

ORIGINAL RESEARCH ARTICLE

KNOWLEDGE AND BARRIERS OF INCIDENT REPORT AMONG NURSES IN TEACHING HOSPITAL,
BHARATPUR

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ABSTRACT

Background: An incident report is a formal recording of the facts related to a workplace accident, injury or near miss. So, incident should be reported properly and immediately in effective way which would lead appropriate management and prevention of incident. This study aimed to assess the knowledge and barriers of incident reports among nurses.

Methods: A cross-sectional study design was used among nurses working in teaching hospitals. A simple random sampling technique was used to select 208 nurses and data was collected by using self-administered questionnaire from June 18, 2019 to July 18, 2019. Data was analyzed in SPSS version 20 using descriptive statistics and inferential statistics.

Results: This study revealed that 73.1% of respondents had poor knowledge on incident report. Whereas common barrier identified by respondents were work complexity (40.4%), fear of blamed (59.1%), lack of protocol (50.0%) and inadequate reporting system (42.3%). Nurses level of knowledge was statistically significant with level of education ($p=0.001$), professional designation ($p=0.001$), available guideline ($p=0.004$) and available reporting format ($p=0.014$)

Conclusions: This finding concluded that nurse's knowledge is limited on incident reports and number of barrier of incident reporting had been identified. With this information nurses knowledge should be upgraded by providing in service education on incident report and availability of protocol along this hospital administrator should support, ensure anonymity and create a strong safety culture within hospital which will reinforce staff to report incident immediately thus to reduce the reoccurrence of errors and enhance patient's safety.

INTRODUCTION

An incident is any event that is not consistent with routine operation of health care unit or patient care. There are various types of incidents like needle stick injury, patient falls, and medication error. Reporting incident helps to identify the trends of the system which provide the justification for changes in policies, procedures or in service programme.¹ So, incident should be reported properly and immediately in effective way which would lead appropriate management and prevention of incident.² Several of a nation around the world constantly have demonstrated excessively high rates of medical harm and experienced deaths or disabling injuries.³

Reporting the errors has been found as an effective strategy to reduce the reoccurrence of errors and improving patient's safety.⁴ There are various barriers of reporting incident like lack of time, complexity of work,⁵ inadequate feedback, deficiencies in knowledge, beliefs about risk, cultural norms, lack of value in the process,⁶ lack of job training and confidentiality,⁷ heavy workload,⁸ burnout and communication gap among team, were being the most essential one.⁴

Reporting incident is a crucial part of nursing as they have to deal with various information and data, so nurses should have knowledge on how to record, report and interpret data which helps in reducing likelihood of reoccurrence of the error. Thus identification of nurse's knowledge and barrier on reporting incident helps to improve quality of reporting system which enhances patient safety. So, the study aimed to assess the knowledge and barrier on reporting incident report among nurses in Teaching Hospital, Bharatpur.

METHODS

A cross-sectional study design was conducted to assess the knowledge and barriers of incident report among registered nurses working in different units of CMC-TH. A total of 208 samples were selected by using Simple random sampling technique through tabulation method. At first total population (358) was identified and sample size was calculated by using the formula $n = (1 + Ne^2)$ with an allowable error 5% at 95% CI. The estimated sample size was 208 after adding 10% non-response rate. Data was collected from June 18, 2019 to July 18, 2019 by using self-administered questionnaire. Self-constructed

research instrument based on previous similar studies was used which was divided into three parts. Part-I was related to socio-demographic and professional information of respondents, Part-II was related to knowledge of incident report multiple choice question having 15 items. Each question was scored 1 for correct response and 0 for incorrect response. The level of knowledge was measured by calculating the total score and then classified into two categories Good Knowledge ($\geq 80\%$ of total score) and Poor Knowledge ($< 80\%$ of total score) and Part III was related to barrier of incident report having 17 items of checklist Yes/No.⁹⁻¹² Validity was established through extensive literature review and consultation with experts. Pretesting was done among 21 nurses of Chitwan Medical of Sciences. Ethical clearance was obtained from Institutional Ethical Review, CMC with reference number CMC-IRC/076/077-059. Informed written consent was obtained from each participant. Privacy, confidentiality and anonymity of the respondents were maintained. All the collected data was checked, reviewed and organized for accuracy, consistency and completeness. After that collected data were coded and entered in Statistical Package for Social Science (SPSS) version 20 for analysis. Then the data were analyzed using descriptive statistics and inferential statistics.

RESULTS

Table 1 depicted that more than fifty percent (56.7%) of respondent were at the age more than and equal to twenty-two (≥ 22) years. More than one third (44%) of the respondents were Brahmin and most of the (88.9%) respondents followed Hindu religion. Regarding level of education 74.5% had completed the Professional Certificate Level of Nursing.

Table 1: Socio-demographic characteristics of respondents
n=208

Variable	Frequency (%)
Age in years	
<22	90(43.3)
≥ 22	118(56.7)
(Median=22, IQR=(Q3-Q1) =(24-21), Min=18 Max=36)	
Ethnicity	
Bhramin	93(44.7)
Chhteri	41(19.7)
Janajati	58(27.9)
Dalit	9(4.3)
Religion	
Hindu	185 (88.9)
Buddhist	18(8.7)
Others	5(2.4)
Level of education	
Proficiency Certificate Level	155(74.5)
Bachelor Level	53(25.5)

Table 2, depicted that majority of respondents (83.2%) were staff nurse. More than fifty percent (58.2%) of respondents had 12 months of total work experience where 70.2% had received none in-service education. More than half of the respondents' (60.6%) had answered that there was no any available guideline and 71.2% had answered there was no

available reporting format in their ward and most common incident that occur (34.7%) in the ward was fall injury.

Table 2: Professional characteristics of respondents

n=208

Variable	Frequency (%)
Professional designation	
Staff nurse	173(83.2)
Senior staff nurse	25(12.0)
Nursing Officer	7(3.4)
Senior Nursing Officer	3(1.4)
Total work experience in CMC	
<12 month	87(41.8)
≥ 12 month	121(58.2)
(Median=12, IQR=(Q3-Q1)=(24-6),Min=0.23,Max=84)	
Present working area	
Intensive care unit	73(35.1)
Maternity unit	12(5.8)
Medical ward	47(2.6)
Surgical ward	32(15.4)
Operation theater	17(8.2)
Psychiatric ward	1(0.5)
Ortho ward	8(3.8)
Emergency	18(8.7)
Total work experience in present ward	
<12 month	99(47.6)
≥ 12 month	109(52.4)
(Median=12, IQR=(Q3-Q1)=(24-6), Min=0.2, Max=83)	
In-service education on Incident Report	
Yes	62(29.8)
No	146(70.2)
Available guideline in ward	
Yes	126(60.6)
No	82(39.4)
Available reporting format in ward	
Yes	148(71.2)
No	60(28.8)
Common Incident occurs in ward	
Needle stick injury	100(31.8)
Medicine error	51(16.2)
Fall injury	109(34.7)
Inappropriate behavior	39(12.4)
Consent issues	15(4.8)

Table 3: Respondents' level of knowledge on incident report

Level of Knowledge	Frequency (%)
Good Knowledge ($\geq 80\%$ of total score)	56(26.9)
Poor Knowledge ($< 80\%$ of total score)	152(73.1)
Total	100

Median=22, IQR=(Q3-Q1) = (24-21), Min=2, Max= 15. Total score=15

Table 3, showed that out of 208 respondents, nearly three-fourth (73.1%) of respondents had poor level of knowledge on incident report whereas only 26.9% had good level of knowledge on incident report.

Table 4, depicted that more than half of the respondent (64.4%) had answered that high staff turnover rate was major barrier

of incident report. Similarly, Fear of administrative sanction was (61.5%), fear of penalties (57.7%) is other common barrier identified by respondents. Whereas only 13.0% of respondents had answered that lack of responsibility was the barrier of incident report.

Table 4: Barriers on incident reporting n=208

Statement	Frequency (%)
Over workload	67(32.2)
Work complexity	84(40.4)
Lack of responsibility	27(13.0)
High staff turnover rate	134(64.4)
Knowledge deficit	65(31.3)
Lack of protocol	104(50.0)
Lack of priority	51(24.5)
Trivial and insignificant	59(28.4)
Lack of improvement	69(33.2)
Fear of penalties	120(57.7)
Fear of administrative sanction	128(61.5)
Fear of loss of prestige	73(35.1)
Fear of blamed	123(59.1)
Fear of decrease salary	31(14.9)
Job threat	50(24.0)
Difficult to filling form	60(28.8)
Inadequate reporting system	88(42.3)

Table 5: Association between respondents' level of knowledge on incident report and selected variables n=208

Variable	Good	Poor	p-value
Age in completed year			
<22	22(24.4)	68(75.6)	0.482
≥22	34(28.8)	84(71.2)	
Level of education			
Proficiency Certificate	27(17.4)	128(82.6)	0.001
Bachelor Nursing	29(54.7)	24(45.3)	
Professional designation			
Staff Nurse	38(22.0)	135(22.0)	0.001
Others	18(51.4)	17(48.6)	
Total work experience in CMC			
<12 month	28(32.2)	59(67.8)	0.147
≥12 month	28(26.9)	93(76.9)	
Present working area			
General unit	29(29.0)	71(71.0)	0.516
Critical unit	27(25.0)	81(75.0)	
In-service education			
Yes	18(29.0)	44(71.0)	0.655
No	38(26.0)	108(74.0)	
Available guideline			
Yes	43(34.1)	83(65.9)	0.004
No	13(15.9)	69(84.1)	
Available reporting format			
Yes	47(31.8)	101(68.1)	0.014
No	9(15.0)	51(85.0)	

Significance level at 0.05

Table 5, depicted that the association between respondent's level of knowledge on incident report and selected variables. Whereas, level of knowledge was statistically significant with level of education (p=0.001), professional designation (p=0.001), available guideline (p=0.004) and available reporting format (p=0.014).

DISCUSSION

The finding of the study revealed that nearly three-fourth (73.1%) of respondents had poor knowledge of incident report in contrast to this study, study conducted by Kizitoomona¹³ where (64.9%) of respondents had average level of knowledge of incident report. Only 16.2% of the respondent's showed medical error as an incident. But in contrast to this study, study, conducted by Scharein and Trendelenburg, 2013 revealed more than half (62.3%) of respondents perceived as medical error as incident occurs in hospital.¹⁴

The finding of the study revealed that more than one third (40.4%) of the respondent's perceived that work complexity is the barriers of incident report. Similar finding was noted by Banakhar et al where more than fifty percent (53.6%) of respondent's identified work complexity as a barrier on reporting incident.⁵ This might be as nurses had pressure in the main priority of work not on reporting incident.

Less than one third of the respondents' (28.8%) reported difficulty to filling form as barriers of incident report, whereas in the study conducted on Saudi Arabia had 46.4 of respondents had difficulty in filling form⁵. The finding of the study also showed that 31.3% of respondents perceived that knowledge deficit as the barriers of incident report similar finding was noted on study conducted in Indonesia, where 45.2% of the respondents perceived knowledge deficit as a barrier of reporting incident.¹⁵

More than half of the respondents perceived barriers as fear of blame 59.1% but in contrast to this study, study conducted in Korea concluded only 2.1 % of the respondent perceived fear of blame as barrier of incident.¹⁶ In our context possible explanation for this might be targeted healthcare organization is not encouraging a non-blaming culture of reporting incident among their staff. Additionally fifty percent of (50%) of the respondent perceived lack of improvement as a barrier of incident similar finding was revealed study conducted in Australia where 61.8% of respondents perceived lack of improvement as a major barrier of reporting incident.⁵

This study revealed that the significant association between availability of guideline (p=0.004), available of reporting format (0.014) with the level of knowledge on incident report and where study conducted by Engeda similar finding on availability of guideline (p=0.004) and contrast finding on available of reporting format (0.06).¹⁷

The possible implication of the outcomes of present study could be helpful for hospital authority to develop protocol and conduct programme for updating and upgrading knowledge on reporting incident whereas possible limitation of the study

as it is limited to only nurses of Chitwan Medical College thus finding of the research study may not be generalized the entire population.

CONCLUSION

This study showed that nearly three-fourth of respondents had poor level of knowledge on incident report. Main barrier identified were work complexity, lack of improvement after reporting, fear of blamed and penalties, inadequate reporting system and lack of protocol. This finding emphasizes the need

to upgrade nurse's knowledge on incident report for that well planned training sessions and availability of written protocols need to be practice. Besides this hospital administrator should support, ensure anonymity and create a strong safety culture within hospital which will ultimately reinforce staff to report incident immediately which helps to reduce the reoccurrence of errors. Thus, enhance quality care and patient's safety.

CONFLICT OF INTEREST: None

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