with the sanitary and hygienic conditions in the medical institution?” and “Are you satisfied with the results of medical care?” (Table 6). Cramer’s correlation coefficient was  $C=0.521$  ( $p<0,001$ ), which indicates an average strength of the relationship and means that the group of patients who are not satisfied with the sanitary and hygienic conditions are often also dissatisfied with the results of medical care and, respectively, vice versa.

A weak connection (Table 7) was established when calculating the Cramer’s correlation coefficient  $C=0.225$  ( $p<0,001$ ) among patient respondents for the group of questions – “Have you ever had a conflict?” and “Are you satisfied with the results of medical care?”. Therefore, it is not possible to claim that only those patients who are not satisfied with the results of medical care are in conflict.

The calculated Cramer’s correlation coefficient  $C=0.208$  ( $p<0,001$ ) for the group of questions that were asked to patients: “Have you ever had a conflict?” and “Are you satisfied with the sanitary and hygienic conditions in the medical facility?” showed a weak connection between

Table 6

Evaluation of the correlation between the groups of questions: “Are you satisfied with the sanitary and hygienic conditions in the medical institution?” and “Are you satisfied with the results of medical care?”

Answers		Are you satisfied with the sanitary and hygienic conditions in the medical institution?		
Are you satisfied with the results of medical care?	Answer options	Unsatisfied	Satisfied	Total
	Unsatisfied	766	159	925
	Satisfied	51	170	221
	Total	817	329	1146

Table 7

Evaluation of the correlation between the groups of questions: “Have you ever had a conflict?” and “Are you satisfied with the results of the medical care?”

Answers		Have you ever had a conflict?		
Are you satisfied with the results of provided medical care?	Answer options	Yes, I have	No, I have not	Total
	Unsatisfied	477	333	810
	Satisfied	116	220	336
	Total	593	553	1146

them (Table 8), which can only indicate that there is a conflict not only among patients who are dissatisfied with sanitary and hygienic conditions.

Table 8

Evaluation of the correlation between the groups of questions: “Have you ever had a conflict?” and “Are you satisfied with the sanitary and hygienic conditions in the medical facility?”

Answers		Have you ever had a conflict?		
Are you satisfied with the sanitary and hygienic conditions in the medical facility?	Answer options	Yes, I have	No, I have not	Total
	Unsatisfied	520	394	914
	Satisfied	73	159	232
	Total	593	553	1146

In additions, a weak connection (Table 9) was obtained when calculating the Cramer’s correlation coefficient  $C=0.247$  ( $p<0.001$ ) for the next block of questions – “How much time do you usually spend in line at the doctor?” and “Are you satisfied with the results of medical care?”. The obtained result shows that the patients who usually waited in queues for more than half an hour, are, respectively, also dissatisfied with the results of medical care and vice versa.

In recent decades, the rate of medical conflicts has increased dramatically all over the world [12]. The number of conflict situations has increased more than threefold [13]. Such a rapid increase in conflicts in medicine was observed not only in European and American countries, but also in Asian countries, such as Japan, where a 10-fold increase in medical malpractice lawsuits was reported [14].

Table 9

Evaluation of the correlation between the groups of questions: “How much time do you usually spend in line at the doctor?” and “Are you satisfied with the results of the medical care provided to you?”

Answers		How much time do you usually spend in line to the doctor?		
Are you satisfied with the results of the medical care provided to you?	Answer options	5–15 minutes	Half an hour or more	Total
	Unsatisfied	135	682	817
	Satisfied	130	199	329
	Total	265	881	1146

The number of medical disputes has increased rapidly since the beginning of the 21st century in all European countries, including Ukraine, due to the mismatch between demand and supply for medical services and the growing awareness of patients about their rights, as well as the imperfection of the legal system. So, the disharmony in the relationship between the doctor and the patient was not just a medical problem, but turned into a crucial social issue. Medical disputes are defined as a patient’s proposal in exchange for an argument that may or may not be related to a medical error. Usually, a medical dispute begins when a patient claims, that doctors are not fulfilling their duties in medical practice, and symptoms worsen or death occurs as a result of their negligence [15; 16]. Medical disputes include medical malpractice, medical lawsuits and medical mistakes.

The management of conflicts between the doctor and the patient consists of several stages and is long-term [17; 18]. Only by direct participating in the process, we can provide a full understanding of the information about the conflict between the doctor and the patient and avoid further conflicts caused by asymmetry of information [19]. In the process of doctor–patient dispute settlement, the communication and exchange between multiple actors on dispute settlement measures can not only enrich the information and requirements related to dispute settlement, improve the rationality and scientific nature of dispute settlement measures, but also better help each participant. Due to the specificity of doctor-patient disputes and the main thinking of people, as well as the protection of people’s fundamental interests, the protection of the legal rights and interests of both doctors and patients is undoubtedly the main goal of doctor-patient dispute settlement [20].

**Conclusions.** In today’s world, it is necessary to constantly pay attention to conflicts and disputes between the doctor and the patient. Lack of government supervision, inadequate hospital management, insufficient medical resources, inappropriate behavior of doctors and nurses, errors of doctors in diagnosis and treatment, and subjective dissatisfaction of patients are important factors causing conflicts between doctors and patients. This is proved by the assessment of the correlation in our research. As for doctors, it showed that conflicts often arise in the team, and doctors of various specialties actively participate in them. As for patients, it was established that only those patients who are dissatisfied with the results of treatment usually have medical care conflicts.

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Електронна адреса для листування [biduchak.anzhela@bsmu.edu.ua](mailto:biduchak.anzhela@bsmu.edu.ua)