

IMPACT OF ORGANIZATIONAL CULTURE ON WORK ENVIRONMENT AND QUALITY

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Abstract The aim of this work is to demonstrate the influence of culture in healthcare organizations on the quality of healthcare services. For the organization of health care, the key factor is to improve the quality of health services. Which consist of the following components: patient care, patient safety and patient satisfaction. The quality of health care delivery consists of two components: a clinical component and a psychoemotional component. These two components can be simultaneously positively influenced by the culture of the organization, while the culture aimed at improving quality can not only positively influence the components of the quality of medical care, safety, satisfaction, but also positively influence the working environment within the organization. Leading to employee satisfaction, reduced stress, burnout, and employee turnover. The review is based on materials from Scopus, Web of Science, CHINAL, PubMed and Sage databases. Several cultural influences such as excellence in care delivery, ethical values, involvement, professionalism, value-for-money, cost of care, commitment to quality and strategic thinking were found to be key cultural determinants in quality care delivery.

Keywords::

health services, a healthy work environment, quality of care, organizational culture.

1 Introduction

Health care processes are becoming increasingly popular (Wright, Gardner, Monynihan, & Allen, 2005). Healthcare is now the world's largest industry by value and outperforms the banking sector by three times (Ramadevi, Gunasekaran, Roy, Rai, & Senthilkumar, 2016). However, the authors report that risk, error, adverse events, and critical incidents are always present in healthcare delivery and undermine safety and quality (Attree & Newbold, 2009).

This is due to the fact that modern healthcare faces serious challenges that exacerbate the state of affairs, namely the demographic crisis, population aging, the growth of chronic diseases, the introduction of modern technologies (La Salle, 2019). In their work, clinicians must cope with multiple requirements: clinical requirements (eg, treating patients), academic requirements (eg, learning new technologies), and administrative requirements (eg, the need to consider financial considerations when treating patients) (Salyers, Fukui, Rollins, Firmin, & Gearhart, 2015). Therefore, the burden on the medical staff increases, which exceeds their capabilities and resources to perform their duties, which contributes to stress (Lazarus, 1999). Workplace stress has become a major problem as its effects can have a profound effect on organizations and their employees (Barling, Kelloway, & Frone, 2005). This depletion of resources leads to burnout over time. Burnout is a progressive psychological response to chronic job stress associated with emotional exhaustion, depersonalization, and anxiety (Maslach & Jackson, 1981). This leads to medical negligence (Chen, Yang, Lien, Chiou, & Lin, 2013), emotional distress, absenteeism, reduced personal performance, and most importantly, reduced quality of care (Kushnir & Cohen, 2006). Burnout increases the intention of employees to leave or retire early (Shanafelt, Raymond, Kosty, Satele, & Horn, 2014), which can lead to actual employee turnover and reduced productivity (Dewa, Loong, Bonato, Thanh, & Jacobs, 2014; Shanafelt, et al., 2016). These effects negatively affect patient care (Van Bogaert, et al., 2014) and patient satisfaction (Weng, et al., 2011), as well as increase medical errors (Shanafelt, et al., 2010), infection rates (Cimiotti, Aiken, Sloane, & Wu, 2012) and even patient mortality (Welp, Meier, & Manser, 2015).

At the same time, the quality and safety of patients plays a major role in healthcare organizations (Carney, A strategic consensus model for not-for-profit organizations, 2002). The quality of service consists of a clinical aspect: hospitalization, nutrition, functional state, as well as a social aspect: care, empathy, compassion. In other words, the interpersonal relationship between health care staff and patients (Davies, Nutley, & Mannion, 2000) and the way health care or care is delivered affect the quality and satisfaction of patients (Jung, Scott, Davies, Bower, & Mannion, 2009).

Research in recent decades has shown that organizational culture is very important for effective management and achievement of goals. Scholars from various disciplines have identified the phenomenon of organizational culture as the driving force behind the success or failure of organizations (Cameron, 2008). There is growing evidence that culture plays a key role in achieving organizational results and determining strategies, goals, and practices, and that this is associated with less job stress, less staff turnover, and low patient side effects (Gershon, Stone, Bakken, & Larson, 2004). Organizational culture is extremely important, especially for healthcare organizations, as they are labor intensive and very demanding in providing high quality medical care to patients. As noted by Braithwaite et al. (2017), organizational culture is directly related to the quality of care (Braithwaite, Herkes, Ludlow, Testa, & Lamprell, 2017). A relationship-oriented organizational culture is an advantage for healthcare organizations. This is because health care organizations with this culture are balanced by meeting the needs of staff and patients with the achievement of organizational goals (Prodromou & Papageorgiou, 2020).

2 Theoretical part of research work

It is important to understand the impact of organizational culture as cultural values pervade all aspects of organizational life, even in the absence of physical management (Banaszak-Holl, Castle, Lin, Shrivastwa, & Spreitzer, 2015). Part of an effective organizational culture, especially in healthcare organizations, is a work environment in which employees maintain positive relationships with each other, which in turn helps achieve personal satisfaction while at the same time achieving organizational goals (Coeling, 1992). Organizational culture is a definition that is used to describe the general beliefs, perceptions, and expectations of people in organizations. As defined by Schein (1992), organizational culture is “a pattern of common underlying assumptions that a group has learned in solving its problems of

external adaptation and internal integration, which have worked well enough to be considered valid and, therefore, should be passed on to new members. as the right way to perceive, think and feel about these issues.” (Schein, 1992). There are several types of organizational culture, but health care organizations are characterized by a constructive organizational culture (Glisson & James, 2002). Constructive cultures are characterized by values, beliefs, and general behavioral expectations that are associated with the satisfaction of higher-level needs (such as motivation and support) and are typically found in more successful organizations (Martin, Peters, & Glisson, 1998).

According to the authors, in healthcare organizations, organizational culture should have the following characteristics: a favorable environment, a team-oriented organization, information is freely distributed among employees, a high level of support from the employee organization, innovation, and the organization must be flexible. Results-oriented employees are focused on high-quality results, stability, a sense of security and minimization of conflicts in a comfortable workplace (Bellou, 2008).

Using the example of Baptist Hospital, Florida, one can trace the influence of organizational culture on the performance of healthcare organizations, using group culture, empowerment and cultivating quality care has allowed it to become one of the best healthcare systems in America (Prodromou & Papageorgiou, 2020). Another example of cultural transformation can be found at Griffin Hospital, when the institution was transformed from a bureaucratic organization to a patient-centered organizational culture. As a result, employee and patient satisfaction increased, staff turnover decreased, and Griffin became highly competitive (Flarey, 1993). Data was collected from 11 nursing homes in the Netherlands and it was found that better care was provided in settings characterized by a group culture. Staff interacted more closely with patients and responded more quickly to their needs (Van Beek & Gerritsen, 2010). Killett et al. conducted a study in 11 nursing homes in the UK and determined that organizational culture has an important influence on the quality of care and patient satisfaction (Killett, et al., 2016).

Culture plays a leading role in the management of a healthcare organization and is a complex multi-component element of organization management that can influence the quality of medical services. Since the culture creates a positive atmosphere within the organization itself, it reduces the risk of stress, burnout and staff turnover, which leads to an increase in the quality of medical services for patients.

3 Research question

RQ: How can culture change the work environment and quality of care in a healthcare organisations?

4 Research methodology

A descriptive research method of work and a systematic approach to searching for literature were used when constructing the theoretical part of the research work (Sekaran & Bougie, 2016). In addition, a descriptive review was carried out to establish how the culture in the organization influences a healthy work environment and the quality of medical care. This section describes the literature search methodology.

4.1 Research methods

In the paper, we carried out a systematic review, followed by a thematic synthesis (Thomas & Harden, 2008). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed for reporting (Page, McKenzie, Bossuyt, Boutron, & Hoffmann, 2020).

4.2 Research strategy

We searched the literature in the following databases systematically: **Scopus, Web of Science, CHINAL, PubMed, Sage**. We also searched for the grey literature via hand-searching. In the search we used the following keywords: healthcare or health services, a healthy work environment, quality of care, organizational culture with the help of the Boolean operators (AND, OR). The search strategy was: ("health services" OR healthcare) AND ("healthy work environment" OR "healthy workplace") AND "quality of care" AND "organizational culture". The background for this

work was research articles in English published up to January 2022 that focus on how the culture in the organization influences a healthy work environment and the quality of medical care (Table 4.1, 4.2).

Table 1: Inclusion and exclusion criteria for the literature search

Databases:	Scopus, Web of Science, CHINAL, PubMed, Sage	
	Inclusion criteria	Exclusion criteria
Population:	Healthcare professionals	Patients; Care partner, public
Intervention / treatment	How organizational culture affects a healthy work environment in healthcare settings.	Articles do not assess the organizational culture affects a healthy work environment in healthcare settings.
Outcomes	Articles assess based on the impact of organizational culture on a healthy work environment in healthcare settings.	Articles do not assess the impact of organizational culture on a healthy work environment in healthcare settings.
Types of research:	Quantitative research, qualitative research, research of mixed methods	Systematic reviews or other types of transparent articles and duplicates, protocols, conferences, editorials and not research articles.
	Limits	
Time frame	Until January 2022	
Language	English	

Table 2: International database lookup table

Data base	Keywords and synonyms with Boolean operators	Limits used	Results	Date
Scopus	("health services " OR healthcare) AND ("healthy work environment" OR "healthy workplace") AND "quality of care" AND "organizational culture"	Language: English Time frame: Until January 2022 Types of articles: quantitative research, qualitative research, research of mixed methods	90	18.01.2022
Web of Science	("health services " OR healthcare) AND ("healthy work environment" OR "healthy workplace") AND "quality of care" AND "organizational culture"	Language: English Time frame: Until January 2022 Types of articles: quantitative research, qualitative research, research of mixed methods	42	18.01.2022
CHINAL	("health services " OR healthcare) AND ("healthy work environment" OR "healthy workplace") AND "quality of care" AND "organizational culture"	Language: English Time frame: Until January 2022 Types of articles: quantitative research, qualitative research, research of mixed methods	598	18.01.2022
PubMed	("health services " OR healthcare) AND ("healthy work environment" OR "healthy workplace") AND "quality of care" AND "organizational culture"	Language: English Time frame Until January 2022 Types of articles: quantitative research, qualitative research, research of mixed methods	5	18.01.2022
Sage	("health services " OR healthcare) AND ("healthy work environment" OR "healthy workplace") AND "quality of care" AND "organizational culture"	Language: English Time frame Until January 2022 Types of articles: quantitative research, qualitative research, research of mixed methods	64	18.01.2022

The extraction of final selection data included authors, year, country, purpose, Research methodology/methods, sample, and main findings. Disagreements were resolved based on discussion and consensus. Data synthesis was made based on a thematic theoretical framework (Thomas & Harden, 2008). By following the steps, we first synthesised the data obtained from the final selection of transparent articles. We organised them into a descriptive primary sub-theme and analysed them to develop a secondary theme. All research team members will review the thematic synthesis, and any disagreements will be resolved through discussion and consensus.

5 Results

5.1 Results of the literature review

Seven hundred ninety-nine records were retrieved from the Scopus, Web of Science, CHINAL, PubMed, Sage databases. We also searched for articles in other sources (grey literature) using a manual search and found 36 articles. With the help of the Mendeley program, 40 duplicates were eliminated. After reading the titles of the articles, 745 articles were excluded because they did not meet the literature selection criteria. 50 articles are left for further evaluation. The following 35 articles were excluded after reading the abstract of the article. It was necessary to become acquainted with 10 works in total. Figure 5.1 shows the exact sequence of the article selection process, excluding articles at each search stage. In conclusion, ten studies were selected for further work, which provided answers to the research questions of this work.

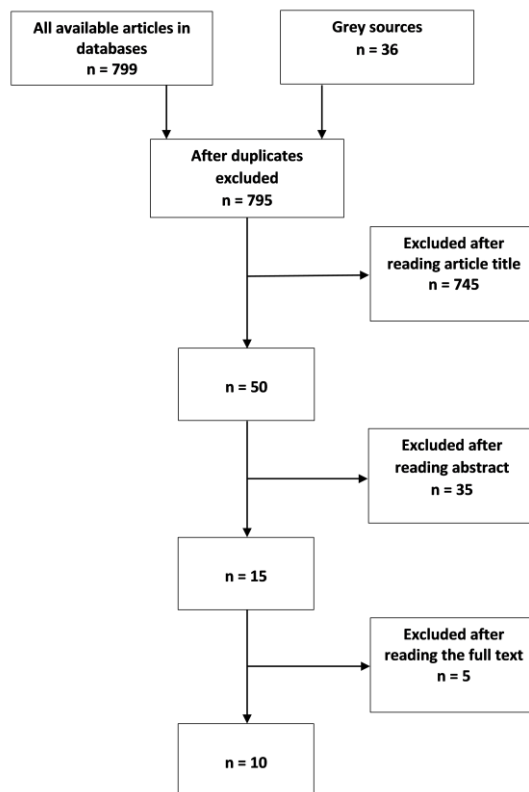


Figure 1: Flowchart for finding relevant articles

5.2 Analysis of identified sources

Of the ten included studies, two were conducted in Canada, one in Taiwan, one in Ireland, one in Brasilia, one in USA, one in Kuwait, one in England, one in Pakistan and one in the Republic of Malawi. Two of these studies were cross-sectional, three were quantitative, one was qualitative and four were mixed-method studies. The study sample consisted of nurses (n = 2), healthcare workers (n = 3), managers (n = 4), administrators (n = 2). The main interests of the articles under consideration were: The relationship between organizational culture and a healthy work environment and the quality of care provided (Table 5.1).

Table 3: An overview of studies' characteristics, outcome definitions and main findings

Author Year Country	Methods	Aim	Sample Size	Main Result
AlFadhlah, & Elamir 2021 Kuwait	Cross-sectional and retrospective quantitative approaches	To investigate the organizational culture, assess the quality of care, and measure transformational organizational culture and the quality of care	n = 1626 (healthcare workers)	The prevailing transformational leadership style creates and maintains a transformational organizational culture. The effect of transformational leadership on the quality of care delivered by the organization was measured in this study, and showed a positive and nonsignificant relationship between generic quality indicators and the transformational style
Banaszak-Holl, Castle, Lin, Shrivastwa, & Spreitzer 2015 USA	Quantitative	How organizational culture in nursing homes affects staff turnover?	n = 419 (administrators)	Organizational culture had differential effects on the turnover of Registered Nurse, Licensed Practice Nurse, and nursing aide staff that should be addressed in developing culture-change strategies. More flexible organizational culture values were important for Licensed Practice Nurse staff only, whereas unexpectedly, greater emphasis on rigid internal rules helped facilities retain Registered Nurses. Facilities with a stronger focus on customer needs had higher turnover among all staff.
Bernardes, et al. 2020 Canada	Quantitative data approach	To investigate relationships among flexible and hierarchical organizational cultures, quality improvement domains, and authentic leadership competencies in Canadian healthcare facilities	n = 226 (nurse managers)	Flexible organizational cultures influence the adoption of authentic leadership, participatory management model and also improves quality.
Carney 2011 Ireland	Qualitative method	The purpose of this paper is to identify if aspects of organizational culture may indicate a new terrain in the cultural influences-quality healthcare relationship	n = 50 (professional clinician and non-clinician managers)	Several cultural influences such as excellence in care delivery, ethical values, involvement, professionalism, value-for-money, cost of care, commitment to quality and strategic thinking were found to be key cultural determinants in quality care delivery.
Jacobs et al. 2013 England	Cross sectional survey	Relationship between senior management team culture and organizational performance in English acute hospitals	n = 899 managers n = 826 managers n = 739 managers	The study provides evidence for a relationship between culture and performance in hospital settings.

Mahl, et al. 2015 Canada	Combined cross-sectional survey and retrospective cohort study	Is organizational culture related to the implementation of quality improvement as well as outcomes in neonatal care?	n = 1.113 (health care professionals)	Our data suggest that organizational culture, particularly hierarchical culture, and level of quality improvement implementation may play a role in neonatal outcomes
Liou & Dellmann Jenkins 2020 Taiwan	Quantitative and qualitative research methods	How does culture in an organization affect quality?	n = 134 (nurses, social workers, directors)	The group cultural elements, such as flexible management, teamwork environment, and sharing the same values, contributed to good care; however, the nongroup cultural elements, such as the staff-centered view, hierarchy, and conflicts within the leadership, led to negative staff-staff and staff-clients interactions.
Saleem, Shenbei, & Hanif 2020 Pakistan	Cross-sectional study	The aim of this research is to describe the effect of workplace violence on employee engagement and clarify the relationship between workplace violence, work environment, organizational culture, and employee engagement	n = 178 (employed in caring, customer care, managerial, and technology professions)	The findings underscore that a supportive work environment and positive organizational culture play a mediating role between workplace violence and employee engagement among employees.
Patterson, et al. 2021 The Republic of Malawi	Multimethod study	To demonstrate how taking a theory-centered approach can help to identify what would be necessary to foster “cultures of quality” outlined in the public health literature.	n = 121 (included facility managers) n = 16 (administrators), n = 28 (care providers), n = 18 (support staff), n = 59 (patients or their family members)	Our analysis revealed facility-level organizational cultures in which staff valued providing care, but responded to structural constraints by normalizing divergence from quality-of-care protocols. These findings indicate that sustaining a quality-oriented organizational culture requires addressing underlying conditions that generate routine experiences and practices
Vegro, Pocha, Camelo, & Garcia 2016 Brazilia	Quantitative	To assess the values and practices that characterize the organizational culture of a private hospital in the state of São Paulo in the perspective of nursing professionals	n = 21 (nurses) n = 62 (nursing aides and technicians)	In the perception of workers, despite the existence of hierarchical strictness there is cooperation at work and the institution pursues customer satisfaction and good interpersonal relationships

6 Discussion

It has been recognized that organisational culture influences the quality of care and behavior and attitudes of staff in all health and social care settings. However, the authors Liou & Dellmann-Jenkins, 2020, conducted a quantitative analysis and showed that in order to achieve high quality standards, a group culture must prevail in a medical organisation. Agile management, a collaborative environment, and

shared values are important elements of a group culture. These elements of group culture allow staff to work more autonomously, are not afraid to face difficulties in the workplace in the performance of their direct duties, as they have support among colleagues, as well as from the administration, which creates an atmosphere of security and allows employees to work more involved and get satisfaction from work, which positively affects the quality of medical care (Liou & Dellmann-Jenkins, 2020).

The authors Bernardes, et al., 2020, came to a similar conclusion by conducting a quantitative study and determined that in a medical institution where a more flexible type of culture (group or developmental) is used, high quality of medical care and patient satisfaction. And also, the group type of culture has a positive effect on the development of leadership and leaders, providing the freedom to set goals and achieve them with a creative and innovative approach, which also positively affects the quality in the healthcare organisation (Bernardes, et al., 2020).

A qualitative study conducted in Ireland by author Marie Carney, 2011, considers culture in an organisation to be a very complex and multi-component element. She also demonstrated the importance of culture in healthcare organizations and the direct impact of culture on the quality of medical services, through the following components of culture: excellence in care, identified as a key determinant by the culture of the organisation, and includes the following elements of patient safety, low risk, high standards and striving for quality excellence. The next important component is ethical values, which are denoted by trust, honesty, care, loyalty, compassion, fairness, quality, protection and dignity. Also of great importance defining culture is professionalism, participation of clinicians in the management of the organisation, strategic planning and thinking. Excellence in patient care, linked to positive value systems through an interdisciplinary team approach and the use of strategic participation, were the most important organizational cultural influences reported for optimal efficiency in delivering quality care (Carney, Influence of organizational culture on quality healthcare delivery, 2011).

Vegro, Pocha, Camelo, & Garcia, 2016, conducting qualitative research, came to similar conclusions as the authors of papers Liou & Dellmann-Jenkins, 2020 and Bernardes, et al., 2020, that a fundamental element of quality is the culture in an organisation that is able to unite and support medical staff, the ability of culture to

improve interpersonal relationships and mutual assistance of employees in the presence of a common ideology providing quality medical services, which increased the involvement of employees in the work and improved the quality of services provided and patient satisfaction (Vegro, Rocha, Camelo, & Garcia, 2016).

Culture is the first step towards creating a satisfying work environment. It is from this statement that Banaszak-Holl, Castle, Lin, Shrivastwa, & Spreitzer, 2015, proceeded in their quantitative study, which demonstrated the influence of culture on the formation of a healthy work environment. Their research demonstrates that the culture should be focused on the employees of the organisation in the first place, thus it is possible to create a favorable environment and increased productivity from employees and thus improve the quality of medical care and combat burnout and staff turnover (Banaszak-Holl, Castle, Lin, Shrivastwa, & Spreitzer, 2015).

A cross study in Kuwait shows us the relationship between transformational leadership style and the culture that leaders who use transformational leadership style create. The main feature of this culture is the creation of a healthy working environment through open and accessible communication skills, constant support in case of difficulties in the workplace, freedom of action in solving problems, which leads to increased involvement in the work process of employees and job satisfaction, which improves the quality of medical services (ALFadhlah & Elamir, 2021).

In their cross-sectional study, Jacobs et al., 2013, demonstrated a direct relationship between organisational culture and the quality of healthcare services. And they came to the conclusion that by introducing common values, beliefs and norms within the organisation, the members of the organization will form favorable communication measures that will help to interact more productively, as well as the promotion of common ethical standards that correct behavior aimed at improving efficiency, these measures allow members of the organisation to be in comfortable conditions and fruitfully interact with each other, which positively affects patient satisfaction (Jacobs , et al., 2013).

The authors from Pakistan in their study concluded, as Liou & Dellmann-Jenkins, 2020, Marie Carney, 2011, and Vegro, Pocha, Camelo, & Garcia, 2016, that the organization's culture should first of all be aimed at creating a favorable working environment and the main element of which is the productive interaction of all employees and support, the availability of assistance in cases of need, which leads to an increase in the involvement of employees in the process of providing assistance and in this way positively affects the quality of services (Saleem, Shenbei, & Hanif, 2020).

A multifunctional study was also conducted in which a relationship was drawn between leadership styles such as transformational and transactional and the quality of nursing care and patient satisfaction. Due to the fact that transformational and transactional leadership styles can create a culture of a healthy work environment, which, as noted by other authors ALFadhlah, & Elamir, 2021. In turn, a healthy work environment helps to minimize stress, burnout and staff turnover, which positively affects the quality medical services (Patterson, et al., 2021).

Similar conclusions were reached by Mahl, et al., 2015, who conducted a combined cross-sectional study in Canadian hospitals, observing how leaders, using different leadership styles, created culture in the organisation and how this was reflected in the quality of medical services. Like the authors of previous studies, ALFadhlah, & Elamir, 2021, and Patterson, et al., 2021, concluded that the transformational leadership style, due to the fact that it creates a common culture and values within the team, is able to create a favorable working environment, employee job satisfaction and more in-depth involvement in the process, which definitely positively affects the quality of medical services (Mahl, et al., 2015).

At the same time, the authors of Mahl, et al., 2015, note that the culture created by the *laissez-faire* leadership style, when each individual team member belongs to himself, there is no productive relationship between employees, can increase the level of stress, burnout and staff turnover, which will lead to only to reduce the quality of medical services. The authors of the papers ALFadhlah, & Elamir, 2021, and Patterson, et al., 2021 also came to similar results (ALFadhlah & Elamir, 2021; Patterson, et al., 2021). Even the authors of Liou & Dellmann-Jenkins, 2020, noticed that it is not a group culture, hierarchical power building and a breakdown in communications that cannot positively affect the quality of services provided, but is

an excellent basis for the development of conflicts, stress and staff burnout. A negative effect of organizational culture was also seen by Banaszak-Holl, Castle, Lin, Shrivastwa, & Spreitzer, 2015, if the organizational culture was focused only on patient satisfaction. What did not contribute to the strengthening and development of ties between employees, communication was lost or complicated, which ultimately led to conflicts and stress, and there can be no talk of patient satisfaction (Liou & Dellmann-Jenkins, 2020; Banaszak-Holl, Castle, Lin, Shrivastwa, & Spreitzer, 2015).

7 Conclusion

Our work was aimed at studying the impact of organisational culture on the quality of medical services and patient satisfaction. We can safely conclude that one of the basic elements of quality in healthcare is the culture of the organisation. However, culture is a very complex and multicomponent and multi-vector element. Since culture can improve the quality of medical services, it can also nullify all the efforts of staff in the provision of medical services, lead to conflicts, stress, burnout and staff turnover. Also, from the analysis of the works, it is clear that it is impossible to talk about culture without leadership. It is leaders who, using different management styles, are able to create a culture that positively affects the quality of medical services and patient satisfaction. The culture in the healthcare organisation should be primarily aimed at creating a healthy working environment for staff. Only in this case, when the staff is united into a single whole, where mutual assistance and assistance do not have to wait, leaders are available and open, understanding and trust reign between employees. Only in such a team there will be no place for conflicts or they will be resolved quickly with the satisfaction of all parties, the stress factor is minimized, the involvement of employees in their work will increase and satisfaction from the performance of which will increase, only in this case we can talk about high standards of medical care and patient satisfaction.

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