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## Original Article

### Post Operative Incidents Reporting In Patients- A Clinical Study

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#### ABSTRACT:

**Background:** Evaluating the errors helps us to learn, identify and solve a major problem in health care systems, also this systematic approach does not intend to punish or blame individual personnel. The present study was conducted to assess incident reporting in post operative patients. **Materials & Methods:** The present study was conducted in the department of Anesthesia. It comprised of 2430 patients of both genders. A proforma was developed which included information about the type of incident, severity of incident, person responsible. Whenever an incident was identified, a proforma was filled. **Results:** Out of 2430 patients, males were 1280 and females were 1150. The difference was non- significant (P= 0.1). Type of incidents were human errors which includes orders not written (7), wrong documentations (8), underdosage (3) and improper patient selection (4). In equipment selection, pump malfunctions (10), battery problem (12) and in patient factors, patient unable to push PCIA handset was seen (8). The difference was significant (P< 0.05). Factors responsible for incidents were inattentive (54%), lack of knowledge (18%), lack of cooperation (12%) and inadequate communication (26%). The difference was significant (P< 0.05). **Conclusion:** Incident reporting proved to be an effective method of improving quality care in patients. It not only provides valuable information about areas which needed improvement but also guides to take steps to avoid it.

**Key words:** Error, Incident, Medical

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## INTRODUCTION

Evaluating the errors helps us to learn, identify and solve a major problem in health care systems, also this systematic approach does not intend to punish or blame individual personnel. Voluntary medical error reporting is a useful device for learning from the past. Collecting data of medical errors in a structural format provides a pathway to identifying the main cause, error pattern and its solution.<sup>1</sup> Incident reporting is one of the inexpensive and reliable methods, through which errors in medical care are discovered. It has also been used as a tool for quality assurance. Other commonly used methods to identify errors in medical management include retrospective chart review and computerized surveillance.<sup>2</sup> Patient safety incident is an event or circumstance which could have resulted, or did result, in unnecessary harm to a patient. Harmful incident is a patient safety incident that resulted in harm to the patient. No harm incident is a patient safety incident that reached a patient, but with no discernible resulting harm. Near miss incident is a patient safety

incident that did not reach the patient. With regards to the systematic approach to errors and by paying attention to the issue of human error possibility, the most important factor which affects the final outcome of an error in the field of patient safety is the way the system responds to defects and failure leading to the problem.<sup>3</sup> The present study was conducted to assess incident reporting in post operative patients.

## MATERIALS & METHODS

The present study was conducted in the department of Anesthesia. It comprised of 2430 patients of both genders. All patients were informed regarding the study. The study was approved prior from institutional ethical committee.

A proforma was developed which included information about the type of incident, severity of incident, person responsible. Whenever an incident was identified, a proforma was filled.

Results thus obtained were subjected to statistical analysis using chi-square test. P value less than 0.05 was considered significant.

**RESULTS**

**Table I Distribution of patients**

Total- 2430		
Males	Females	P value
1280	1150	0.1

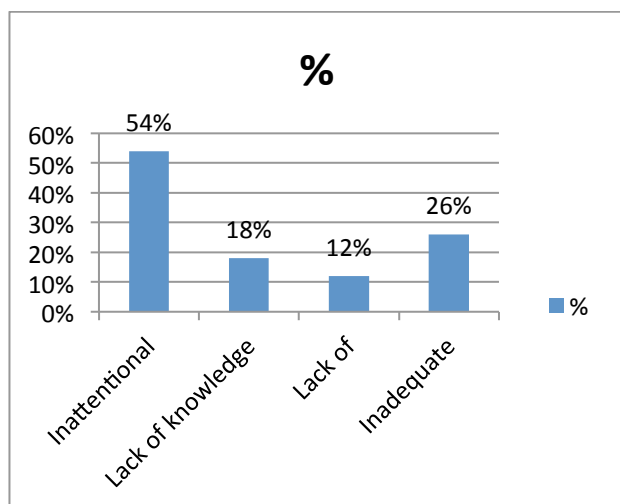
Table I shows that out of 2430 patients, males were 1280 and females were 1150. The difference was non-significant (P= 0.1).

**Table II Type of incidents**

Incident	Number	P value
<b>Human errors</b>		
Orders not written	7	0.01
Wrong documentations	8	
Improper selection of patient	4	
Underdosage	3	
<b>Equipment factors</b>		
Pump malfunction	10	
Problem with battery	12	
<b>Patient factors</b>		
Patient unable to push PCIA handset	8	
<b>Total</b>	<b>52</b>	

Table II shows that type of incidents were human errors which includes orders not written (7), wrong documentations (8), underdosage (3) and improper patient selection (4). In equipment selection, pump malfunctions (10), battery problem (12) and in patient factors, patient unable to push PCIA handset (8). The difference was significant (P< 0.05).

**Graph I Responsible factors of incidents**



Graph I shows that factors responsible for incidents were inattentional (54%), lack of knowledge (18%), lack of cooperation (12%) and inadequate communication (26%). The difference was significant (P< 0.05).

**DISCUSSION**

According to experts opinions 44000 to 98000 deaths occur due to medical errors in the United States of America, annually. Nevertheless, patients expect to receive health care according to the best standards and based on the latest scientific and clinical evidence. Cooper et al<sup>4</sup>. published incident reporting in anesthesia first in 1978. Since then critical incident reporting found some early applications in medicine. Incident reporting can be anonymous and voluntary by the patient, family, press or from medical personnel. In present study, out of 2430 patients, males were 1280 and females were 1150. We found that incidents were seen in 52 patients. Hamid et al<sup>5</sup> found a total of 98 (1.80%) incidents were in 5432 patients managed by APS during 3 years period. Average age of the patients was 46 ± 17 years. Majority of incidents were related to epidural care (71%) and occurred in surgical wards (87%). Most of the incidents occurred due to human error and infusion delivery set related defects. We found that type of incidents were human errors which includes orders not written, wrong documentations, underdosage and improper patient selection. In equipment selection, pump malfunctions and battery problems were seen and in patient factors, patient unable to push PCIA handset was the common incident. In a study by Davoodi et al<sup>6</sup>, 2500 errors were extracted from 1000 voluntary error reporting forms of the 12 hospitals of Mashhad Medical University. The most frequent error type was treatment errors (36%) related to drug administration, standard procedures and surgical events. Weingart et al<sup>7</sup> suggested that involvement of patient in adverse incident reporting should also be considered to identify avoidable incidents. Early and frequent feedbacks to medical staff may also help to stimulate voluntary participation and their continued engagement in incidents reporting. Regular dissemination of knowledge regarding the adverse events and near misses will improve reporting. In present study, we observed that factors responsible for incidents were inattentional (54%), lack of knowledge (18%), lack of cooperation (12%) and inadequate communication (26%). This is in agreement with Bhatia et al.<sup>8</sup> In Rogers's<sup>9</sup> study the risk of committing an error was higher when personnel worked more than 12 hours a day or 40 hours a week. If nurses have enough time and are better connected with their patients, such errors could be prevented or reduced to an acceptable level. Baker's<sup>10</sup> survey showed that 42% of incidental events led to harm whereas 20% of them were preventable. In our study about 50% of events resulted in harm which might be due to the general perception that only severe adverse events should be reported. There are few reports of changes in clinician's behaviour after a critical incident. These emotional disturbances due to critical incident may lead to additional errors. Same may be true for paramedical staff in such situations.

**CONCLUSION**

Incident reporting proved to be an effective method of improving quality care in patients. It not only provides valuable information about areas which needed improvement but also guides to take steps to avoid it.

## REFERENCES

1. MacLennan AI, Smith AF. An analysis of critical incidents relevant to pediatric anesthesia reported to the UK National Reporting and Learning System, 2006-2008. *Paediatr Anaesth* 2011;21:841-7.
2. Mahajan RP. Critical incident reporting and learning. *Br J Anaesth* 2010;105:69-75.
3. Sirivararom P, Virankabutra T, Hungsawanich N, Preamsamran P, Sriraj W. The Thai Anesthesia Incidents Monitoring Study (Thai AIMS) of adverse events after spinal anesthesia: An analysis of 1996 incident reports. *J Med Assoc Thai* 2009; 92:1033-9.
4. Cooper, Catchpole K, Bell MD, Johnson S. Safety in anaesthesia: A study of 12,606 reported incidents from the UK National Reporting and Learning System. *Anaesthesia* 2008; 63:340-6.
5. Hamid, Thomas AN, Panchagnula U. Medication-related patient safety incidents in critical care: A review of reports to the UK national patient safety agency. *Anaesthesia* 2008; 63:726-33.
6. Davoodi, Wubben I, van Manen JG, van den Akker BJ, Vaartjes SR, van Harten WH. Equipment-related incidents in the operating room: An analysis of occurrence, underlying causes and consequences for the clinical process. *Qual Saf Health Care* 2010;19: 64.
7. Weingart, Care WD. Identifying the learning needs of nurse managers. Application of the critical incident technique. *J Nurs Staff Dev* 1996; 12:27-30.
8. Bhatia, Gupta S, Naithani U, Brajesh SK, Pathania VS, Gupta A. Critical incident reporting in anaesthesia: A prospective internal audit. *Indian J Anesth* 2009; 53:425-33.
9. Roger, Weingart SN, Pagovich O, Sands DZ, Li JM, Aronson MD, Davis RB, et al. What can hospitalized patients tell us about adverse events? Learning from patient-reported incidents. *J Gen Intern Med* 2005; 20:830-6.
10. Baker, Merry AF. Safety in anaesthesia: Reporting incidents and learning from them. *Anesthesia* 2008; 63:337-9.

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