
LEVEL OF CONFLICT IN PUBLIC HOSPITALS

Ekaterina RaykovaFaculty of Public Health, Medical University, Plovdiv, Bulgaria, ekaterina_raikova@abv.bg**Maria Semerdjieva**Faculty of Public Health, Medical University, Plovdiv, Bulgaria, msemerdjieva@abv.bg

Abstract: Hospital conflicts arise in the process of joint work. They may have a negative impact both on medical professionals and teams providing medical care, but they may also provoke a positive effect in the activity of the medical establishment. The level of conflict is an essential indicator reflecting the actual and potential conflicting relationships in the working teams. Systematic tracking of conflict helps to identify actual and potential conflicting relationships and to implement effective measures to solve them and prevent their negative consequences. **Purpose:** The purpose of the study is to assess the level of conflict in teams providing medical care. **Material and methods:** By means of direct individual poll was studied the opinion of 302 medical employees at four general hospitals on the territory of the town of Plovdiv and town of Asenovgrad, Bulgaria. Of all respondents, 223 (73.8±2.53%) were healthcare specialists and 79 (26.2±2.53%) were physicians.

A. Velichkov's Questionnaire for Assessment of Conflicting Relationships in the Organization was used to assess the extent of impaired relationships at the workplace and to determine the existing level of conflict in hospitals. The data were analyzed using descriptive statistics and non-parametric analysis at a significance level for the null hypothesis $p < 0.05$. The statistical analysis was performed using SPSS v. 16.

Results: Medical professionals evaluated the working environment in hospitals as highly conflicting. The assessment of relationships between medical professionals showed that high levels of conflict are predominant in men than in women. There is a tendency to reduce the level of conflict with the increase of age and service of the medical professionals. **Conclusion:** The level of conflicting relationships that has been established indicates that medical professionals face a high risk of real conflict when practicing their profession. The data are indicative of the presence of unsolved or inadequately managed conflicts in teams providing medical care, which are determined by sex and age. This finding implies that given the specificity of the profession they pursue – a high-risk profession, medical professionals work in a situation of permanent conflict. In the event of an objective problematic situation or threat, they actively enter into conflict.

Keywords: level of conflict, medical specialists, hospital

I. INTRODUCTION

Hospital conflicts arise in the process of joint work. They may have a negative impact both on medical professionals and teams providing medical care, but they may also provoke a positive effect in the activity of the medical establishment [1, 2, 3, 4, 5, 6, 7]. The level of conflict is an essential indicator reflecting the actual and potential conflicting relationships in the working teams [1, 8, 9, 10, 11, 12, 13,14,15]. Systematic tracking of conflict helps to identify actual and potential conflicting relationships and to implement effective measures to solve them and prevent their negative consequences.

2. PURPOSE

The purpose of the study is to assess the level of conflict in teams providing medical care in hospital.

3. MATERIAL AND METHODS

By means of direct individual poll was studied the opinion of 302 medical employees at four general hospitals on the territory of the town of Plovdiv and town of Asenovgrad, Bulgaria in the period January 2014 - April 2014. A. Velichkov's Questionnaire for Assessment of Conflicting Relationships in the Organization was used to assess the extent of impaired relationships at the workplace and to determine the existing level of conflict in hospitals.

The instrument is designed to diagnose conflicts within the organization. It comprises of 16 questions, evaluated according to Likert's 5-grade scale, on the frequency of conflicting interactions described in them. The proposed instrument is validated by the author for the Bulgarian population and application in organizations. The questionnaire proved to have a high internal consistency (Cronbach's $\alpha=0.91$) based on a study held in an organizational environment [8]. The three-grade scale proposed by the author was used to determine the level of conflict. High degree is associated with the presence of conflicts, medium one is an indicator of impaired relationships, while low values reveal lack of conflicts in the organization. The data were analyzed using descriptive

statistics and non-parametric analysis at a significance level for the null hypothesis $p < 0.05$. The statistical analysis was performed using SPSS v. 16.

4. RESULTS AND DISCUSSION

In the study are included medical employees divided into categories personnel as follows: healthcare specialists (HCS) – $73.8 \pm 2.53\%$, physicians $26.2 \pm 2.53\%$. The main part of the interviewed are medical professionals occupying executive positions – $82.1 \pm 2.21\%$, and $17.9 \pm 2.21\%$ and $17.9 \pm 2.21\%$ are managing personnel. As a whole in the researched contingent dominate women – $86.8 \pm 1.95\%$ versus men – $13.2 \pm 1.95\%$. The average age of the contingent observed is 44.3 ± 0.62 years. The average duration of the work experience is $21,7 \pm 0,65$ years.

The assessment for the presence of conflict relationships was determined for each surveyed person; the aggregated data are presented in figure 1.

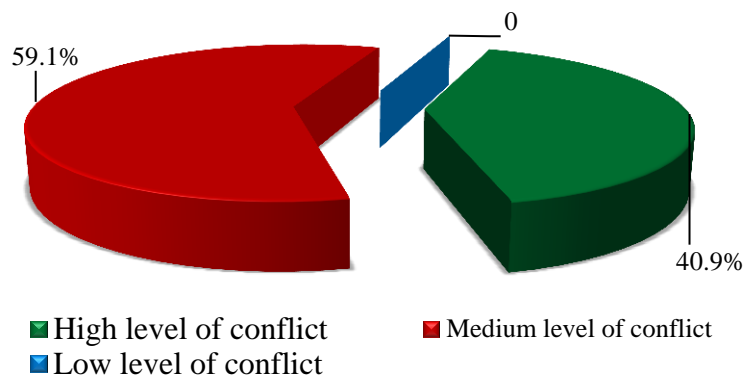


Figure 1. General level of conflict among medical professionals (n=301)

In the analysis of the level of conflict, it was found out that the medical professionals perceived their real working environment as *relatively* conflicting ($59.1 \pm 2.83\%$) and *highly* conflicting – $40.9 \pm 2.83\%$.

Significant differences between the *medium* and *high* level of conflictogenic situation were identified - $P < 0.01$.

In this regard, it is necessary to point out that none of the respondents reported a *low level of conflict*.

The results presented in figure 1 demonstrated that conflicts were a serious problem to a large number of medical professionals; they also illustrated the presence of impaired relationships and conflictogenic environment in the teams providing medical care. This assessment could be regarded as an indicator that determines the need for adequate measures to be taken to reduce the level of conflict relationships in order to optimize the activity of medical professionals.

Upon closer examination of the situation, there were also percentage differences between the *high* and *medium* level of conflictogenic situation in both professional groups – physicians and healthcare specialists (figure 2).

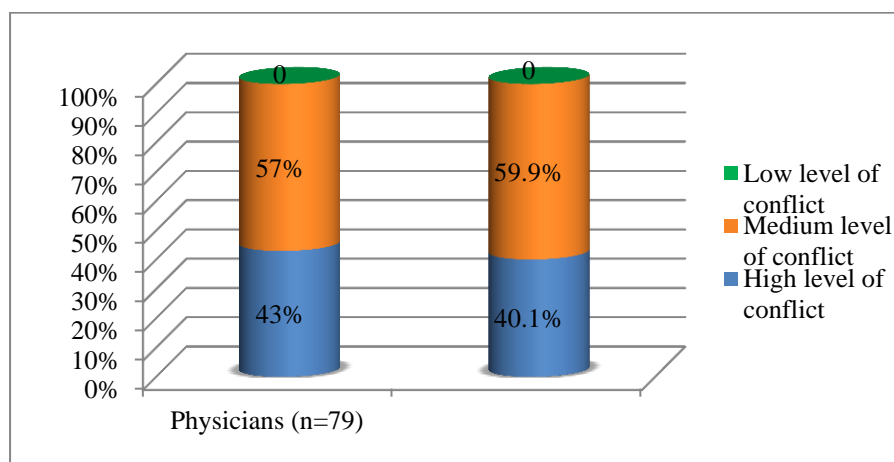


Figure 2. Relative shares of level of conflict in physicians and healthcare specialists

High level was more pronounced in physicians (43.0±5.57%) although no significant differences were found ($u=1.77, P > 0.5$).

Medium level (59.9 ± 3.29%) prevailed in healthcare specialists, although significant differences were identified between the *medium* and *high* level of conflict relationships ($u=4.26, P<0.01$)

The comparison between both professional groups showed no statistically significant differences – $P>0.05$ ($\chi^2=0.21$).

The findings in this study were comparable to the study of F. R. Ardalan & S. Valiee (2017), who found out that the *medium* level of conflict dominated in the professional group of nurses [10]. Similar results were observed in other studies [9,15,16]. In terms of nurses, however, V. V. Maslyakov, I. V. Levina, S. A. Romanova and N. M. Nehotyashaya (2014), found out the following: *high* level of conflict 68%, *medium* level – 20% and *low* level – 12% [14].

It should be pointed out that the assessment of the level of conflict in the above studies was carried out with a questionnaire which was different from the one used in this study.

When comparing the assessments for the presence of conflict relationships in this study, significant differences were found in the relative shares of *high* and *medium* level in both sexes – $P<0.01$ ($\chi^2=14.19$) (figure 3).

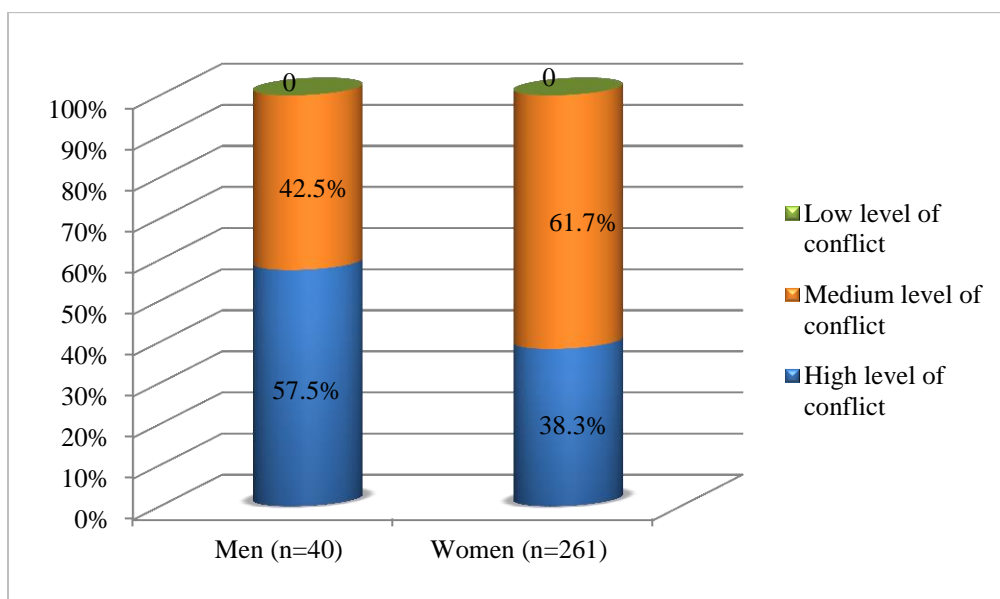


Figure 3. Relative shares of level of conflict in medical professionals from both genders

High level of conflict was more pronounced in men (57.5±4.94%), while *medium* one - in women (61.7±3.01%).

Based on the differences found out between men and women, it may be assumed that their manifestation in this case depended on how the conflict was perceived. Studies, which have demonstrated that gender-stereotyped concepts are activated when assessing a real conflict situation, also confirm that [2,7,17].

Upon examining the level of conflict, statistically significant differences were found with regard to the **age** factor - $P<0.01$ ($\chi^2=13.93$).

The results of the surveyed medical professionals showed predominantly *high* level of conflict in the age group up to 30 years (55.6 ± 9.57%) and from 31 to 40 years (47.6 ± 5.15%). After this age period a gradual decrease in *high* levels of conflictogenic environment was observed. *Medium* levels of conflict were inversely proportional, i.e. they increased with the increase of age. The oldest respondents showed the highest *medium* levels of conflict, respectively, from 51 to 60 years – 73.8 ± 4.92%, and above 61 years – 83.3 ± 10.76%, in comparison to those from the other age groups. With increase of age, lower *medium* levels were reported at the expense of the *high* ones.

When comparing the assessments of the degree of conflict relationships, differences were found that depended on **the professional experience** of the respondents – $P<0.01$ ($\chi^2=14.19$) (table 1).

Table 1 . Effect of work experience on the level of conflict

Level of conflict	Work experience												Total		
	> 10 years			11-20 years			21-30 years			> 31 years					
	n	%	Sp	n	%	Sp	n	%	Sp	n	%	Sp	n	%	Sp
High	25	55.6	7.40	41	46.1	5.28	24	33.8	5.61	18	24.7	5.05	108	38.8	2.92
Medium	20	44.4	7.40	48	53.9	5.28	47	66.2	5.61	55	75.3	5.05	170	61.2	2.92
Low	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	45	100.0	-	89	100.0	-	71	100.0	-	73	100.0	-	278	100.0	-

High levels of conflict were characteristic for the first 10 years of work experience of medical professionals. However, there was a gradual decrease in the *high* level of conflictogenic environment with the increase of professional experience, while the most pronounced change was observed in people with over 30 years of experience - twice less than those who were less experienced (24.7±5.05%). In the analysis of *medium* levels of conflict, it was found out that the highest *medium* levels were demonstrated by respondents with 21 to 30 years of experience (66.2±5.61) and over 31 years of experience (75.3±5.05%), in comparison to their younger colleagues – $P < 0.01$ ($\chi^2=14.19$).

The analysis of data on work experience and age showed a distinct declining tendency in the level of conflict with the increase of age and service. The manifestation of this tendency can be explained by the fact that, with the increase of age and service medical professionals, on the one hand, improve their skills for non-conflict interaction and, on the other hand, they are likely to successfully avoid collisions in the workplace.

Defining workplace relationships as conflict ones is also linked to the respondents' belonging to a certain level in the hospital hierarchical structure (figure 4).

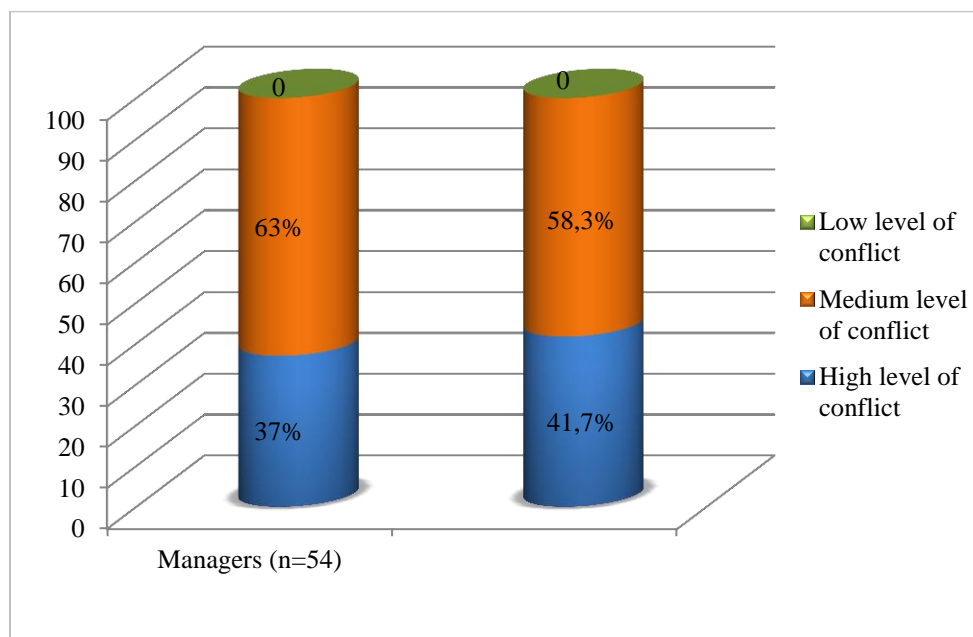


Figure 4. Level of conflict according to the hierarchical status of medical professionals

The analysis of data showed that the highest percentage of *medium* levels of conflict was among managers – 63.0±6.57%, in comparison to regular employees where the percentage was 58.3±6.57%. Inversely proportional dependence was found in the assessments of *high levels* of conflict relationships.

Medical professionals occupying executive positions, 41.7±3.14%, evaluated their workplace environment as *highly* conflictogenic, while for those occupying managerial positions this percentage was 37.0±3.14%.

Therefore, the *high* level of conflict was more pronounced in medical professionals performing executive functions (41.7±3.14%), while the medium one was typical for managers (63.0 ± 6.57%). No statistically significant difference was found in comparing the levels of conflict between medical professional performing managerial functions and those performing executive functions - $P > 0.05$ ($\chi^2=0.40$).

Although statistically insignificant, these data confirm the existence of a serious and significantly marked degree of conflict relationships, which means that there are unsolved as well as inadequately managed conflicts between the members of the teams providing medical care and their managers. This is also an indicator of insufficient ability of medical professionals to optimally deal with conflict situations - a circumstance that leads to a decrease in the efficiency of their activity.

5. FINDINGS

Medical professionals evaluated the working environment in hospitals as highly conflicting. The assessment of relationships between medical professionals showed that high levels of conflict are predominant in men than in women. There is a tendency to reduce the level of conflict with the increase of age and service of the medical professionals.

6. CONCLUSION

The level of conflicting relationships that has been established indicates that medical professionals face a high risk of real conflict when practicing their profession. The data are indicative of the presence of unsolved or inadequately managed conflicts in teams providing medical care, which are determined by sex and age. This finding implies that given the specificity of the profession they pursue – a high-risk profession, medical professionals work in a situation of permanent conflict. In the event of an objective problematic situation or threat, they actively enter into conflict.

REFERENCES

- Almost, J., Doran, D. M., McGillis Hall, L., & Spense Lashinger H. K. (2010). Antecedents and consequences of intra-group conflict among nurses. *Journal of nursing management*, 18(8), 981-992. DOI: [10.1111/j.1365-2834.2010.01154.x](https://doi.org/10.1111/j.1365-2834.2010.01154.x).
- Ardalan, F., Valiee, R., & Valiee, S. (2017). The level of job conflicts and its management styles from the viewpoint of Iranian nurses. *Nursing Practice Today*, 4(1), 44-51. Retrieved from: <http://npt.tums.ac.ir/index.php/npt/article/view/221>.
- Attri, J. P., Sandhu, G. K., Mohan, B., Bala, N., Sandhu, K. S., & Bansal, L. (2015). Conflicts in operating room: Focus on causes and resolution. *Saudi journal of anaesthesia*, 9(4), 457. Doi: [10.4103/1658-354X.159476](https://doi.org/10.4103/1658-354X.159476).
- Barki, H., & Hartwick, J. (2004). Conceptualizing the construct of interpersonal conflict. *International journal of conflict management*, 15(3), 216-244. DOI: [10.1108/eb022913](https://doi.org/10.1108/eb022913)
- Bear, J. B., Weingart, L. R., & Todorova, G. (2014). Gender and the emotional experience of relationship conflict: The differential effectiveness of avoidant conflict management. *Negotiation and Conflict Management Research*, 7(4), 213-231. Retrieved from: <https://doi.org/10.1111/ncmr.12039>.
- Dijkstra, M. T., Beersma, B., & Evers, A. (2011). Reducing conflict-related employee strain: The benefits of an internal locus of control and a problem-solving conflict management strategy. *Work & Stress*, 25(2), 167-184. DOI: [10.1080/02678373.2011.593344](https://doi.org/10.1080/02678373.2011.593344).
- El-Hosany, W. A. (2016). Interpersonal conflict, job satisfaction, and team effectiveness among nurses at Ismailia General Hospital. *Journal of Nursing Education and Practice*, 7(3), 115. Doi: <https://doi.org/10.5430/jnep.v7n3p115>.
- El-Hosany, W. A. (2016). Interpersonal conflict, job satisfaction, and team effectiveness among nurses at Ismailia General Hospital. *Journal of Nursing Education and Practice*, 7(3), 115. DOI: <https://doi.org/10.5430/jnep.v7n3p115>.
- Higazee, M. Z. A. (2015). Types and levels of conflicts experienced by nurses in the hospital settings. *Health Science Journal*, 9(6), 1. Retrieved from: <http://www.hsj.gr/medicine/types-and-levels-of-conflicts-experienced-by-nurses-in-the-hospital-settings.php?aid=7838>.

-
- Il'nykh, S.A. (2013). Gendernyye stereotipy: effekt, shablona, prayminga, ustoychivosti. Scientific research and their practical application. *Modern state and ways of development. October 1-12*. Retrieved from: <http://www.sworld.com.ua/index.php/ru/pedagogy-psychology-and-sociology-313/special-and-industrial-sociology-313/18818-313-0836>.
- Kumpikaite, V., Kondrotiene, Z., Taraskevicius, A (2011). Negative Aspects of Conflicts in Health Care Sector in Lithuania. *3rd International Conference on Advanced Management Science IPEDR, Singapore: IACSIT Press*, 19, 41-45.
- Polyzou, M., & Tsiotras, G. (2018). Analysis of Determinant Factors of Conflict in Greek Hospitals. *International Journal of Caring Sciences*, 11(2). Retrieved from: <http://www.internationaljournalofcaringsciences.org/Issue.aspx?issueID=48&pageIndex=0&pageReason=0>
- Volchansky, M.E. (2008). Sotsiologiya konflikta v meditsine. Volgograd: Volgogradskiy gosudarstvennyy meditsinskiy universitet. Retrieved from: <https://search.rsl.ru>.
- Velichkov, A. Metod za otsenka na konfliktni otnosheniya v organizatsiyata. V: Velichkov A, Radoslavova M. Metodi za psikhodiagnostika. Sofiya: „PANDORA PRIM“; 2005;151-56. (Bulgarian).
- Gostev, A.N., & Demchenko, T.S. (2013). Organizatsionnyy konflikt: sotsiologicheskiy aspekt. Moskva: SGU; 2013.
- Maslyakov, V.V., Levina, V.A., Romanova, I.V., Nekhotyashchaya, N. M. (2014). Organizatsiya sozdaniya blagopriyatnogo mikroklimata v kollektive meditsinskikh sester s tsel'yu preduprezhdeniya konfliktnykh situatsiy. *Vestnik novykh meditsinskikh tekhnologiy*, 8(1). DOI: 10.12737/5687.
- Stupak, V.S., & Podvornaya, Y.E.V. (2014). Problemy upravleniya konfliktnoy situatsiyey v srede meditsinskikh rabotnikov. *III Mezhdunarodnoy nauchnoy konferentsii „Novyye zadachi sovremennoy meditsiny“; Sankt Peterburg*, 99-102. Retrieved from: <https://moluch.ru/conf/med/archive/153/6076/>.