Organisational culture and its impact on quality of healthcare performance outcomes. A literature review

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Abstract

The aim of this paper is to examine, through a literature review, how the organisational culture influences the probability of realising successful performance in healthcare systems. The main topic concerns the safety culture and how it can be improved in a systematic way. The history of healthcare organisations is full of examples of user resistance to the imposition of developments and innovations which do not conform to the organisational culture or established way of working. The model of leadership affects employees' motivation at work and consequently the safety and quality of healthcare. Leaders at all levels should be aware that they have an essential role in supporting a positive company climate and safety behaviour and in promoting a shared responsibility for patient assistance. A correct understanding of the basis of safety culture with a greater openness and acceptance at all levels in a system's organisational culture, could increase both health performance outcomes and employees satisfaction.

L'obiettivo del presente articolo consiste nell'esaminare, attraverso la revisione della letteratura, in quale modo la cultura organizzativa influenza la probabilità di realizzare performance di successo nell'ambito dei sistemi sanitari. Il tema principale riguarda la cultura della sicurezza e come questa può essere sistematicamente migliorata. La storia delle organizzazioni sanitarie è carica di esempi di resistenza all'imposizione di sviluppi ed innovazioni che non si attengono alla cultura organizzativa o a modi consolidati di lavorare. Il modello di leadership influenza la motivazione del personale al lavoro e, di conseguenza, la sicurezza e la qualità dell'assistenza. I leader dovrebbero rendersi consapevoli che, a tutti i livelli di sistema, rivestono un ruolo essenziale nel supportare un clima aziendale positivo, un comportamento di sicurezza e nel promuovere la responsabilità condivisa per l'assistenza al paziente. Una corretta comprensione riguardo ai principi della cultura di sicurezza, con una maggiore apertura ed accettazione della cultura organizzativa a tutti i livelli di sistema, può incrementare i risultati di performance e la soddisfazione del personale.

Keywords

Organisational Culture; Leadership; Safety Management; Work Environment; Healthcare Performance.

Parole chiave

Cultura organizzativa; Leadership; Gestione della sicurezza; Ambiente di lavoro; Performance sanitarie.

Summary: 1. An organisational culture focus on safety 2. Organisational well-being versus blame-culture 3. Improved teamwork and motivation through better communication management 4. Final thoughts

1 An organisational culture focused on safety

The management of the organisational culture should be considered an essential element of

healthcare systems. The safety and quality of care, treatment and services are highly dependent on the professionals working inside the health organisation. Culture and safety behaviour can improve the performance of the staff in relation to patients, optimizing the workflow. A current perspective on organisational culture should not place the emphasis on control and command but rather should encourage dialogue and communication among healthcare professionals and stakeholders.

Organisational culture refers to different aspects of what is shared among people within the same organisation: beliefs, values, traditions, norms, sensemaking, *et al*.. This concept is similar to "organisational climate" which refers to worker perceptions about organisational features such as leadership, decision-making and norms about work. Within the several definitions that can be found in literature[1], the most useful is by Shein. He states that the organisational culture refers to "the pattern of shared basic assumptions – invented, discovered or developed by a given group as it learns to cope with its problems of extended adaptation and internal integration – that has worked well enough to be considered valid and therefore to be tought to new members as the correct way to perceive, think and feel in realtionship to those problems".

Several researchers have studied the impact of organisational culture on quality in healhcare systems but there is really little empirical evidence that links the organisational culture and professionals' performance. A causal relationship between cultural characteristics of individuals and a successful health organisation has not yet been demonstrated. On the other hand, the organisational culture represents a key element in understanding the capacity of any organisation to compete and to manage changes. It is shaped not just by individuals but also by new and old organisational features, inside and outside the system.[2] Some researchers on health quality assert that "newcomers to an organisation may bring with them prior expectations about the culture when they join, but culture is also trasmitted to new arrivals by established staff."[3] Interaction with peers, their senior co-workers and managers is essential for newcomers becoming motivated and effective employees.

Factors inside and outside the health system, such as organisational structures, leadership, operational norms, control expectations, public opinion and policy frameworks, all influence the organisational culture. The most important issues underlying patient safety are human factors, health system reliability and effective communication within the team. In particular, communication competence, skills and abilities need to be in place and to be regularly reviewed. The WHO Patient Safety Group states that "Communication is essential to workplace efficiency and for the delivery of high quality and safe work. It provides knowledge, institutes relationships, establishes predictable behaviour patterns and is vital for leadership and team coordination."[4]

Nowadays, a challenge in healthcare systems in relation to performance improvement consists in balancing the need for technical skills and non-technical skills. Both are important in order to work safely and effectively. *Technical skills* include the procedural and clinical skills that healthcare professionals apply when diagnosing, monitoring and treating

1 The term "organisational culture" first appeared in the academic literature in an article written by A.M Pettigrew in "Administrative Science Quarterly" (1979). He defined the organisational culture as the "system of publicly and collectively accepted meanings operating for a given group at a given time". He did not clarify the nature of functional consequences of culture and he was more interested in promoting a way of analyzing a culture which focuses on "symbol, language, ideology, belief, ritual and myth" and such as a product of social dramas which occur in the history of an organisation.

2 The human capital refers to the knowledge, skills and experience achieved by an employee to perform the task well. The most important investment in human capital is represented by the continuing education and professional training.

3 H.T.O. Davies, S.M. Nutley, R. Mannion, *Organisational culture and quality of healthcare*, Quality in Health Care, 2000, pp. 111-119. Available at: http://eprints.whiterose.ac.uk/446/

4 World Health Organisation Patient Safety Group, *Human Factors in Patient Safety. Review of Topics and Tools*, 2009, available at: www.who.int/patientsafety

patients. They are different from *non-technical skills* which also have a significant impact on patient safety. Non-technical skills often refer to the general cognitive and social skills that allow to monitor the situation, make decisions, take a leadership role[5], communicate and coordinate the actions within the team, in order to achieve high levels of safety and performance.[6]

Besides, "Organisational culture conveys a sense of identity for members and enhances social system stability which influences behaviour to help build organisational committment, establish a management philosophy and motivate personnel. This perspective assumes that organisational culture can be broken down into a smaller components (safety culture, creativity culture and motivation culture) to be empirically manipulated."[7]

The safety culture of an organisation is the "product of individual and group values, attitudes, perceptions, competencies and patterns of behaviour that determine the committment to, and the style and proficiency of an organisation's health and safety management."[8] To achieve a culture of safety requires a fundamental increase in the correct understanding of the values, beliefs and normative criteria of an organisation and whose manners and behaviours are proper and expected. Values, beliefs and behaviours are difficult to change because they are often interwoven with a long -established professional tradition. Within this context, leaders can support a culture of safety through specific actions and behaviours. A safety management system should promote a culture that encourages all workers to accept responsibility for their safety as well as that of their co-workers, the patients and their caregivers. Regarding this, accrediting and professional organisations, including the Joint Commission International, the American Society for Healthcare Risk Management and the National Patient Safety Foundation have published standards and guidelines for informing patients and their caregivers about the outcomes of care, included errors and adverse events.[9] In particular, the Joint Commission's Management of the Environment care management plans require the provision of a safe, functional, supportive and effective environment to minimize risk and support strong performance.[10]

2. Organisational well-being versus blame-culture

Behavioural researchers have observed that many organisations unintentionally reinforce employees' behaviours they do neither intend to promote nor desire to have repeated. In different safety incentive programs health operators do not report errors or near misses. As a result,

5 Nowadays, successful healthcare leaders should be action-oriented and flexible to recognize and maximize the opportuinities for all employees. They should be able to work effectively using personal reflecion and skills to get their team members motivated and get desidered results. If employees feel good and motivated about work they will perform better, and it will result in improved patient care outcomes.

6 N. Kodate, A.J. Ross, J.E. Anderson, R. Flin, *Non-technical skills for Enhancing Patient Safety: achievements and future directions,* 2012; available at: www.andersonhumanfactors.org/kodate2012; The WHO states that the main categories of non-technical skills are: cognitive (situation awareness and decision making), social (leadership and teamwork) and, furthermore, managing personal resources (stress and fatigue). For an in-depht analysis, refer to: WHO Patient Safety Group, 2009, p. 29, quoted.

7 E. Shein, *What is a culture?*, in P.J. Frost, L.F. Moore, M.R. Louis, C.C. Lundberg, J. Martin, *Reframing organisational culture,* Sage Publishing, London, 1991, pp. 243-253.

8 ACSNI, 1993 in E.P. Borodzicz, *Risk, Crisis and Security Management,* Wiley & Sons, Ltd, NJ, USA, 2007.

9 An error is defined as the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim. A medical error is defined as an adverse event. An adverse event is an injury caused by medical mismanagement rather than the undelying condition of the patient. Joint Commission defines the sentinel event as an "unexpected occurrence involving death or serious physical or psycological injury, or the risk thereof". Adverse events and sentinel events are the main factors endangering patient safety. Regarding this, Root Cause Analysis is a systematic investigation of the reported event to discover the underlying causes. For an in-depht analysis, refer to: ECRI Institute, *Healthcare Risk Control,* supplement A, January 2009; by G.D. Pozgar, MBA, CHE, D. Litt, *Legal aspects of health care administration,* Jones & Barlett Learning, US, 2015, p. 355.

10 For an in-depht analysis, see: JCI, Environment for Management Care Plans, Joint Commission International, 2013. Available at: www.jointcommission.org

workers receive a reward for not having an accident, and therefore do not report the accident in order to get the reward.[11] With regard to this, some common barriers to reporting errors or accidents include the limited knowledge about what and how to report and the fear of reprisal or punishment. Healthcare professionals, aware of their direct responsibility, report feeling worried, guilty and sad following serious errors, as well as being concerned for patient safety and being scared of disciplinary actions.

In order to overcome these problems, at first, employees need to understand the relevance of admitting errors and near misses inside the teamwork. This represents a core issue in increasing the quality of communication and performance among workers. Furthermore, a satisfied medical and nursing staff may contribute more to patient satisfaction through the reduction of errors and improvement of a health quality system at all levels. Blame culture discourages the reporting of errors and represents a powerful barrier to collaborative problem-solving.

El-Jardaly and Lagace state that an important part of promoting patient safety must focus on how to promote a healthy healthcare workplace.[12] With regard to both medical and nursing staff, it is of the utmost importance to share problems and errors with peers, banishing the myth of perfect practice. Leaders could use some strategies to facilitate reporting such as using standard reporting forms that are clear and immediately accessible to all professionals of the health team. Another simple methodology could be to ask medical and nursing staff to participate in safety culture surveys oriented to improving the effectiveness of the learning process. This approach helps to create an open, fair and learning culture and manages behavioural choices, creating a non-punitive environment. Regarding this, the Canadian Patient Safety Institute focuses on instruments to measure effectiveness of teamwork in healthcare such as the Operating Room Management Attitudes questionnaire and those for Interdisciplinary Collaboration and Team Climate Assessment Measurement. Poor levels of supervision, safety information management and training represent significant factors which can all contribute to decreasing members' motivation and health and safety awareness. The Comprehensive Unit Based Safety Program is a five-step program designed to change a unit's workplace culture by empowering staff members to assume responsibility for safety in their environment. It uses multiple strategies, such as building relationship between the leadership and unit teams, focusing on learning from errors and evaluating the impact on healthcare outcomes.[13] The Health and Safety Executive states that the human factors can influence the organisational behaviour among workers. The HSE defines the human factors as "environmental, organisational and job factors and, besides, human and individual characteristics which influence behaviour at work in a way which can affect health and safety". Health and safety of individuals at work are influenced by the organisation and, furthermore, by the job descriptions[14] and personal factors. Within a quality management system which focuses on safety culture, job descriptions provide a way to communicate to employees the most important characteristics, roles and responsibilities of each job title. They also represent a possibility to measure performance[15] by performance indicators.[16] With regard to this, some indica-

11 For an in-depht analysis, see: T.L. Mathis, S.M. Galloway, *Steps to safety culture excellence*, Wiley, US, 2013.

12 El-Jardali and Lagace (2005) in A. Yassi, T. Hancock, *Building a culture of safety to improve healthcare worker and patient well-being"*, Healthcare Quarterly, vol. 8, Special Issue, October 2005.

13 For a better analysis read: Joint Commission International, *From front office to front line. Essential Issues for Health Care Leaders*, Chicago, US, 2005.

14 For an in-depht analysis, read: C.R. McConnell, *The health care manager's human resources handbook*, Jones & Barlett, US, 2012.

15 For an in-depht analysis refer to: JCI, *Tools for Performance Measurement in Health Care*, Joint Commission International, US, 2008.

16 A job description has to be regularly reviewed and modified to keep up with activities that may change in time. For and in-depht analysis read: J Rider Ellis, C.L. Hartley, *Nursing in Today's World: Trends, Issues & Management*, Lippincotto Williams & Wilkins, US, 2004,

tors or measurements for evaluating training and team performance improvement can be found in Kirkpatrick's evaluation framework which consider team reaction, learning, behaviour and results of performance outcomes. Personal factors include physical or cognitive aspects, motivation, attitude to human error and their interaction with the physical, mental and perceptual capability of individuals.

J. Reason maintains that a poor safety culture encourages an atmosphere of non-compliance to safe operating practices.[17] He suggests four aspects which promote a positive safety culture: 1) an informed culture, in which those who manage and operate the system have current knowledge about the factors that determine the safety of the system; 2) a reporting culture, in which people are prepared to report their errors and near misses; 3) a just culture, in which people are encouraged and even rewarded for providing safety-related information; 4) a learning culture, in which people are willing and knowledgeable about drawing the correct conclusions from the safety-information to implement reforms.[18] Safety culture is closed to good safety management established by leaders in healthcare systems. The interaction of these four components reflects an informed, safe and highly reliable system improving overall healthcare quality.

3. Improved teamwork and motivation through better communication management

Leaders at all levels are responsible for the quality of care, treatment and health services provided in their areas. They create guidelines and procedures to provide services which support patient safety and the quality of care, that influence the culture of the organisation.

Excellent leaders know what, when and how communicate to employees, building a culture of quality and safety related to patients through advanced communication systems, information management and feedback.[19] Feedback results are particularly appropriate when they relate to specific goals.[20] Thus, managers and coordinators have to create a culture that supports staff and instils in health professionals a sense of ownership of their work processes. "A just culture, the engagement of leadership in safety, and a good teamwork[21] and communication training, are critical and related requirements for safe and reliable care".[22]

There are a number of factors that reduce the effectiveness of existing programs to prevent errors in health organisations. It is known that common causes of errors leading to adverse events include organisational factors such as lack of communication or miscommunication, lack of attention to safety procedures, inadequate supervision, stress, excessive workload and insufficient staff members for specified tasks.

Successful traninig is dependent on employees' knowledge and competence, instructional strategies and organisational variables such as leadership support, resource availability and eagerness for change. The involvement in conversations by in-depht briefings and debriefings creates the sense of stronger ownership of ideas discussed and a more active par-

p. 461.

17 J. Reason, *Achieving a safe culture: theory and practice,* Work & Stress on-line, 1998, vol. 12, no. 3 293-306, p. 297.

18 J. Reason, *Managing the risks of organisational accidents,* Ashgate Publishing, UK, 1997.

19 With regard to the scale of values of managerial skills, read: O. Slipicevic and I. Masic, *Management knowledge and skill required in the Health Care System of the Federation Bosnia and Herzegovina,* Materia Sociomedica, 2012; 24 (2): 106-111.

20 "Establishing employee performance expectations and goals before work begins is the key to providing tangible, objective and powerful feedback", in *Feedback is critical to improving performance,* edited by: https://www.opm.gov/performance

21 "Teamwork is distinct from *taskwork* (e.g. Surgical skill); teamwork depends on each team member being able to anticipate the needs for others; adjust to each other's actions and have a shared understanding of how a procedure should happen." edited by: D.P. Baker, R. Day, E. Salas, *Teamwork as an essential component of high-reliability organisations,* HSR, Health Services Research, 2006, Aug; 41 (4Pt2): 1576-1598.

22 A. S. Frankel, M. W. Leonard and C. R. Denham, *Fair and Just Culture, team behavior and leadership engagement: the tools to achieve High Reliability,* Health Services Research, 2006, Aug; 41(4Pt2): 1690-1709.

ticipation by workers within the team.

Team-Based Learning is a well-defined instructional strategy, developed by Michaelson in the 1970s, which offers the opportunity for assessment of both individual and team performance. It promotes collaboration, the use of acquired knowledge and competence and identifies learning deficiencies. In order for team-based learning to be successful, the team coordinator should plan the event targeted at the specific learning goals developed for the employees and provide timely and active feedback.[23] The team-based learning emphasises the importance of individual and group accountability, the need and opportunity for group interaction, mutual support, and level of motivation, and the increase in quality communication processes.[24]

A briefing (also called pre-session) represents a critical element in team effectiveness and determines whether people work together as a cohesive team. According to Standard of Best Practice, INACSL[25] defines "pre-briefing" as an "orientation session held prior to start of a simulation-based learning experience in which instructions or preparatory information is given to participants."

A briefing represents only the first step of team building. A debriefing (also called post-session), represents an in-depht analysis that occurs after a clinical event and incorporates the team involved in the episode, encouraging reflection on what happened, what was learned and what could be done next time in a better way. The effectiveness of a debriefing relies on the quality of the briefing, and feedback is provided regarding the individuals' performance while discussing different aspects of the experience. SBAR is an acronym for a structured communication technique (Situation, Background, Assessment and Reccomendation) that has become the Joint Commission stated industry best practice for standardized communication between two or more people in healthcare.[26] The employment of SBAR helps phisycians and nurses to establish a shared mental model for improving communication and the effectiveness of information transfer and promotes a culture of quality, with regard to patient safety and staff satisfaction.

Team coordination and the structured setting for training and communications aim to help workers to learn about specific teamwork skills and to discuss about potential problems, actively contributing to effectiveness and quality of healthcare performance and outcomes. In this context, using a common language, both for phisycians and nurses, may be helpful to ensure high reliability and comprehensiveness in communication in different situations.

Final thoughts

Health professionals are more inclined to embrace changes when the organisation's culture is in line with the mission and the aims of the system. Historically, in U.S. and in European hospital organisations, total quality management projects have existed for some time at a high administrative level, while clinical care was closed to both physicians and nurses. Future changes in hospital systems, which will involve healthcare professionals in quality management, could promote adequate competencies focused on safety and new employee orientation at all levels. Improving the safety environment in healthcare systems means optimizing communication flows and social networking among professionals to break down divisions that limit information sharing and the reporting of errors. Leadership development capabilities[27] should be viewed

23 Team Based Learning was also described in 1990 by Senge who stressed the importance of organisational learning focusing on systemic thinking and dialogue.

24 The Team-Based Learning Collaborative. For an in-depht analysis refer to: http://tblcollaborative.org

25 International Nursing Association for Clinical Simulation & Learning.

26 For an in-depht analysis, refer to: K.M. Haig, S. Sutton, J. Whittington, *SBAR: a shared mental model for improving communication between clinicians,* Joint Commission Journal on quality and patient safety/ Joint Commission Resources, 2006 Mar; 32 (3): 167-75. By C.D. Beckett, G. Kipnis, *Collaborative communication: integrating SBAR to improve quality/patient safety outcomes,* Journal of Healthcare Quality, 2009, Sept-Oct; 31 (5): 19-28.

27 Some highly valued qualities required to leaders and

as an educational and training process built to improve workers' performance and organisational well-being. Therefore, it should focus on both improvement of managerial skills and individuals' job performance. A serious consideration in performance improvement and change management should support the employment of performance measurements or indicators which lead to improved health outcomes.[28] Effective planning of safety culture for health workers, both physicians and nurses, should help to prevent errors, provide for a forthright response when problems happen and make available support to increased safety and professional awareness.

The reporting and the disclosure of errors and near misses could promote a blame-free culture, which banishes psychological barriers, improving healthcare safety and quality of performance. An open two-way communication helps to prevent hazards, enhancing data collection to evaluate performance outcomes and improving work and patient safety in complex health systems.

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managers include motivation, work capability, decision making, problem-solving, communication skills, relationship and pedagogical attitudes.

28 Interventions to improve safety culture are interwoven with measurement approaches. The act of measuring represents an intervention on its own as it sends significant feedback to staff workers about the value of the organisation. Regarding to this topic, from the literature review on patient safety culture surveys, the Canadian Council of Health Service Accreditation identify a number of main patient safety indicators (leadership; safety systems and risk perception; job demands; organisational learning and occurrence reporting; teamwork, communication and feedback; personal resources and safety attitudes) and further break them down into more detailed elements. These main indicators represent a tool that healhcare organisations can use in their journey to create a positive safety culture and support the identification of actions for cultural safety improvement. For an indepht analysis refer to: M. Fleming, N. Wentzell, *Patient safety culture improvement tool: development and guidelines for use*, Healthcare Quarterly, 11 (sp), March, 2008.