

Implementation of Incident Report as Risk Managing Tool in Assiut University Hospitals

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Abstract

Background: The health environment contains many hazards that can be prevented. Development of a culture of safety is crucial in presence of quality assurance requirements. Incident report could enhance patient safety especially vulnerable group (children and elderly patients) by pointing the vulnerabilities and guide the corrective actions. **Aims:** 1) Examine the effects of incident reporting education program on nurses' knowledge, intentions, and behavior. **Subject and Methods:** A convenient sample of 126 nurses. The incident report was implemented in the selected setting (Cardiology and Urology hospitals) based on the pre-assessment survey. The implementation phase proceeded by education program held by the researcher about the incident report. Six months after implementation, a follow-up survey starts to assess nurses' views and personal experience with the incidents that were reported. **Results:** The vast majority of nurses did not hear about the incident report either in Cardiology or Urology hospitals (100%, 96.6% respectively). Which gain more information after attending the education program about incident report (87.2% & 84.6% and 94.3% & 98.9% respectively). Follow-up survey results show that nurses felt that incident report enhance patient care, find the causal factors of the incident, but more concern about blames directed toward the reported nurse. **Conclusions:** The education program improved the participants knowledge and behavior about incident report. Thus, help to implement the incident report and start errors reporting system in the included hospitals. The incident reports improve patient care and safety, more efforts need to establish error reporting culture without fearing of blame or disciplinary issues. **Recommendations:** Continuous training about the incident report and to reduce fear of reporting and reduce reporting burden and improving feedback system.

Keywords: Incident report, education program, patient care, patient safety.

Introduction

An incident report (IR) or accident report is a form filling out in a health care facility, such as a hospital, nursing home, or assisted living, to document details of an unusual occurrence that happens at the facility, such as a patient's injury. The purpose of the IR is to record the exact details of the incident while they are fresh in the minds of the ones who have witnessed the case. In the future, this information could help mitigate liability concerns resulting from the incident (Ann S, 2019).

The report must usually be filled out as soon as possible after the incident, according to

health care guidelines. This way, as precise as possible are the descriptions written in the article. The bulk of written IRs includes incidents with patients, such as patient crashes. But most facilities may also report an occurrence in which a member of the staff or visitor is injured (Melanie & Goodman, 2020).

The reporting of accidents as a way of improving patient care was one of the report's main recommendations especially for high-risk patient such as children and elderly population, which has been generally adopted. The goal of IR is to recognize safety hazards and, accordingly, to develop steps to minimize these risks and prevent damage to health care. It has

also been suggested that a transition in culture towards embracing IR and relying less on guilt and personal responsibility is a road to increasing patient protection (Khatiri, et al., 2018).

An obstacle to IR is that if they find the issue conveniently fixed, healthcare providers do not report problems. They resolve the issue and forget about it, and no learning takes place. It has also been found that if harm occurs, accidents are more likely to be reported (Kreckler, 2017).

Adverse events are described as the incidence of accidents due to healthcare procedures rather than the illness of the patient that could result in permanent injury, extended hospitalization, and death (Institute of Medicine (US) Committee on Quality of Health Care in America, 2015) & (World Alliance for Patient Safety, 2016) To achieve protection for patients, The principles of human factors that require the introduction of responsive response processes for medical accidents that cause activities that can endanger patient safety, use the system to recognize and learn from incidents, and match them to standard clinical practice are extremely significant (Wolf & Hughes, 2018).

While a considerable achievement in patient safety has been made, medical incidences remain unacceptably high, particularly in low- and middle-income countries, as treatment is frequently given in a pressurized and fast-moving atmosphere involving a wide variety of technologies and numerous individual decisions and decisions by healthcare providers (HCPs) (World Alliance for Patient Safety, 2016).

Patient injury is one of the highest sources of the global burden of disease, according to the World Health Organization (WHO), and is equivalent to such diseases as tuberculosis and malaria. Of the total 421 million annual hospitalizations worldwide, nearly 42.7 million experience medical conditions linked to diagnosis, recording, treatment, prescription, dispensing, distribution of drugs, surgery (Cooper, et al., 2018).

The practice and reporting of medical accidents by HCPs are important

considerations to be considered to interpret medical incidences as an instrument for educational exercise and continuous enhancement in the provision of patient safety. There is proof that medical-incident reporting is underutilized based on research evidence, but it will be of immense value to healthcare provision (Fetherston, 2015).

Very frequently, after an event happens, neither HCPs nor organizations inform each other nor discuss what they have found when an investigation has been carried out, although this will boost faith in the healthcare system (World Health Organization, 2017). There are established phenomena to overcome the status quo, as reported by numerous research studies to promote IR and patient care. These include a supportive environment, a culture of no blame and shame, collegiality, and self-regulation of professionals. More evidence also indicates that while aircraft crews were encouraged to report incidences as they would be rewarded (Howell, et al., 2015). Care providers were discouraged from reporting due to the worries from organization's use of data reported such as these would encourage punishments when used as evidence for judicial cases, poor workplace response (for example trying to blame, disciplinary actions), moral compassion of previous mistakes, providers' emotional reactions to errors such as constantly worrying, guilty and depression following serious errors (Health Quality Ontario Patient Safety Learning Systems, 2017).

A reporting system helps guide healthcare workers on how and where incidents should be reported; and it also helps to analyze, investigate, and disseminate information about incidents reported and therefore their recurrence. Also, an open-door policy where in-charges are available to health care workers is critical as such type of administration has a major impact on incident reporting as health workers do not report incidents (Mark & Heather, 2016).

Significance of the study:

Millions of patients worldwide have experienced deaths or disabling injuries due to errors in the healthcare system. From the researcher clinical

observations and experience as nursing specialist in Assiut university hospital, it was observed that many errors occur with no reporting of such errors as a result the same errors repeatedly occur and patient encounter preventable damage and adverse events. Although much research has been conducted in Egypt concerning factors contributing to reporting behavior as perceived by nurses. there is still a gap in the literature concerning implementation of incident report and suggested solutions. Incident reporting has already been an established idea that is initially intended to promote and improve safety in the worksite

Aim of the study

This study aimed to: Examine the effects of incident reporting education program on nurses' knowledge, intentions, and behavior.

Specific objectives:

- 1) Implementing the incident report in cardiology and Urology hospitals at Assiut University hospitals though assess nurse's knowledge, intention, and behavior
- 2) Evaluate the impact of use incident report on patient care.

Hypotheses of the study:

- Nurses will not hear about the incident report before either in Cardiology or Urology hospitals
- The education program will improve the participants knowledge and behavior about incident report.
- Most of the nurses will agree that the incident report will enhance unit safety

Materials and methods

I-Technical design

Study design: Quasi experimental study design was used in the present study.

Study duration: The present study took about seven months (September 2019 until April, 2020).

Sample size: A convenient sample of all available nurses in the included hospitals (head nurse, bedside nurse).

Study location: Two hospitals of Assiut University Hospitals included in this study. Assiut University Hospitals are in Assiut Governorate, Egypt. It was established in 1956 to be the first university hospital in Upper Egypt. It is the second-largest hospital in Egypt and the first largest one in Upper Egypt. It is a central hospital that receives complicated referred cases daily. It starts with a few specialized hospitals, but now it is including many hospitals such as Obstetric, Pediatric, Neuropsychiatry & Neurosurgery, Cardiology, Urology, Burn, Emergency hospitals. Therefore, only two hospitals were involved in this study Cardiology and Urology hospitals. As they are high risks areas, have more than one unit of ICUs. Also, Urology hospital has a high percent of admission is elderly patient, in addition to elderly patient, there are pediatric intensive care in each hospital. These vulnerable groups (children and elderly patients) have high risk for accidents such as fall down more than any other age group. Each hospital contains outpatient, inpatient (pediatric and adult), ICUs (pediatric and adult), and operation units with a total of about 300 beds. With About 326 nurses (81 head nurse, 254 bedside nurse) over the included hospitals. All nurses in the related settings were invited to participate in the study. Only 126 nurses agree to complete pre and post-assessment tests.

Tools:

Structure questionnaires interviewing sheet consists of parts.

A- Pre-assessment questionnaire: This tool comprised two parts:

Part I- Demographic data part; was designed to collect data about age, place of work, years of experience; Part 11- *Pre-assessment* consists of nurses' knowledge regarding IR (see Table 1).

B- Post-assessment questionnaire: Part 111-items questionnaire. The first 3 items

measure the impact of the education program on raising nurses' knowledge about the incident report. Items 4 - 9 provide insight into the respondents' attitude and intentions toward incident reports, which were measured on a 3-point Likert Scale (agree/neutral/ disagree) (see Table 2). The last two items were open-ended questions concerning nurses' opinions about challenges encounter errors reporting system and suggestions for improvement.

C- Follow-up questionnaire: Part IV- 20 items sheet used to assess hospitals commitment and using of the incident report and respondents' personal experience with incidents. The first question was the only item that collected identifying information concerning the participant's hospital. The rest of the questions had three answer options given for each item (agree, neutral, disagree).

II-Administrative Design: Official permission was obtained from the setting managers, head nurses, and charge nurses to apply this research.

III-Operational Design:

Preparatory phase: This phase took about one month (September 2019) which included reviewing the available literature concerning the study topic, study tools were prepared, and translated. The draft of the questionnaire was reviewed for face validity by expert's opinion through a jury comprised of 5 experts of Faculty of Nursing, Assiut University (to test comprehension of study tools). Content validity was measured using confirmatory factors analysis to assure (importance, clearance, and accountability) of all items of study tool.

Pilot study:

We held a pilot study at the pre-assessment and follow-up surveys. It Was done to detect any problems that may be hindered the researchers during the data collection phases. It helps also in estimating the time needed to fill the questionnaire form. It was carried out on 10% of nurses (No.=30 based on the total number of nurses in both hospitals). Based on the pilot study, the questionnaire

form took about 30 minutes to be filed and tool modification done accordingly. The total period of data collection in the pilot study takes about one week. The participants chosen for the pilot study were excluded from the total study sample.

Reliability: This was measured using Cronbach's Alpha Coefficients methods to ensure internal consistency. Both Part III and Part IV questionnaires had Cronbach's α equal 0.941 and 0.932, respectively.

Ethical considerations:

A written agreement was taken from the ethical committee of Faculty of Nursing, South Valley University. The oral agreement was taken from all nurses who participated in this study after informing them about their rights to participate, refuse, or withdraw at any time. Total confidentiality of any obtained information was ensured. The steps of the study could not entail any harmful effects on nurses or patients.

Procedure:

After ensuring the clarity and understandability of the study tools the actual data collection was started. The researchers organize a meeting with nurses in their workplace, Assiut University Hospitals to explain the purposes of the study.

Pre-assessment: it was taking about one month (October 2019). Meetings are done with the hospitals and units' managers to identify if the hospital have\using any errors repots form, no form was used at the conclusion of the meetings. Therefore, we moved on to the next step in our research. Which is to start the health education program section with head nurses and bedside nurses to present detailed information about the incident report. To gain organizational support we get directors permission to start the education program. After presenting background information and how the tool could be used to improve patient safety and quality assurance. All nurses in the included setting were invited to participate in this study. At the beginning of the program, a questionnaire was applied to identify if the working staff have any information about the incident report. At the beginning of the pre-

self-assessment questionnaire was used for that purpose. More than 300 questionnaires were provided to nurses and head nurses. Only 127 sheets back, 46 of them is incomplete so excluded from the analysis. With a total of 81 valid sheets undergo statistical analysis, 39 sheets from nurses in the Cardiology hospital, while the rest from nurses in the Urology hospital

Statistical analysis

We analyzed the data in terms of percent positive responses and percent negative response rate to identify strengths and opportunities for the studied hospitals. Descriptive statistics were used to describe participants' characteristics in the Pre & post-assessment tests. Narrative feedback was listed out and analyzed for common themes. SPSS program used to perform the analysis accordingly.

Results

Two hospitals in 126 nurses were included in this study. The nurse's characteristics are presented in Figures 1 and 2. Most nurses were aged between 20 to less than 40 years with more than 5 years of experience. The vast majority of them did not hear about the incident report before either in Cardiology or Urology hospitals (100%, 96.6% respectively). However, about 5% of the included nurses revealed that there are ways to report errors that occur in their units as shown in Table 1. Such as orally inform charge nurses, or through nurse's notes.

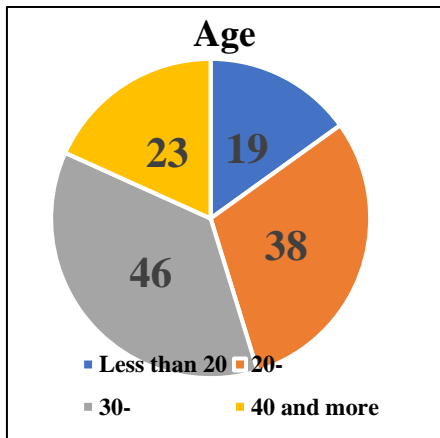


Figure 2: Distribution of nurse's age

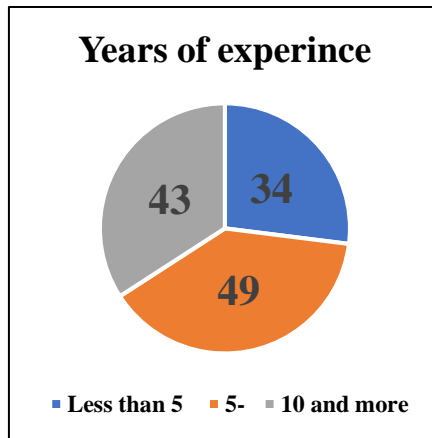


Figure 3: Years of experience

Table 1: Pre-assessment test (nurses knowledge)

N	Questions	Cardiology Hospital (n= 39)		Urology Hospital (n= 87)		
		Yes	No	Yes	No	
1	Do you hear about the IR before?	0% (0)	100% (39)	3.4% (3)	96.6% (84)	
2	Do you know items\contents of the IR?	0% (0)	100% (39)	1.1% (1)	98.9% (86)	
		Cardiology Hospital (n= 39)			Urology Hospital (n= 87)	
		Yes	No	Don't know	Yes	No
					Yes	No
						Don't know

3	There are ways to report errors that occur in your unit?	5.2% (2)	17.9% (7)	76.9% (30)	5.7% (5)	42.5% (37)	51.7% (45)
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Table 2: Post-assessment test (nurses behavior)

N	Questions	Cardiology Hospital (n= 39)			Urology Hospital (n= 87)		
		Agree	Neutral	Disagree	Agree	Neutral	Disagree
1	Know exactly what is IR means?	87.2% (34)	7.7% (3)	5.1% (2)	94.3% (82)	5.7% (5)	% (0)
2	Understand items included in the IR form	84.6% (33)	7.7% (3)	7.7% (3)	98.9% (86)	0% (0)	1.1% (1)
3	Can you fill-out IR form correctly?	82.1% (32)	10.3% (4)	7.7% (3)	92% (80)	4.6% (4)	3.4% (3)
4	The IR made the evaluation process more transparent	66.7% (26)	17.9% (7)	15.4% (6)	82.8% (72)	11.5% (10)	5.7% (5)
5	It is an effective tool to identify weak points and system-related problems	97.4% (38)	2.6% (1)	0% (0)	95.4% (83)	2.3% (2)	2.3% (2)
6	The IR put nurses in more troubles\stress	33.4% (13)	53.8% (21)	12.8% (5)	19.5% (17)	46% (40)	34.5% (30)
7	The IR has a positive effect on safety in your unit?	71.8% (28)	23.1% (9)	5.1% (2)	72.4% (63)	13.8% (12)	13.8% (12)
8	I become more confident to report errors	56% (23)	28.2% (11)	12.8% (5)	89.7% (78)	10.3% (9)	0% (0)
9	I agree with the implementation of the IR	82.1% (32)	15.4% (6)	2.6% (1)	95.4% (83)	3.4% (3)	1.1% (1)

Regrading post-assessment test results that represent in Table 2. Notably, most nurses in both settings gain information about meaning and items that are included in the incident report form (87.2% & 84.6% and 94.3% & 98.9% respectively). Also, most of them can complete the incident report form correctly (82.1% in Cardiology hospital, 92% in urology hospital). About 66.7% of the nurses in Cardiology hospital and 82.8% of the nurses in urology hospital believe that the incident report will increase the transparency of the errors reporting system. Also, the incident report could help to identify system-related issues as the vast majority of the nurses tell (97.4% and 95.4%). Close to half of the participants give a neutral response regarding the incident report can cause more problems to nurses, while near to one-third of them confirm that concern (33.4% and 19.5%).

Most of the nurses agreed that the incident report will enhance unit safety (about 72% of both hospitals). In the Urology hospital, nearly 90% of the nurses feel confident to report errors occur, however about half of their colleagues in Cardiology hospital had the same feeling.

With the major agreement of them on implementation of the incident report in their units (82.1% and 95.4%) The last two questions of the post-assessment test were open-ended questions aimed at gathering more information about their opinion regarding implementation circumstances, their answers listed in Table 3. Only 56 nurses (44.4%) chose to complete open-ended questions. No issues or concerns were reported by managers or staff about the tool during the implementation.

Only four reportable incidents were demonstrated at the implantation period; one was related to environmental condition; one due to delay nurse's response; laboratory unit attributed to one event; verbal aggression towards nurse represent one event (Table 4).

Table 3: Themes obtained from the post-assessment test (nurses opinion) (n=56)

1. What is the most challenges encounter implementation of the IR?	1) Using incident report for punishment only (n=56) 2) Resistance to change (n=34) 3) The concept is misunderstood, and the application process is unclear (37)
2. What are your suggestions to improve the errors reporting system?	1) Use short and easy applied form (n=42) 2) More workshops\training (n=56) 3) Transparent of errors reporting process (n= 51) 4) Looking at the situation generally versus the individual (n=38) 5) Encourage reporting by fair investigate circumstances of the situation (n=52) 6) Managers and supervisors support (n= 54)

Table 4: Distribution of incident report as of event and the reporting unit (n=4)

Hospital	Unit	Cause	Number of events
Cardiology	Inpatient	Environmental	1
Urology	Operation	Delay nursing response	1
Urology	Laboratory	Unfunctional	1
Cardiology	Out-patient	Verbal aggression	1

Most of the nurses in both hospitals see that there are too busy to fill out the IR form (53.8% in Cardiology, 45.2% in Urology hospitals) (Table 5). Also, participants give a positive response regarding items 2-7, which about identifying and responding to the incident report, organization support, and the incident report form itself. More than half of nurses in the Cardiology hospital give a neutral response regarding using the IR results for improvement purposes (53.8%), while most nurses in Urology hospital disagree with this statement (47.6%). About 56.4% of nurses in Cardiology hospital revealed that most of the reports would be reinvestigated for more details, versus 26.2% of nurses in Urology hospital. Nurses in both hospitals give a neutral response to the statement that asking if the investigations undergo a systematic approach (51.3% in Cardiology, 45.2% in Urology hospitals). Also, nurses in both hospitals give a high rate to disagree choice to statements 11-13. Most nurses in the Cardiology hospital see that investigations usually determine the causal factors of incident & objectivity of the investigation, while most nurses in Urology hospital were neutral. A high percentage of nurses in both hospitals give a neutral response regarding incident reports enhance patient care. Also, nurses were neutral regarding ignorance of report if no one gets hurts through the incident. Nurses who report a risky incident didn't get additional support or guidance in both hospitals. Most of the nurses believe there are more incident unreported (hidden).

Table 5: Follow-up survey (nurses' intention)

N	Items	Cardiology Hospital (n = 39)			Urology Hospital (n = 42)		
		Agree	Neutral	Disagree	Agree	Neutral	Disagree
1.	I have enough time to fill out the incident report form.	25.6% (10)	20.5% (8)	53.8% (21)	19% (8)	35.7% (15)	45.2% (19)
2.	I know how to respond correctly in case if an incident occurs.	69.2% (27)	25.6% (10)	5.1% (2)	50% (21)	33.3% (14)	16.7% (7)
3.	I get notes about the investigation of incidents that I reported.	69.2% (27)	17.9% (7)	12.8% (5)	47.6% (20)	33.3% (14)	19% (8)
4.	You are encouraged to report, and the disciplinary procedure is exceptional?	53.8% (21)	30.8% (12)	15.4% (6)	33.3% (14)	45.2% (19)	21.4% (9)
5.	Do you receive continuous training about the errors reporting system?	59% (23)	33.3% (13)	7.7% (3)	35.7% (15)	35.7% (15)	28.6% (12)
6.	There are clear rules about types of incidents that need to report to?	56.4% (22)	38.5% (15)	5.1% (2)	42.9% (18)	31% (13)	26.2% (11)
7.	Used the form of the IR is appropriate and suitable?	38.5% (15)	41% (16)	20.5% (8)	35.7% (15)	33.3% (14)	31% (13)
8.	Recommendations of IR investigation used for improvement purposes?	33.3% (13)	53.8% (21)	12.8% (5)	19% (8)	33.3% (14)	47.6% (20)
9.	Re-investigation may occur in some situations?	56.4% (22)	38.5% (15)	5.1% (2)	26.2% (11)	45.2% (19)	28.6% (12)
10.	Incident report undergoes systematic investigations?	33.3% (13)	51.3% (20)	15.4% (6)	14.3% (6)	45.2% (19)	40.5% (17)
11.	My hospital treats incidents as learning opportunities.	33.3% (13)	33.3% (13)	33.3% (13)	21.4% (9)	33.3% (14)	45.2% (19)
12.	No blame is attached to reporting an incident.	28.2% (11)	30.8% (12)	41% (16)	14.3% (6)	40.5% (17)	45.2% (19)
13.	My hospital accepts nurses who make mistakes.	5.1% (2)	41% (16)	53.8% (21)	20.6% (12)	33.3% (14)	46.1% (16)
14.	Incidents investigations usually identify the causal factors that lead to the incident?	64.1% (25)	17.9% (7)	17.9% (7)	23.8% (10)	45.2% (19)	31% (13)
15.	Incident investigated objectively?	51.3% (20)	33.3% (13)	15.4% (6)	19% (8)	45.2% (19)	35.7% (15)
16.	Errors reporting system improves patient care\safety?	33.3% (13)	56.4% (22)	10.3% (4)	23.8% (10)	47.6% (20)	28.6% (12)
17.	Results and recommendations of reports communicated to nurses?	41% (16)	41% (16)	17.9% (7)	56.4% (22)	16.7% (7)	31% (13)
18.	Incidents ignore as long as no-one gets hurt?	35.9% (14)	59% (23)	5.1% (2)	19% (8)	38.1% (16)	42.9% (18)
19.	Nurses, who report on the dangerous incident, get more support and guidance?	17.9% (7)	17.9% (7)	64.1% (25)	30.7% (15)	28.6% (12)	40.7% (15)
20.	Do you think there are unreported incidents (hidden incidents)?	66.7% (26)	28.2% (11)	5.1% (2)	50% (21)	23.8% (10)	26.2% (11)

Discussion

The starting point for the right management of the hospital's clinical risk is therefore represented by the identification and analysis of non-conforming results, determining whether they have caused damage to the patient (Wiles, et al., 2008). A useful tool for this is represented by the incident reporting system (Leistikow, et al., 2017). So, the aim of this study is examining the effects of incident reporting education program on nurses' knowledge, intentions, and behavior.

In pre-assessment phase, almost all nursing staff did not hear about the incident report before and only five percent of them know the way to report errors (Table 1) because the two hospitals of Assiut University Hospitals which included in this study did not apply the incident report. While at post-assessment phase and after the health education program sessions, the participant nurses gain much information about the meaning, contents, and importance of incident report as well as how to complete the incident report form correctly and implementation agreement in both Cardiology and urology hospital (Table 2).

This finding agrees with the study findings done by Engeda (2016) who found that training was significantly associated with the incident reporting behaviour of nurses. Nurses who had received training on incident reporting were more likely to report incidents than those who did not receive training about incident reporting (Engeda, 2016).

This finding is in line with another similar study in that the rate of reporting adverse incidents increased following the 6-month educational intervention, and that nurses who received the intervention became more knowledgeable and more positive about incident reporting (Nakamura, et al, 2014).

In this study, the nursing staff mentioned some challenges encounter implementation of

the incident report such as, (1) using incident reports for punishment only, (2) resistance to change, and the concept is misunderstood, and (3) the application process is unclear. Also, they suggested some valuable strategies to improve errors reporting system such as, (1) use short and easy applied form, (2) more workshops\training needed, (3) transparent of errors reporting process, (4) looking at the situation generally versus the individual, (5) encourage reporting by fair investigate circumstances of the situation, and (6) managers and supervisors support (Table 3). These findings are consisted with the findings confirmed by Pham et al (2013) who concluded that, Incident Reporting Systems (IRS) are and will continue to be an important influence on improving patient safety. However, they are not the panacea that many believe them to be. They have several limitations that should be considered when utilizing them or interpreting their output: i) IRS can't be used to measure safety (error rates); ii) IRS can't be used to compare organizations; iii) IRS can't be used to measure changes over time; iv) IRS generate too many reports; v) IRS often don't generate in-depth analyses or result in strong interventions to reduce risk; vi) IRS are associated with costs. Moving forward, several strategies are suggested to maximize their value: i) make reporting easier; ii) make reporting meaningful to the reporter; iii) make the measure of success system changes, rather than events reported; iv) prioritize which events to report and investigate, do it well; v) convene with diverse stakeholders to enhance their value (Pham, et al., 2013).

The researchers evaluated hospitals learning from incidents and personal experience of staff with incident report after six months of post-assessment (follow up). They found that most of nurses in both hospitals reported that they did not have enough time to fill-out incident report form. We think the causes are the workload because the shortage

of the nursing staff at Assuit University Hospitals and the high flow rate. The evidence for this are more than half of the participant nurses reported that they know how to respond correctly in case if an incident occur, get notes about investigation of incidents that they reported, are encouraging to report & the disciplinary procedure are exceptional, receive continuous training about errors reporting system, and There are clear rules about types of incident that need to report.

These results are contrasted to the findings by **Archer and Colhoun (2018)** who confirmed that, nurses do not appear to be engaging with the incident reporting process. The main reason given for not completing forms was not having enough time (38.2% of respondents), primarily due to the length and complexity of forms, organizational issues, a culture of blame, and a lack of feedback (**Archer & Colhoun, 2018**).

Conclusions

The education program improved the participants knowledge and behavior about incident report. Thus, help to implement the incident report and start errors reporting system in the included hospitals. The main barrier for reporting incidents was time constraints. Nurses' concern about blame or disciplinary that could attach to report an incident.

Recommendations

1. Continuous educational sessions about the incident report for the nursing staff are required at the health care facilities in Egypt and to reduce fear of reporting and reduce reporting burden and improving feed-back system.
2. Follow up on the incident report implementation to assess the challenges and provide the necessary support.
3. Follow-up studies count the incidents that have been reported and the correction action.

Limitation of the study

We cannot implement the incident report at all Assiut University Hospitals because the manager of some Hospital and ICUs directors did not agree to go further with the implementation phase.

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