Title:
Adverse Incidents Reporting in a Paediatric Unit of a University Hospital in Ghana

Gifty Osei Berchie, MSc[1]
Susanna Aba Abraham, MPH[1]
Christiana Okantey, MPhil[1]
Vida Maame Kissiwaa Amoah, MSc[2]
Charlotte Boachie Danquah, MN[3]
(1)School of Nursing and Midwifery, University of Cape Coast, Cape Coast, Ghana
(2)School of Nursing, Garden City University College, Kumasi, Ghana
(3)Paediatric Ward, Kwame Nkrumah University of Science and Technology Hospital, Kumasi, Ghana

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Session Title:
Clinical Posters Session 2

Keywords:
Adverse events, Patient safety and Reporting

References:
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Abstract Summary:
Participants will acquire information about the most common type of adverse events that occur among the paediatric population in Ghana. The session will also afford participants the opportunity to become acquainted with paediatric nurses' practices as related to documentation and reporting of adverse events that occur in their unit.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to identify the types of adverse events that are documented and reported in the Paediatric Ward of the KNUST Hospital.	The investigator will review the Incident Books of the Paediatric Ward to identify and categorise the various adverse events that are recorded by nurses of the Unit.

The learner will be able to determine the paediatric nurses' documentation and reporting practices.	The investigator will review the Incident Books and interview nurses of the Unit to determine whether they documented and reported adverse events that occurred.
The learner will be able to identify the factors that inhibit or facilitate adverse events reporting.	The investigator will interview nurses of the Paediatric Unit to identify the barriers to and facilitators of adverse events reporting.

Abstract Text:

Introduction

Healthcare services are aimed at preventing or managing diseases. In spite of this intention, errors emanating from the health systems, the environment or the health professionals are sometimes made exposing patients to harm (Kingston, Evans, Smith, and Berry, 2004). Adverse events (AEs), defined as injuries caused by medical management rather than the underlying disease that lengthen the hospitalisation or produce a disability, constitute a serious problem for the health care industry and a drain on the national health resource (Leonard, 2010; Vincent, Neale, and Woloshynowych, 2001).Patient safety has therefore become a primary concern of contemporary health-care delivery systems.

Children are at higher risk to suffer AEs because of their unique physiological and developmental needs (Choonara, Gill, and Nunn, 1996; Stratton, Blegen, Pepper, and Vaughn, 2004) and have been found to be exposed to up to three times the rate of AEs such as medication errors compared to their adult counterparts (Kaushal, Bates, Landrigan, McKenna, Clapp, Federico et al., 2001). AEs can negatively impact patient outcomes and are an aspect of patient safety directly connected to health care provision (Stratton et al., 2004).

This risk requires that a good internal reporting system is adopted to ensure that all responsible parties are informed of major hazards and identify threats to patient security in their institution. Reporting is also important for monitoring progress in the prevention of AEs (Leape, 2002).

For understanding, preventing recurrence or reducing AEs, data on the frequency and types of events is important. The approach most commonly used for uncovering adverse patient events is through the use of incident reports which is typically completed by health care staff (Taylor, Brownstein, Christakis, Blackburn, Strandjord, Klein et al., 2004). However, research studies have shown that not all AEs are recorded in the incidents reports or patients' charts.

Problem statement

In the past two decades, AEs have come to be recognised as an important cause of injuries in patients and the problem has received comparatively more attention in developed countries like United States of America, Australia and the United Kingdom. Patient safety is therefore becoming an important public-health issue and there is a growing interest in the general safety of all patients globally.

The situation, however, seems strikingly different with little published data to measure the enormity of AEs in any age group in Ghana.

While there is no national requirement that hospitals should document and evaluate adverse incidents, many hospitals have systems in place for the recording of AEs that are aimed at informing health care institutions of the incidence and types of AEs so that appropriate measures can be instituted to prevent or reduce them. The management of the Kwame Nkrumah University of Science and Technology (KNUST) Hospital has over the past few years encouraged individual ward-managers to maintain Incident Books

for recording AEs that occur in their respective wards. However, the reports have not been reviewed or evaluated to determine the frequency and types of AE's suffered by patients admitted to the Paediatric Ward.

Purpose

The study seeks to review the incident reports of the Paediatric Ward of the Kwame Nkrumah University of Science and Technology (KNUST) Hospital to determine the most common types of AEs that occur in the unit, how they are documented as well as factors that influence paediatric nurses in reporting AEs.

Objectives of the study

The study seeks to address the following specific objectives:

- Determine the type of adverse events that are documented.
- Determine the processes involved in reporting adverse AEs in the Paediatric Ward.
- Identify measures that facilitate adverse events reporting.
- Identify factors inhibiting reporting of AEs in the Paediatric Ward.

Significance of the study

The study is important in several ways. To start with, little research has been done on adverse events in the paediatric population in Ghana. This study will therefore add to the literature on adverse events in Ghana and other developing countries. Secondly, the study will provide an understanding into the types of adverse events and factors that influence paediatric nurses to report such incidents or why adverse events are not always documented. It is hoped that the information gathered could be relevant in encouraging the hospital management and the health care personnel to develop quality of care initiatives that will prevent or reduce the future occurrence of these events among paediatric patients who access the services of the hospital.

Literature review

Incidence of adverse events

Iatrogenic injuries pose a critical problem to all hospitalised patients including children (Kaushal et al., 2001; Thomas, Studdert, Burstin, Orav, Zeena, Williams et al., 2000). Studies conducted in U.S and Canada have shown a high rate of AEs notwithstanding significant efforts by hospitals to improve the safety of patient care (Classen, Resar, Griffin, Federico, Frankel, Kimmel et al., 2011; Forster, Asmis, Clark, Al Saied, Code, Caughey et al., 2004). It has been reported that between 44000 and 98000 deaths occur every year in the United States of America as a result of AEs, more than from motor vehicle accidents, breast cancer or AIDS (Donaldson, Corrigan, and Kohn, 2000). A Harvard medical practice study revealed that 3.7% of hospital admissions led to AEs and in 71% of the patients, the AE led to minor disabilities lasting less than six months while 14% resulted in death (Brennan, Leape, Laird, Hebert, Localio, Lawthers et al., 1991). Vincent and his colleagues (2001) also reported in another study conducted in two acute hospitals in Greater London that 10.8% of the patients experienced an AE with a third of the AEs leading to moderate or greater disability or death. It is, however, difficult to get a complete picture of adverse events in low-middle income countries. This situation is attributed to the limited number of research studies on this subject.

Reporting of adverse events

Adverse events reporting is central to the ultimate goal of reducing error in healthcare delivery (Cohen, 2000). The Joint Commission on Accreditation of Healthcare Organisation recommends that every

accredited health institution should establish reporting channels for unanticipated adverse events and perform detailed analysis of the information with the aim of identifying ways to prevent future incidents from occurring (Donaldson et al., 2000).

Reporting of AEs is an indication that an individual recognises a medical error or an adverse event when it occurs (Leonard, 2010). It is argued that if reporting is accurate it offers health care organisations useful information that can form a foundation for accountability and generate ideas for safer and improved care (Classen et al., 2011). However, evidence suggests that underreporting of medical errors is prevalent especially in paediatric patients (Taylor et al., 2004) and health-care providers will report only if they feel secure doing so or it is a culturally established norm within the healthcare community (Cohen, 2000; Lawton and Parker, 2002). A study by Cullen, Bates, Small, Cooper, Nemeskal, and Leape (1995) identified that only two of the 26 life-threatening adverse drug events had an incident report submitted on them. The non-reporting of adverse events by the health personnel was attributed to the voluntary nature of the report as the health staff were not obliged to do so. Fear of punishment, time constraints and lack of certainty about what is deemed an error have also been cited as reasons why hospital staff often fail to report incidents (Cullen, Bates, Small, Cooper, Nemeskal, and Leape, 1995; Taylor et al., 2004).

Methods

Study design and setting

This is a descriptive case study that will be conducted in the 28-bed capacity Paediatric Ward of the KNUST Hospital in Ghana. It will employ a retrospective review of the Incident Books of the Unit between October 2010 and September 2016 (6 years) to determine the type of adverse events documented.

Data collection tools

A checklist designed by the researcher will be used to audit the records on AEs in the Incident Books.

Key informant interviews will be conducted with the ward-manager and shift in-charges to determine the policy on adverse events reporting.

One-on-one interviews will also be conducted with nurses of the Unit to determine reporting practices and factors that facilitate or inhibit adverse events reporting.

Data analysis

The results will be summarised using descriptive methods for the type of adverse event reported. Qualitative data from the interviews will be analysed and categorised.

Ethical consideration

Ethical approval will be obtained from the Committee on Human Research, Publications and Ethics of KNUST.