

PATIENT SAFETY CULTURE AT ORGANIZATIONAL LEVEL

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Abstract: Recent studies show that one of the major awareness in the medical field over the past decade, was that despite the recognition of the power of modern medicine to cure or ameliorate any disease, hospitals were not considered safe places to heal the patients. On the contrary, hospitals were regarded as places with potential risk of harm to patients. An important response to this awareness has been the increasing interest in patient safety, in particular in evaluating the concept of patient safety culture and the human factors relevant to patient safety.(1)

Cuvinte cheie: cultură, siguranța pacienților, organizație, factori umani

Rezumat: Studii recente arată că una din marile conștientizări în domeniul medical din ultimii zece ani, a fost că, în ciuda recunoașterii puterii medicinei moderne pentru a vindeca sau ameliora boala, spitalele nu erau considerate locuri sigure pentru vindecarea pacienților. Dimpotrivă, spitalele erau considerate ca locuri cu risc potențial de vătămare a pacienților. Un răspuns important la conștientizarea acestui fapt a fost creșterea interesului în domeniul siguranței pacienților, în special prin evaluarea conceptului de cultură a siguranței pacienților și a factorilor umani cu relevanță în siguranța pacienților.(1)

The concept of patient safety culture first appeared in the United States. The law on quality improvement and patient safety (Law no. 109-41), published in July 2005, in the U.S., aims at improving patient safety by encouraging voluntary and confidential reporting of adverse events that could have a negative impact on patient care as a result of the medical acts, without fear of repercussions.(2)

Patient safety refers to the fact that they should not be submitted to unnecessary or potential risks related to medical care. In the past seven years, this issue has been a major preoccupation of the European Union. Recent studies have shown that in a growing number of countries, medical errors occur in about 10% of cases of hospitalization, although unforeseen events happen in all units awarding medical assistance.

Organizational culture is described as a set of common beliefs of a group of individuals in an organization. The concept of safety culture was introduced as a specific concept of the organizational culture after the accident produced at the nuclear reactor in Chernobyl, in 1986, subsequently concluding that it rather occurred as a result of human error than as a result of a technical failure. Thus, those who took part in the investigation stated that human errors have as a starting point the lack of a well established organizational culture.(3)

Researchers believe that one of the key conditions of safety in any industry that involves risks, including the health system, is to create an organizational culture. Patient safety culture refers to a coherent and integrated attitudes, values, principles, individual and organizational behaviours to reduce further damage to patients. Attributes such as open communication about the safety issues, teamwork, local and organizational support, all contribute to creating a positive patient safety culture.

All stakeholders (front-line medical staff, doctors,

administrators, managers, psychologists) are responsible for their own safety, that of colleagues, patients and their families. This safety must be placed above all financial and operational objectives. They should encourage and reward the identification, communication and solving of all safety problems, act to anticipate their occurrence and provide adequate infrastructure to maintain in good conditions the security systems. Most security experts consider that in the medical field, we cannot talk about a real organizational culture.

The medical literature on safety speaks about four categories of beliefs that dramatically affect patient safety in general. The first would be that those working in the medical field are primarily interested in individual responsibility, blaming the bad situations on the people taking the first contact with the medical act. It is therefore necessary to establish a system addressing the patient safety issues in terms of latent factors that might lead to or prevent the commission of medical errors.

Secondly, clinicians often encounter errors in clinical practice, giving the impression that these mistakes are inevitable – “normalization of deviance”.(4)

Thirdly, the medical system is organized hierarchically. This is very important in patient safety. Medical incidents are not reported for fear of repercussions, or are seen as a personal attack instead of being considered a way to improve the organization and the functioning of such health facility. Finally, we do not hear much talking about the organizational learning in the medical field. Often, frontline medical staff found that the same types of problems occur repeatedly and that these exist in many organizations in the world. Collection and transmission of information that led to positive results in the field, in this case by reducing the medical errors is not performed effectively. Intra-and inter-institutional learning can lead to the identification of solutions for patient

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safety.

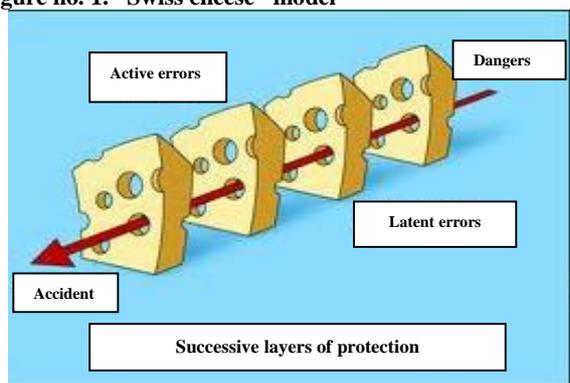
Basic principles in patient safety

The traditional approach to patient safety was based on the principle that the person responsible for the medical errors was even the care provider: a doctor who performed the transplant, or who diagnosed the patient, a nurse who put the perfusion etc. In the past decade, it was recognized that this approach does not take into account that most of the times, medical errors were committed by competent, well prepared people. It is unlikely that such errors be prevented only by warning and punishing the employees.

The modern patient safety suggests as a basic principle in understanding patient safety, the “systemic thinking”. This paradigm recognizes the human condition - namely that man can go wrong – at the same time, recognizing the importance of establishing systems that anticipate the medical errors before harming the patients. This approach has been the cornerstone of the actions to improve the safety concept in many industries with high risk but, unfortunately it was ignored in medicine.(5)

English psychologist, James Reason, developed a model of accidents that occur in any organization, model that turned into a mental model of safety systems (figure no. 1). This model, which has its roots in numerous investigations of accidents in areas such as commercial aviation, nuclear plants, points out that in complex organizations, it is very difficult for one person only to be responsible for the committed errors. The holes of the model proposed by Reason are represented by the systematic errors that occur in an organization and the system is represented by the slices of cheese. Each slice of cheese protects the organization from possible errors. For a major error to be produced, it is necessary that each hole should be aligned one after another. The model makes the distinction between “latent” errors and “active errors”. Latent errors are the existing problems and the active one are the mistakes that lead to the accident.(6)

Figure no. 1. “Swiss cheese” model



This model highlights the fact that medical errors analysis must focus on root causes, on all conditions favouring the occurrence of errors and not only on the staff directly involved in providing the medical care. The most common causes, according to Charles Vincent could be: the lack of a checklist before performing any medical procedure, installed fatigue, shyness of nurses to express their opinion when they suspect a mistake. These are perhaps the biggest threat to patient safety, but can be remedied by a thorough analysis of the human factors involved in the organization level.

Human factors involved in patient safety

Based on this organizational model of the psychologist James Reason, researchers found that over 70% of the medical errors are due to human factors, especially on the aspects of how

communication takes place within the organization, on management factors (leadership) and on the aspects of team work structure, cohesion, dynamics, team or individual issues, stress, fatigue that can adversely affect the conduct of the medical care, with repercussions against patients.(7)

Regarding the *management factors*, in health field, it appears that managerial leadership has not been studied closely. Studies show that where safety was a priority management, hospital units registered fewer accidents. A survey in Great Britain shows that the perception of the medical staff on the effectiveness of the management style was closely related to the low number of complaints coming from patients. Top managers must demonstrate their concern for the safety concept in general in a visible manner, for example by visiting the wards and laboratories. In the United States of America, the visible manifestation of the commitment to safety is called “executive rounds” and aim at influencing the subordinate medical staff on patient safety culture.

Also, it appears that transformational leadership focused on change, seems to be the most appropriate management style in medical facilities.

Studies have shown that *communication* problems are the primary source of medical errors. Providing safe care requires communication between individuals fulfilling different task, with different education, training and experience. Some of the key problems common in the research reports in this field, indicate the quality of information from the patients’ records, case reports, status of the subordinated personal who is afraid to speak, difficulties in sharing and retrieving information in the large medical facilities.

In the organizations where safety is a primary concern, briefing sessions are performed prior to any mission. This would necessarily be introduced in all health facilities providing medical care. Currently, the only such tool is the checklist used by the surgical teams before any surgery. An important element of the briefing sessions would be the creation of opportunities to discuss, exchange information between each team member. Also, debriefing sessions are vital to patient safety. Performance evaluation of the individual or team, as appropriate, in a positive or negative sense, is extremely important especially for the young professionals who have not experienced any critical situations, thus avoiding the risk of committing the same error in future. Debriefing sessions is a technique that can improve patient safety through positive lessons learned from both the positive situations and from the most critical ones.

Teamwork is affected by structural characteristics of the team, which includes membership, statuses, roles hierarchy, rules accepted as group behaviour. These factors vary depending on type of team, organization and may influence the group cohesion. In hospitals, it is considered that work teams are well established, operating according to well established protocols and procedures, unlike primary care medical units, where the role of members is mixed. As mentioned in the previous paragraphs, in the field of health, multidisciplinary teams are needed, so that each team member’s role must be well established, in order to avoid committing errors.

In the field of patient safety, a delicate aspect is represented by the differences of status within the teams, especially the position, the rank occupied by the older people with reputable experience, as against the young and inexperienced. The perception on status can have a major impact on the behaviour of the team members and thus, on patient safety. In this case, we speak about the difference between doctors and nurses, the first being considered superior to the other categories. There are situations when subordinates intentionally avoid reporting a medical error for fear of

difference in status or for fear of not violating the group norms. These are very serious aspects and should be identified by administering questionnaires to measure behaviour at group level.

Stress and fatigue have serious consequences both on safety and productivity. Most of the industrial accidents are due to stress and fatigue of employees. Fatigue has negative effects on cognitive performance, which is reduced by up to 40% after two sleepless nights (after Krueger, 1989).

The medical field is one of the areas with the highest emotional involvement. In Romania, a team from Bucharest Institute of Public Health conducted a study in three hospitals in the capital. The conclusion shows that the doctors included in study consider that the stress factors are the following: time constraints, disruption of circadian rhythms, irregular work, decision making, professional dissatisfaction, difficulties in adaptation and integration to the workplace, the threat to their own health, special responsibility, emotional strain etc.

In health field, long working hours, guards continued with normal work cause fatigue, with negative consequences for patient safety. In the U.S., 41% of resident physicians have noted fatigue as the main cause of the most serious medical errors, and 31% of these cases resulted in patient's death. 61% of anaesthesiologists reported having committed errors due to fatigue.

The last category of human factors involved in patient safety refers to the *working environment*, to the risks involved not only in the environment in which healthcare workers operate, but also in terms of the medical equipment used, which is often insufficient or very worn.

Providing health care services involves the interaction between the patient and the working environment, but also between the equipment and the patient. These interactions should be carefully analyzed using methods to identify the unpleasant events that may arise from their use. The lack of necessary equipment may delay the rapid diagnosis of the disease, which causes an increase in illness cases requiring hospital treatment and hence expenditure.

The existence of tools to assess the organizational culture and the human factors, starting from the individual resources, training, work experience, competence, burnout, stress, fatigue, communication difficulties within the organization, poor management, the existence of a punitive system for reporting the medical errors, issues related to teamwork structure and cohesion will help considerably reducing the medical errors and thus, improving patient safety in hospitals.

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