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" Hospitals risk management and progress of patient safety"

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Abstract

Objective: The health care systems complexity, therapeutic approaches development, and the advancement of science and technology create new requirements for patient safety and clinical risk management.

Proper risk management should have good plans to avoid the mistakes and risks in hospitals to provide a good and proper patient safety. The requirements for clinical risk management are an effective culture of reporting errors in hospitals and other medical organizations.

In this study we are trying to explain the usage of critical incident reporting system in hospitals and healthcare organization and how it affects the patient safety. the purpose of this exercise is to access informations about the good usage of critical incident reporting system and to obtain suggestions from both experts and staff. Also in this study we show the importance of critical incident reporting system in clinical setting to identifiy the vulnerable areas, accidents, and difficult situations such as "near miss".

Methods: The terms of inclusion, terms of exclusion and keywords were used for the collection of courses, reviews and studies on critical incident reporting system on the official website.

After having relevant studies we give a full description of every single information then the information are divided into different categories based on their main statements, and a small conclusion is given.

Results: There is a very important relationship between critical incident reporting system in hospitals and patient safety even though the quantity relation between patient safety and CIRS is unclear until now. A number of requirements have been explained: senior management obligation, training, transparency, and an open culture of reporting mistakes. The human being has a big and important role in decrease medical mistakes improve risk management and increase patient safety. Leaders must embrace the application of the ‑no blame‖ error and results and comments culture and security of a completely anonymous reporting system. The safety or emergency manager position is very important.

Conclusions : As a quick suggestion , hospitals and other medical organizations are encouraged the adoption of critical incident reporting system. However a lot of studies have been described like the quantity relation between CIRS and patient safety or the improvement between critical incident reporting system and risk management and methods to show us how

to react with them, Strengthened power-based study can help answer open-ended questions related to critical incident reporting system.

Keywords:

- Clinical incident reporting system, patient safety , risk management, clinical risks.

Introduction:

We have a very important task in this research first of all to improve patient safety, have a proper risk management and identify the best diagnosis of a certain illness and try to reach its treatment.

Anyways the difficulty of work understanding and spend a lot of time in work cause high risk in hospitals and other medical organizations [1] .

In nineteen ninety nine the death number among Americans in this year is between 45.000 to 100.00 because of medical errors and wrong medications.

The number of deaths because of medical errors for the first time come before accidents and breast cancer also we notice that the medical stuff in hospitals and other medical organization are a reason of the risk and errors.

On the other hand the medical organizations and hospitals are trying to comfort the patients and gain their trust [2].

That‘s why we should improve our risk management system to avoid risks and medical errors and also develop (no blame) process.

Culture reporting errors in Germany and Australia is not perfect and not compeletly developed [3].

The development of risk management and patient safety in hospitals and other medical organizations are disabled by the stuff because of the scare of the financial problems and individuals issues and consequences.

The clarity in risk management in the hospitals and other medical organizations is very important [4].

In this research a lot of processes must be put in consideration

- The application of the critical incident reporting system.

- Mentioning of universal and national risk management demands in hospitals and medical organizations.

Aim of work:

In this research we are aiming to learn how the usage of critical incident reporting system can improve patient safety knowing the type of risks and mistakes in hospitals in order to improve hospitals and other medical organizations risk management trying to access all the informations about CIRS and obtain all the recommendations we need.

Methodology:

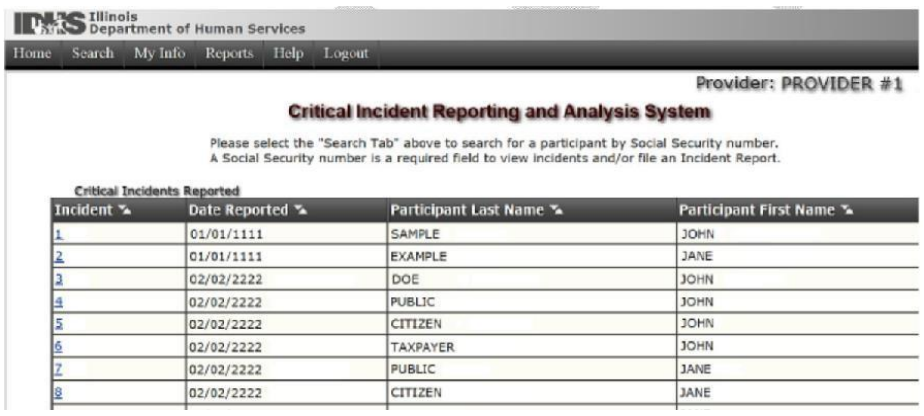
Nowadays there is no enough studies on critical incident reporting system that‘s why we are making a review article on how critical incident reporting system affects risk management and patient safety in hospitals and other medical organizations, in this review article we use these following databases (pubmed, Google scholar and MEDLINE).

This issued condition are applied to identify and choose the most appropriate sources lead to the main set of studies papers, books and articles with data integration .

After collecting the information and data articles are distributed to three sections:

1) Papers and studies.
2) Reviews.
3) Technical documentation and reports.

This review article search for the problems and issues we are facing like who and what has reported, how to improve risk management and avoid the obstacles that have bad effects on patient safety the good relationship between critical incident reporting system and improving patient safety and risk management system in hospitals.



A figure showing the organization of data using (CIRS).

RESULTS :

What was reported?

A lot of studies talking about the usage of critical incident reporting system and its importance in improving patient safety in hospitals also these studies explain the advantages and disadvantages of this system and other reporting systems. A lot of authors [5, 6] explaining that the critical incident reporting system recording a small part of the incidents that happen in hospitals. the cause of not recording the errors happen in all the medical organization are lack of information and feedbacks ignorance and bad appreciation of important events[7] it seems that a high level of incident reporting is consistent with sound error and safety practices[8].

Another issue we found in this study is the critical incident reporting system indicators are often overlooked and misunderstood[9] or the data tend to be very common[10] ignore the analysis during the usage of the critical incident reporting system will not improve patient safety [11] medical mistakes and accidents are common in hospitals.

In Switzerland they made a research and they found that almost half of the accidents recorded in hospitals are human mistakes (48.4%) some accidents happen because the bad organizational ways in hospitals (25.8%) environmental accidents(11.9%) and technical mistakes (7.3%) others (9.7). there is another research made in Romania and Italy [12] reported accidents happen in Bucharest (Romania) because of diagnosis (29%) surgical mistakes (15%) and patients collapse (14%)

In genoa Italy patient collapses (33%) nursing mistakes (21%) and accidents because of diagnoses (20%) in Milan Italy accidents happen because of nurses (26%) and by taking the wrong medications (22%) and mistakes happen because of diagnosis (18%)

A study made in Japan [13] this study reveals that most results are because of medical mistakes (45.6%) taking the wrong medication (20%) and patient collapses (14%)

A German study of 150 cases [14] revealed : 70 mistakes (46%) because of bad organization 55 records (36.9%) because of human mistakes 18 records (12.4%) others 7 records (6.8%).a lot of mistakes were found in treatment(30%) patient collapse (15%) and medical performances (15%)[15]

The authors explain that 60% of all records mistakes can be avoided [14]. Accidents happen because of bad organizations [16, 17], anesthesia and surgery[18,19,20], and wrong medications [6, 20,21,22,23,24,25] have also been described.

Who has reported?

The nursing staff are the one who always using the Critical incident reporting system but the physicians are rarely using it [7, 18, 26, 27].

Doctors were found to report the problems relating to risk management , while nursing staff frequently using critical incident reporting system setting[26]

This study is explaining the necessity of knowing the idea of being wrong (mistake culture) for the medical and clinical staff [28]. To fix these mistakes and problems the doctors and all the medical staff should participate to find the best solutions [15].

However, a lot of authors explaining that the incident reporting systems going to be successful because of the participating of all the staff that works in the hospital medical ,clinical and nursing .[29,30,31,32,33]

And how the good risk management is necessary [34].

The study [13] said that most reports were made by nurses using their own critical incident reporting system papers. In contrast, the medical staff reports have a very obvious errors.

A study Europe [27] about 32% of the critical incident reporting system are from nursing staff, about 17% from medical staff , and about 25% of medical-technical service staff [35].

This study shows that mainly anesthesiologists and surgeons use critical incident reporting system (38%) [15].

Some authors [15] have confirmed that a very small usage of critical incident reporting system will be produced by medical staff As a result, they have asked for effective partnerships to increase the quality of hospital reporting systems [15].

Improvement document deed

Authors studies [36] proved 586 recommendations for development executed a sum of 4999 critical incident reporting system investigations, Despite of finding the system & the evaluation maybe will produce new mistakes. That‘s why an essential mistake management should be executed plus to critical incident reporting system methodology. Pair of researches, revealed accession of newly discovered facilities, achievements of treatments & dispensation, assumption of paperback quality & teaching programmes between alternative portions executed though an outcome of occurrence articles [10, 37]. Teaching of employees‘ important by all measures, Usage of motivation (setting up a good catch award) was suggested

by Herzer al [38]. Hübler et al. [17] produced suggestions in conditions of surgeries & anaesthesiology.

Blockage and assistant features

A lot of components tend to be functioned well critical incident reporting system to be recognized, working under pressure (the higher it gets, false influences on safe measures [39] further time‘s taken) [7] ,employees that has not trained due to either incomprehension or absence of employee‘s awareness [5, 13, 17, 40], maybe absence of response or transmission or working in groups [17] ,a poorly standards of articles [9, 10] & incident records collecting without good examination [11]. While implementing stage of system reporting, we found increasing in irritations between employees that influence the critical incident reporting system acceptance [41]. Added to the authenticity of false analysis in data that could lead mainly to credit the process [42]. More problems held to be clarified such as anonymity & Results [4], opportunities of success & hours taking [8, 18, 32] and results and comments [7, 43]. A lot of authors have been written about elements could influence the approval of critical incident reporting system in a positive and effective way. We are starting by professionalized guidance which is essential for application of a good working critical incident reporting system that could attribute to a specific author company & A functionally role model. Leaders must have an acceptance to the errors of culture reports for patient safety. First of all ensuring and promotion the effectiveness of work at all stages to rise safety of the patient. That could be controlled by experimenting, learning new skills to promote knowing and education [25, 27, 30] and the application of –no blame‖mistakes and results and the safety of an anonymous reporting system [4, 37, 41, 44]. belief & knowing CIRS are a must and are similar to the relation of learning new skills clinically [4, 14, 45,46,47].Adding, Results were the most important part of critical incident reporting system[4, 37, 41, 44].

Effectiveness of the process of critical incident reporting system [11, 36] depend on some features and criteria. However Generic positive elements of critical incident reporting system [13, 16] described in details also.

Critical incident reporting system and positive trends

The Survey that an author made in this study shows that 99% medical professions [27] & nurses depend on critical incident reporting system records for the long term correction in their medical organization , While 49% of technical workers didn‘t declare any improvements to critical incident reporting system. It was discovered the importance of critical incident reporting system in building a positive error safety environment, catching all points of

weakness & in inspect important changes of the system[27] critical incident reporting system can give an adequate information for following analytical organizational mistakes in the organizations of Health care. CIRS data base permits the investigation of the meanwhile circumstances and improvement of the prospective absolute counter strategy to affect positively in the increase of patient safety [6] .In Australia, studies found that reduction of numbers of upcoming adverse tournament in critical incident reporting system resulted from system changes[48] .Also other positive trends were mentioned in [49,50,51]. Accurate measures were added by Leape and Berwick [2] and Merkle[29].

Additionally awareness

A lot of problems which is way important were discovered,

Technical aspects from articles can give you new mistakes [50].1-

2-The importance of national incident reporting systems probably relevant to anaesthesia [31].

3-A push inflation from critical incident reporting organizations lacking the concept of understanding or arrangement [30] as in medical aspect.

4- Not producing any significant or desired effect on handling in critical incident reporting system articles [4].

5-The connection between critical incident reporting system and related reporting systems with organized quality management [52],

6-Harmonizing proposals of critical incident reporting system [5, 6, 8, 16, 26]; and the debate on the connection between incident articles frequency and patient safety [8, 12, 15, 17, 18, 20, 21, 25, 53].

Discussion :

In the past few years, critical incident reporting system and other reporting systems have become an important requirement for organizational health care [54]. The application of Critical incident reporting system is an important task in hospitals to decrease the clinical risks and improve risk management .

The aim of this work was to discuss the information on critical incident reporting system and its clinical use on risk management and relationships between patient safety and critical incident reporting system adoption. The use of inclusion and exclusion criteria resulted in the main set of essays covering 38 subjects, 8 reviews, and 16 specialist books. The information we show in this study the good relationship between the usage of critical incident reporting system and the improvement of patient safety and increase risk management. A good effect

was noticed on patient safety because of incident reporting system, but critical incident reporting system must be organized in an orderly manner. Key features of effective critical incident reporting system are feedback, the participation of all employees including senior management is an obligation, and Critical incident reporting system involvement in both quality and risk management. We should highlight the benefits of the critical incident reporting system on risk reduction plan procedure for the patients support and clinical members of course at all levels .

Motivation and anonymity is very important in keeping track of incident, also training of the medical staff and nursing staff and honesty are very important and should always put under consideration .

An organized critical incident reporting system can correct the reporting organizational mistakes, understanding the processes, and improving patient safety.

The development of a good risk manager is recommended to show the importance of critical incident reporting system.

The manager of risk management in medical offices and hospitals should search for a ways to make members of senior management and clinical staff participates and improve patient safety by clinical incident reporting. On the other hand, the risk manager needs the support of senior management .

Critical incident reporting system that is not supported by senior management will be applied with problems and will not perform many improvements.

Also, several restrictions have been identified:

-Due to the selected ways ,there might be limits in validity set by the chosen criteria and limited number of pages.

- because of the variability of incident reporting systems and the inclusion of similar signals, interpretations in literature reports often vary.

-Because no fee-based information was used in the search, there may be some limitations in validity.

A figure explaining how (CIRS) works.

Conclusion :

This search that have been made in this study discuss clearly that incident reporting system are very variable in hospitals This is because of the non availability of international standard procedure.

However, critical incident reporting system has been found to have a good reflection on patient safety in many cases like organizing medical history of the patients , reducing waiting lists in hospitals and reduce medications errors also having a good organized system in hospitals and other medical organization improve mental health for both medical staff and patients despite the definition and an analysis of the actual relationship between the reporting and patient safety system remains unclear.

When used sparingly, critical incident reporting system makes good changes like processes adaptaion [20, 53] . risk awareness [10, 16, 19, 53] ,and 'near misses' [19, 20] .

Recommendations :

In this study we recommend to have a proper critical incident reporting system to accomplish a noticeable progress in patient safety and to provide a good risk management.

Recommendation to improve risk management in hospitals:

- Honesty is very important in risk management, being honest about the hospital abilities and limitation of the tasks and activities the hospital responsible for and can provide to avoid all the possible risks.
- Always predict the risks and the problems that could happen in the meantime and in the future because the faster you expect these risks the faster you find the solutions for these risks and problems.
- Spread the positivity among the hospital medical staff and patients to get a good results in work and to improve their mental health
- Use the medical history of the patient to avoid any risk and problems during the treatment.
- Use a proper method in the hospital risk management system in this study we use the (critical incident reporting system).
- Always monitor the situations you are exposing to every day to try to improve it and to learn from your mistakes and keep training your staff on the new strategies and systems and methodology new tools in order to keep improving your hospital quality.

Recommendation to progress patient safety:

- Take a good care of the patients and medical stuff mental health and provide a clean and healthy environment in hospitals and any other medical organizations.
- Provide a good and safe systems that will include all the informations ,data and medical history of the patients to get access to any time the doctor or the patient want to avoid wrong treatment and wrong medications.
- Make the patients appoinments simple ,easy and as fast as possible in order to reduce hospital waiting lists.
- Try to provide a clean and comfortable place for a family member beside the patient in his room to give him support and to understand the process of the treatment and to memories his medications in order to play his role in home recovery when the patient discharged.

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