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Patient Safety Culture in the Emergency Center at the University Clinical Center of Kosovo and the COVID-19 Pandemic

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Abstract

BACKGROUND: Despite the developments in Kosovo's healthcare, there are still many challenges that hamper the delivery of proper health-care service. This was especially highlighted during the coronavirus disease 2019 (COVID-19) pandemic.

AIM: This study aims to elucidate the factors that impede proper health service as well as reduce preventable medical errors by focusing on safety as a fundamental principle in patient care and a key component health services quality management. The main goal is to improve the overall approach to the patient by improving the workers performance and redesigning systems, with the goal of reducing patient risk not only in normal working environment but also in new and unusual situations such as COVID-19 pandemic.

METHODS: In this cross-sectional study, data were collected and analyzed. Two questionnaires were compiled for this research: one was compiled to address patients who sought health services at the Emergency Center; the second questionnaire was designed for the Emergency Center personnel to identify the relationships between the workers, managerial staff, the problems of reporting errors, and similar. Moreover, relevant publications on the impact of the pandemic on the provision of health services were compared. Statistical analysis was done by IBM SPSS® version 25.

CONCLUSION: There is a need for improving Patient Safety Culture in The Emergency Center at the University Clinical Center of Kosovo. By reorganizing working hours for the workers of the Emergency Center, preventable medical errors would be reduced. Raising the capacities of the primary care level would reduce the load of the Emergency Center from interventions, which can be handled without a problem at the lower levels. Continuous professional trainings, as well as trainings focused on stress management, working under time pressure, and relationships between health service providers would significantly improve the level of patient safety in the Emergency Center.

Introduction

On April 22, 2010, the Prime Minister of the Republic of Kosovo issued decision no. ref. 685/10, which ordered the deputy minister of the Ministry of Internal Affairs to establish the Integrated System for Emergency Management [1]. This system provides a consistent, nationwide framework to enable governments at both levels, non-governmental organizations and the private sector to work together to prevent, protect, respond to, recover from, and mitigate the effects of incidents regardless of cause, their size, location, or complexity. The Emergency Center deals with the treatment of emergency conditions: diseases, injuries and poisonings, patients whose lives are in danger. Emergency Center – the emergency service activity is carried out by the University Clinical Center, which deals with triage, monitoring, examination, observation, laboratory, and radiological diagnostics. The Emergency Center is the meeting point of all medical profiles, which interact in multidimensional situations, and the place where patients of any age seek emergency medical assistance, raises the level of the challenge for all health-care providers. Therefore, by highlighting the possible medical errors, this research will sensitize and have a positive impact on raising the level of perception, sensitivity at certain, and relevant institutional levels, thus contributing to the raising of important issues of patient safety.

Patient safety is a property that emerges from systems design [2]. Each point in the health-care delivery process contains a certain degree of different uncertainties.

Adverse events (AE) frequently occur in our medical system, and at least one in ten patients are affected [3]. By placing the patient in the center of attention, we enter a new approach to the treatment of various diseases. This new concept presents health care that is in accordance with and in response to the wishes, needs, and preferences of the patient.

Patient safety is a health-care discipline that emerged with the evolving complexity in health-care

systems and the resulting rise of patient harm in health-care facilities. It aims to prevent and reduce risks, errors, and harm that occur to patients during provision of health care. A cornerstone of the discipline is continuous improvement based on learning from errors and AE [4]. If patients perceive that doctors or nurses are not interested in them, or do not have good communication or sufficient sensitivity, then the suspicion begins that doctors or nurses do not use their full competence in the process of managing patients [5].

In December 2019, a novel coronavirus known as severe acute respiratory syndrome coronavirus 2 was identified. The virus is known to cause Coronavirus Disease 2019 (COVID-19), which originated in the city of Wuhan, China [6]. The virus is transmitted from an infected person's droplets and aerosols released from the mouth or the nose while they are talking, breathing, coughing, or sneezing [7]. Studies have shown that health-care providers are considered at higher contamination risk due to the nature of their work [8].

Dental services in the public and private sector during the COVID-19 pandemic were restricted to severe toothache from inflammation of the pulp, dental abscess or phlegmon, acute periodontal abscess, pericoronitis or third molar pain, post-operative osteitis, tooth fracture resulting in pain or causing soft-tissue trauma, dental trauma with avulsion/luxation, and dental treatment required before critical medical procedures [9]. Patient safety rights' violation can occur in any health institution, starting from the doctor's clinic, hospitals, surgical centers to facilities for prolonged treatment of chronic patients, pathological laboratories, and similar other health-care institutions. This also includes emergency centers, considering that in these environments, quick and immediate intervention is often necessary. This not only leaves insufficient time for proper hand hygiene but also leaves no time for double checks and increases the number total accidental falls as a result of the professional rush throughout the time.

Errors during medicine administration can also easily occur, due to the above-mentioned reasons, adding to the issue of illegible handwriting on prescriptions, errors during the calculation in the pharmacy, and administration problems due to inappropriate dosage. AE also occur due to lack of time and possible errors while administering the medication, to many sound alike or look alike medications which cause even greater confusion, especially in the Emergency Center. The pandemic has emphasized the high risk of preventable AE that can affect health workers, and the general public and has identified a range of safety gaps across all core components of health systems at all levels.

The rapid review "Implications of the COVID-19 pandemic for patient safety" explores impacts that the COVID-19 pandemic did have on patient safety in terms of risks and avoidable harm, specifically in terms of diagnostic, treatment, and care management related issues as well as highlights the main patterns of these implications within the broader health system context [10].

Other sources of patient safety issues that can result in falls can be health-care staff members themselves, who are always in a rush, usually with significant lack of adequate rest time, due to extended shifts as well as the constant overload with the work load in the Emergency Center [11].

The aim of the study

The purpose of the paper is to measure patient safety culture at the Emergency Center in Pristina. The results of the research will contribute to a better understanding of patient safety issues.

The pandemic has highlighted the high risk of avoidable harm to patients, health workers and the general public, and exposed a range of safety gaps across all core components of health systems. These risks and harms need to be better understood. A deeper understanding of this knowledge can lead to improvements in health-care delivery and to building safer and more resilient health systems in the future [10].

Mistakes are a part of being human and they should be recognized when they happen. The most valuable life lessons can be learned the hard way. Even if the mistake is a fatal mistake, at least, it can serve as a lesson from which the others can learn so that it does not occur again. Great services should not be undone by a single act or mistake [12].

Several ongoing patient safety activities were significantly interrupted when the COVID-19 pandemic disrupted existing systems and processes of care. Routine safety and quality meetings were stalled, and many safety and quality professionals were either redeployed from their administrative roles to clinical work or took on additional tasks such as procuring supplies and additional staff in responding to the pandemic. This led to reduced resources, capacity, and infrastructure to prevent and monitor known safety concerns [13]. The main topic of this paper, precisely in relation to the issue of "Patient Safety in the Emergency Center," lies in the fact that this research is about patients admitted for treatment in the Emergency Center, in a state of health which, often due to the importance and emergency health treatment, prevents them from making informed decisions to choose the treatment offered and preferred by the health personnel engaged in the emergency unit. Sometimes when unconscious patients receive life-saving procedures, the method of treatment and application of drugs can be different from what the patient would wish, therefore causing the fundamental issues of patient safety to get completely neglected.

Methods

Two groups were identified for this research. About 200 patients admitted for treatment at the Emergency Center were interviewed prospectively. In parallel, the health workers at the Emergency Center were surveyed to identify the amount and type of collegial support in certain periods of time. The aim of the questionnaire was to analyze the time that workers can allocate for rest between the provision of health services and elucidate error reporting procedures during the provision of health services to prevent their repetition. The questionnaire was anonymous, and the patients were informed in details about the type of research.

After collecting all the required information and data, the results of the questionnaire used in this research were analyzed using IBM SPSS® version 25. Recommendations were developed based on the results obtained from data. These recommendations aim to improve the working condition and performance of healthcare workers in their teamwork, as well as reduce the risk of patient falls due to carelessness and improve patient safety overall.

This research was approved by the ethical council of QKUK.

Results

The Figure 1 in our investigation shows that 54% are convinced that their mistakes during the provision of health services will not be used against them. While 28% think that their mistakes will be used against them in any way, in which case it also gives them the freedom to report their mistakes to prevent similar mistakes during the treatment of other patients.

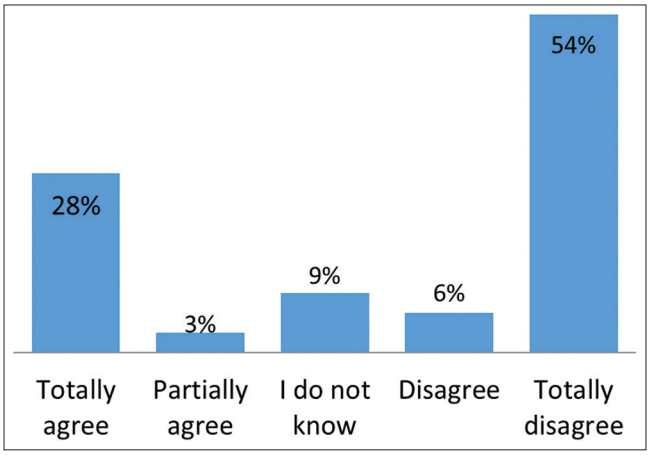

Figure 1: Staff thinks that errors can be used against them

In the Figure 2 is presented that amongst all staff members, 13% totally disagree errors lead toward positive changes, while 27% of them disagree that mistakes can lead to positive changes in their workplace. A part, 10% have no opinion regarding this issue, whereas up to 33% think that positive changes can be made based on mistakes during work at the Emergency Center in Pristina. Only 17% are totally agree that errors can lead toward positive changes.

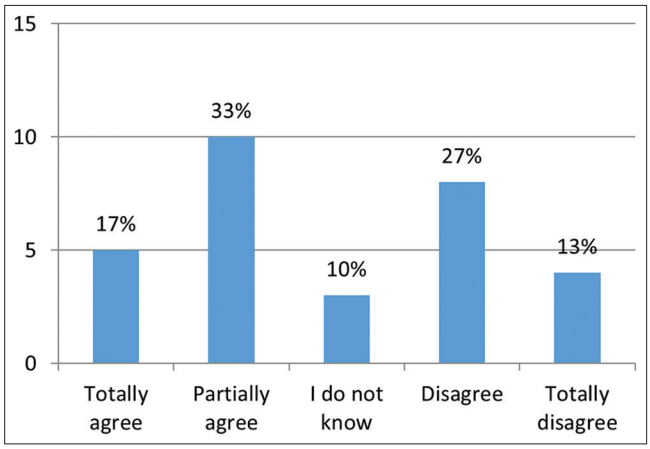

Figure 2: Errors lead toward positive changes

The results on Figure 3 present a high self-confidence of health service providers in the Emergency Center, where most of them are convinced that major mistakes in this center can only happen by chance. Only 6% of health-care providers totally disagree that major errors can only happen by chance. The remaining 6% disagree with this approach, while 45% are convinced that major errors in the Emergency Center can only happen by chance. Another, not small, part of 34% partially agrees with this phenomenon. Among all staff members 9% do not state at all how major mistakes can appear in this emergency institution during the provision of health services.

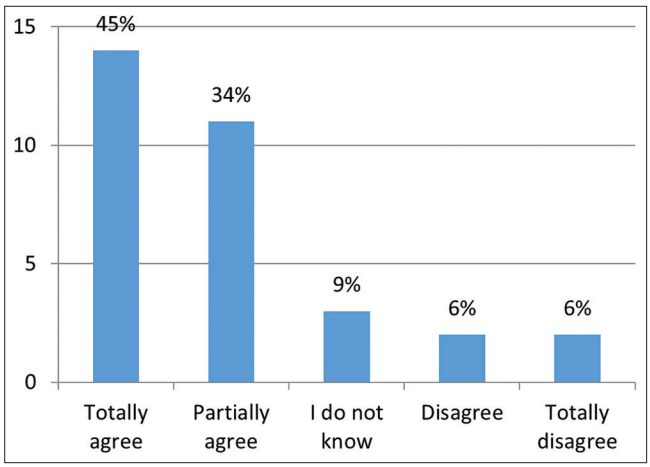

Figure 3: In the emergency center, mistakes can only happen by chance

From the total number of respondents as shown at the Figure 4, 28% are convinced that the person will be punished and the problem will not be dealt with after reporting any error during the treatment of patients in the Emergency Center. From all staff members, 31% partially agree with such an approach of team leaders

in the Emergency Center, 25% do not express their opinion on this question, while 3% do not agree with such a thing. Only 3% are convinced that in case of reporting any problem, no punishment will follow, but only the problem will be dealt with to prevent the same problem from appearing later.

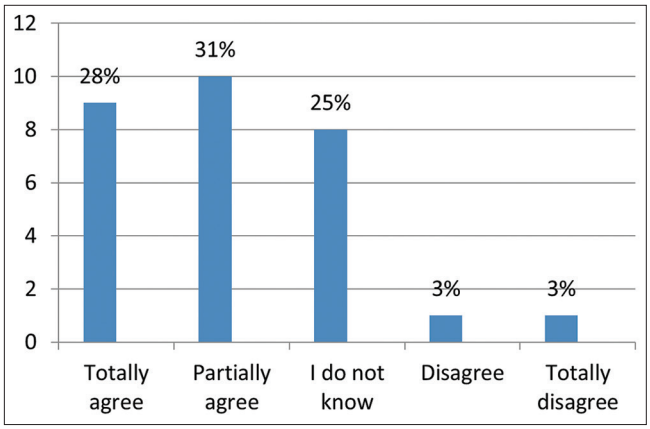

Figure 4: When an incident is reported, there is a feeling that the person will be punished rather than the problem addressed

According to the results of the research in the Emergency Center as shown at the Figure 5, a large number of health service providers strongly agree that after changes are implemented to improve patient safety, their effectiveness is also evaluated in the clinic. The part of 28% partially agrees with this position, while 22% have no idea whether the effectiveness of the implemented changes is evaluated. Only 6% are of the opinion that after the implementation of the changes in the Emergency Center, no action is taken to evaluate the effectiveness of these changes. The same number is convinced of such a thing.

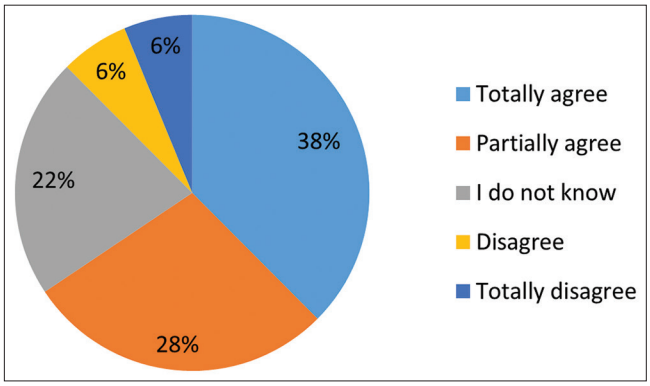

Figure 5: After we make changes to improve patient safety, we evaluate their effectiveness

Results on the Figure 6 show that in the Emergency Center of Pristina, 31% are convinced that there are patient safety problems in their work unit. The group of 35% partially agrees with this opinion, 6% did not have any opinion, while 22% do not think that, in their unit, there are problems related to patient safety. Only 6% do not agree at all with this opinion that in their work unit there are problems that can be related to patient safety.

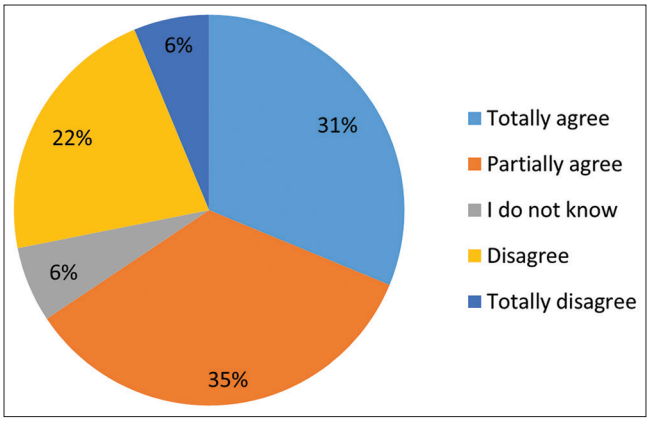

Figure 6: We have patient safety issues in our unit

In Figure 7 we can see that staff majority of 41% are convinced that despite the great commitment of the staff, patient safety is not sacrificed at all. To this should be added the share of 38% which partially agrees with this opinion, 9% did not respond at all. Among all staff members, 6% believe that patient safety is sacrificed when increasing the workload in their work unit, whilst remaining 6% believe that patient safety is sacrificed when increasing the workload.

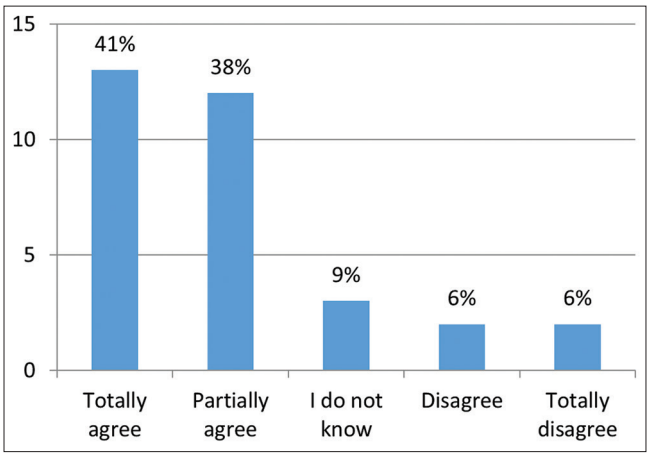

Figure 7: Patient safety is not sacrificed if we commit to a larger workload

Discussion

Medicine is often thought as an individual work of a single doctor with a patient, and when something goes wrong, there is a tendency to try to pinpoint the culprit, and often punish them as a response. Moreover, it has been shown that the multiple patients coming to the emergency center directly from the accident site or from home indicate that there are problems with the referral system at the primary health-care levels which expand the difficulty of case management [14]. Nevertheless, shaming and blaming lead to hiding mistakes instead of reporting them, which should be avoided and prevented as much as possible.

The creation of a report focused on the approach to the patient, which should always be the health-care staff center of attention and termining the activities which potentially can cause unwanted and unintentional damage to the patient's health is very important when it comes to improving the service and overall increase of health-care quality. Recent efforts have focused on changing the approach by encouraging health-care providers to report problems rather than hide them [15]. A culture of fear and intimidation requires a reform of the medical approach from the lowest levels of medical education. It is necessary to develop and maintain a patient safety culture that is based on trust and reporting, respect between health-care disciplines, and a basic skill for all health service providers during teamwork. One of the limitations of our study is the fact that it has been conducted in only one center. However, taking into consideration the fact that the Emergency Center in Prishtina is the main health-care center in Kosovo which has the biggest workload, it is the center which would be able to emphasize the importance of efficient patient safety health service under different working conditions.

One of the health sector reform pillars has been the improvement of efficiency in the health services provision. There are many different types of assessment tools and they can be used in a variety of ways. Feedback is defined as a process within monitoring and evaluation, in which information and knowledge gained are shared and used to assess overall progress toward results [16].

From errors in the interpretation of a doctor's handwriting on a prescription, errors in reading the prescription at the pharmacy, errors in administering the dose, wrong time frame, very similar and confusing names, and packaging of medications are errors grouped into the category of medications and cause thousands of deaths per year. Patient safety is one of the country's most pressing health-care challenges. A 1999 report from the Institute of Medicine estimated that more than 44,000–98,000 people die in US hospitals each year as a result of patient safety errors [17]. It has been proven that medical technicians can identify the relationship between the institution where they work and patient safety. With the increase in work demands on medical technicians, their perception of patient safety also decreases.

Taking into account that fatigue and work overload are the two most frequently identified issues, it turns out that the perception of nurses can be the most valuable in identifying some systemic circumstances that can lead to medical error [18]. Errors during the provision of health services must be reported at the moment of their identification, regardless of whether these errors reached the patient or not. In any case, each staff member should have the freedom to report the error without any fear that this error will be recorded in their personnel documents. In this way, the subsequent appearance of the same error will be prevented, and in time, the number of these errors will be reduced in the future. The presentation of any error prompts the investigation, which aims to improve the system of processes to reduce the possibility of such an event occurring in the future [19]. This is applicable both in normal working conditions, but also in extraordinary conditions such as pandemics. It is agreed that further research is needed to study the criterion-related validity of the survey by analyzing the relationship between patient safety culture and patient outcomes and studying how to improve patient safety culture. It is hoped that researchers and hospitals will use the survey tool assessed in this study, as well as in the Multilevel psychometric properties of the AHRQ Hospital Survey on Patient Safety Culture study, to begin to shed light on the answers to some of these remaining questions about patient safety culture [20].

Conclusion

Accidents at work can happen to anyone at any time. In certain environments, certain types of accidents may be more common than some other environments. Taking into consideration the fact that accidents are impossible to be fully avoided and will always happen from time to time, it is the duty of the team leader to find ways to minimize risks and encourage health-care providers to always focusing on patient safety.

Significant opportunities lie ahead for patient safety improvement in the context of the pandemic. Many instances of risks and avoidable harm identified in this rapid review are still ongoing and if unaddressed are likely to prevail again no matter what pathogen the next pandemic will involve. There are possible risks and avoidable harm from lack of adequate infection prevention and control measures, water, sanitation, and hygiene practices and infrastructure, diagnostic errors, or delays. Medication errors, overloaded health systems, an overburdened workforce, the weakening of preventive interventions, the failure to obtain or receive recommended care, and deficiencies in caring for patients are usually present in emergency centers. Therefore, additional research is needed in specific risks and safety areas, and more work is required to identify best practices and lessons learned to inform optimal interventions and recommended next steps, and in the long term to contribute to building safer and more resilient health systems [21].

Based on presented results, there is a lack of freedom to communicate errors during therapy administration in the Emergency Center in Prishtina. In addition, there is a low frequency of reporting errors. Additional studies are also needed focused on possible change the existing culture.

Hospitals that plan to improve patient safety culture should work together with healthcare researchers to design precise changes. This reveals a need for a multidisciplinary approach involving researchers, health-care managers, and health-care workers able to collaborate and produce evidence of the efficacy of cultural interventions with proven methods for changing existing patient safety culture [22].

Management/staff needs to raise the awareness on patient safety, especially by non-punitive system for reporting errors. Moreover, there is a need for continuous institutional education and continuous professional development and rearrangement of the staff's working hours to enable better outcomes regarding patient safety overall.

Recommendation

The Emergency Center needs continuous education on patient safety culture and this needs to be addressed for all health-care providers, including administrative, managerial, and other staff. Non-punitive system for reported errors that could harm the patient or have harmed the patient should be promoted. In addition, various information on international patient safety standards and patient safety indicators has to be produced and disseminated. A team of professionals should be engaged to encourage health service providers for their active role in patient safety. Furthermore, special emphasis should be addressed in management of existing resources (personnel, equipment or supplies) to increase the performance of all actors of the emergency center during both normal working conditions and also in more challenging conditions such as pandemics.

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