EXPLORING FACTORS INFLUENCING PATIENT SAFETY INCIDENT REPORTING BY NURSES IN PRIMARY HEALTH CARE FACILITIES IN KING SABATA DALINDYEBO SUB-DISTRICT, EASTERN CAPE

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Date: 22 March 2024

DECLARATION

This is to certify that the work is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Durban University of Technology or to any other institution for assessment or for any other purpose.

…… . 22 March 2024

Signature Date

Approved for final submission

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DR N. Naranjee 22 March 2024
Date

_____ 22 March 2024

Mrs S. Moonsamy Date

DEDICATION

I dedicate this work to my late son Hlakanipha and my daughter Linda. You provided the inspiration necessary for me to complete this process and also sacrificed.

ACKNOWLEDGEMENTS

I want to start by giving thanks to God for getting me through all of the difficulties. I have experienced your guidance day by day. You are the one who let me finish my study.

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ABSTRACT

INTRODUCTION AND BACKGROUND

Patient incident reporting is a crucial activity for enhancing healthcare standards and ensuring patient safety. Reporting patient safety incidents offers a comprehensive overview of incidents, detailing what occurred and how it happened, thereby facilitating learning and improvement. The study identified several factors influencing patient safety incident reporting, including a lack of understanding of incident reporting, a blame culture, minimal support by managers, a lack of training, inadequate facilities, a lack of feedback and debriefing, and the absence of rewards and punishment system. A necessary positive activity to improve health care standards and patient safety is patient incident reporting. Patient safety incidents provides a broad picture of what has happened, how it happened and facilitates learning.

AIMS AND OBJECTIVES OF THE STUDY

The aim of the study was to explore and describe factors influencing the reporting of patient safety incidents in primary health care facilities from nurses' viewpoints. The objectives were to explore factors influencing PSI reporting behaviours in primary health care facilities in King Sabata Dalindyebo sub-district, OR Tambo District, Eastern Cape, to explore nurses' knowledge and understanding of PSI reporting, and to provide recommendations for improving PSI reporting.

METHOD

In this study, a qualitative, exploratory, descriptive design assisted the researcher in exploring the factors influencing reporting of patient safety incidents by nurses in primary health care facilities. The target population was all 48 nurses permanently employed in the primary health care facilities in Mqanduli cluster, King Sabata Dalindyebo. A non-probability, purposive sampling method was used to select the participants for the study, where 10 nurses were interviewed as determined by data saturation. Individual interviews were conducted using semi-structured interviews in English based on an interview guide which lasted for 15-20 minutes for each participant. The data was analysed using the thematic data analysis method.

FINDINGS

Five themes emerged from the thematic analysis, with 19 subthemes. Themes were:
(1) Experiences of patient safety incident reporting, (2) contributory factors to patient safety incidents, (3) importance of patient safety incident reporting (4) barriers to PSI reporting, and (5) recommendations by participants.The reporting process for patient safety is influenced by a number of factors, such as nurses' reluctance to report for fear of punishment, the emphasis placed on unclear reporting systems, management behaviour, lack of training and education, and fear of lawsuits. The experience of implementing patient safety incident reporting necessitates support from management in the form of training and provision of resources, creating a positive work environment and safety culture by not punishing those who make errors, and rewarding those who report patient safety incidents.

CONCLUSION

The nurses at Mqanduli cluster, King Sabata Dalindyebo Sub-District had challenges regarding the reporting of patient safety incidents due to a number of issues tabled by the participants that were influencing factors to patient safety incidents that should have been prevented such as negligence. The participants proposed recommendations such as development through training of the nursing staff regarding how to report patient safety incidents and provision of resources.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

LIST OF ACRONYMS

Acronym	Full term
ADRs	Adverse drug reactions
AE	Adverse events
AEFI	Adverse events following immunisation
ART	Anti-retroviral treatment
HIV	Human immunodeficiency virus
KSD	King Sabata Dalindyebo
NDOH	National Department of Health
PHC	Primary health care
PSIs	Patient safety incidents
UK	United Kingdom
US	United States
WHO	World Health Organisation

GLOSSARY OF TERMS

Nurse is a person who has completed a programme of basic, generalised nursing education and is authorised to practise nursing in their country by the appropriate regulatory body (ICN 2002: 1)

Primary health care (PHC) is a whole of society approach to health and wellbeing centered on the needs and preferences of individuals, families and communities. It addresses the determinants of health and focuses on the comprehensive and interrelated aspects of physical, mental and social health and wellbeing (World Health Organisation 2023:1).

Patient safety culture is the degree to which the culture of an organisation encourages and supports patient safety. It addresses how common norms, values, and beliefs affect the attitudes and behaviours of health care workers as well as other employees (Phillips, Malliaris, and Bakerjian 2021: 1).

Patient Safety Incident (PSI) is an unforeseen incident or situation that might have happened, caused injury to a patient while they were under the care of a medical facility, or did cause harm (Department of Health 2021: 7).

Active failure refers to any behaviour or performance issue that could affect implementation that is caused by the person in authority (the health professional), such as an error, mistake, or violation (Torrens et al. 2020: 4).

Organisational culture is the deeply ingrained standards, values, beliefs, and presumptions that all members of the organisation share (Chalmers and Brannan 2023: 1).

Situational factors, such as team factors, individual staff factors, patient factors/services user factors, and task characteristic factors, relate to people's traits in the workplace and elements that influence the workplace (Albalawi, Kidd and Cowey 2020: 4).

Local working conditions describe how well the working environment promotes patient safety and fosters a secure atmosphere. The phrase broadly refers to challenges with leadership, equipment supply, workload, and staffing (Albalawi, Kidd, and Cowey 2020: 4).

CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

Patient safety incident (PSI) is an unplanned or unintended event or circumstance that could have resulted or did result in harm to a patient while in the care of a health facility. This event is thus not due to the underlying health condition or natural progression of disease. An incident can be a near miss, no harm incident or harmful incident. Whether or whether there is injury, it is imperative to determine the causes and influencing factors of any patient occurrence and to document it. According to the South African Department of Health (2021: 12), a "patient incident" is any unanticipated or unplanned event or scenario that might have caused injury to a patient while they were receiving care in a health care facility.

A near miss, no injury, or detrimental incidence (adverse event) can all be classified as incidents. In the health care industry, incident reporting pertains to gathering information about incidents with the aim of enhancing patient safety and treatment quality (Hooiveld 2021: 1). According to Hooiveld (2021:1), effective reporting identifies safety issues and directs the creation of risk-reduction measures. According to Goekcimen et al. (2023: 1), reporting patient safety incidents is crucial to preventing their recurrence. Tarkiainen et al. (2022: 2) state that improving patient care procedures is another goal of PSI reporting, along with reporting, analysing, and learning from events, near-misses, and patient safety hazards. The PSI report offers details on the data submitted, the lessons learned by local organisations from their incidents. However, occurrences are not frequently reported (Kihlberg 2022: 3). Underreporting impedes the improvement of patient care by raising the risk of recurrence, impeding the formation of a PSI reporting culture, and making it more difficult to learn from feedback (Gqaleni and Bhengu 2020: 2). Raising awareness of safety risks and improving patient outcomes are important roles played by nurses, who serve as a critical channel for patient safety between patients and other medical professionals (Alanazi, Sim, and Lapkin 2022: 1).

In 2005, the World Health Organisation's World Alliance for Patient Safety developed initial standards for adverse event reporting, aiming to share negative experiences globally. Simultaneously, the WHO produced a basic information model for event reporting systems that could be adopted by low- income, middle-income, and developed countries (South Africa, Department of Health 2021:14).

Nonetheless, Dhamanti et al. (2019: 1) state that there is significant variation in reporting rates between nations, with some still having difficulty putting the system into place.

1.2 BACKGROUND

King Sabata Dalindyebo (KSD) is one of the five sub-districts located within OR Tambo District in the inland area of Eastern Cape. The sub-district population was approximately 528 770 in 2022 (Eastern Cape Socio Economic Consultative Council 2023: 1). The sub-district has 49 primary health care (PHC) facilities offering eight- hour services, five community health centres, one district hospital, and one regional hospital offering 24-hour services. The sub-district has used the national web-based Patient Safety Incident Reporting and Learning system for reporting incidents since 2018. The reporting system is incorporated in an “Ideal Clinic” realisation and maintenance system. Reporting requires written reports of all incidents from near misses to adverse events (AE). These incidents are to be reported within sixty working days. Incident reporting should communicate all information relevant to patient safety.

The web-based information system has been established in all primary health care facilities in KSD. The system's objective is to report, analyse, identify gaps, and draw lessons from events in order to enhance patient care procedures. The reporting system generates reports of captured incidents. The managers in KSD view the system, identify gaps and intervene accordingly. The researcher noted that the most frequent occurrences in the sub-district are medication errors related to diagnosis, prescription, and dispensing, particularly when it comes to the treatment of HIV patients. A medication error is defined as an event associated with the use of medicine that should be preventable through an effective control system (US Food & Drug Administration 2019: 1).

These errors are identified in patient folders during patient file audits and are found not recorded in the patient safety paper-based incident register and not captured in the web-based patient incident reporting system. The complaints from patients who do not receive their medicines or from those who receive wrong prescriptions are reported at the provincial quality assurance call centre and referred from there to the district and the sub-district. The researcher, who is the quality assurance coordinator and clinic supervisor, receives these complaints, conducts investigations and implements corrective actions.

PHC facilities are also expected to deal with common and simple conditions; however, patients often bypass the primary health care services and seek care at the district referral hospital due to mismanagement at the local level. Patient safety is a crucial metric for assessing the quality and continuity of health care services. Patients on antiretroviral drugs (ARVs) are hospitalised due to drug resistance and treatment failure, thereby impacting on patient safety. Other issues facing the KSD health care system include underutilisation of primary health care services and workload (South Africa**,** Department of Health: 1996).

The South African Guidelines adopt the Minimal Information Model as proposed by the World Health Organisation (WHO 2018:1). Health care providers must disclose any unanticipated incident that endangers a patient in a health facility in accordance with the 2022 version 2 National Guidelines for Patient Safety Reporting and Learning in South Africa (South Africa, Department of Health 2021 :7). Prioritising serious PSI occurrences is important. The reporting tool gathers data on the type of incident, recording the incident type clearly identifies the type of a PSI, the consequences, the actions that followed, the reporter, the time, the place, and the contributing factors.

Patient safety incidents are categorised according to their severity. Severity Assessment Code (SAC) is a numerical data score that rates incidents affecting a patient on a scale from 1 to 4. Sac (1) represents serious harm or death , (SAC 2) moderate harm , SAC (3) minor harm ,and SAC(4) represents no harm (near miss). Rating is assigned by the reporter on incident submission based on the severity of the event. The key purpose of the SAC is to determine the level of investigation and action required. Therefore, the degree of harm suffered should be the key consideration (South Africa, Department of Health 2021: 7).

In KSD the reporting rates reflect not only the true number of safety incidents within a facility but also the reporting behaviour and culture within an institution. In 2018 to 2019, 0.8% cases of moderate harm (SAC 2) were reported, classification for contributing factors were staff factors due to the lack of knowledge of clinical guidelines. In 2019 to 2020, the majority of reported cases were no harm (0.75%). The data shows 10% of PHC facilities reported incidents for the year 2020 to 2021, and 90% reported none, yet patient safety incidents still occurred in all these health facilities. In 2021 to 2022 serious AEs were reported (1.2%) while there were no reports of near misses and medication errors (South Africa,

Department of Health 2021). To enhance patient safety reporting systems; a thorough understanding of the factors influencing PSI reporting systems is essential. Nevertheless, this type of research has not been carried out in KSD despite its significance. Thus, the researcher set out to explore, from the viewpoint of nurses, the factors influencing PSI reporting in KSD.

1.3 RESEARCH PROBLEM

Gray, Grove and Sutherland (2017: 47) define a research problem as an area of concern where there is a knowledge gap. The research problem provides the basis for the research being conducted to obtain essential knowledge and improve the practice concerned. Incident reporting systems are widely considered effective instruments to learn from incidents.

Despite the fact that patient files indicate a variety of PSIs, including prescription errors, medication errors, and paperwork problems, the patient safety incident reporting system in KSD's primary health care institutions reveals a low and erroneous rate of PSI reporting (South Africa, Department of Health 2021). When HIV-positive patients are being managed, prescription errors commonly happen, which can result in drug resistance and treatment failure. These gaps are identified through clinical audits of patient files, performance reviews and complaints received via the provincial call centre.

1.4 AIM OF THE STUDY

The study's aim was to explore and describe, from the viewpoint of nurses, the factors influencing PSI reporting in primary health care facilities.

1.5 OBJECTIVES OF THE STUDY

The objectives of the study were:

- To explore and describe nurses' knowledge and understanding of PSI reporting and learning.
- To explore factors influencing patient safety incident reporting behaviours in primary health care facilities in KSD.
- To provide recommendations for improving PSI reporting.

1.6 RESEARCH QUESTIONS

A research question is a question that a study or research project aims to answer. The research project often addresses an issue or a problem which through analysis and interpretation of data, is answered in the study's conclusion (Bouchrika 2023: 1). According to McCombes (2023: 1), a research question should explicitly state the researcher's goals for the field of study.

The following research questions served as a guide for the investigator.

- What knowledge and understanding do nurses have of PSI reporting in KSD?
- What are the factors influencing PSI reporting behaviours in primary health care facilities in KSD?
- What recommendations can be provided to improve PSI reporting in KSD?

1.7 SIGNIFICANCE OF THE STUDY

A study of this nature is the first to be conducted in primary health care institutions in KSD, Eastern Cape. The findings of this study can be useful in the areas listed below.

Nursing Research: This study can provide database which can be added to by other researchers conducting similar research in this field.

Nursing Education: The study can be used as an instrument in teaching and learning institutions. The study results can be used to increase awareness about PSI reporting among nurses in KSD. Information gained from the study can be used during in service training sessions to promote reporting.

Health Services Management: The findings from the study informs and provides recommendations for health care management and staff on the culture of PSI reporting within PHC settings and recommend measures to put in place or sustain to ensure incidents are adequately reported. This study highlights the extent to which several factors influence the reporting of PSI. The KSD sub-district's management team and policy makers can use the findings to increase patient safety and management effectiveness.

Nursing Practice: The study may encourage health care providers to participate in the safety of patients by reporting incidents, learn from the mistakes and improve the quality

of care. Health care providers in PHC KSD will be able to identify safety hazards, learn from mistakes and develop interventions to mitigate these hazards in order to reduce harm in health care.

Health care institutions: In order to enhance and maintain patient safety and the standard of care in the PHC facilities in KSD, data from the study can be used to plan, develop, and redesign processes. Systems in health care facilities could be strengthened and made safer.

Society: The community served by KSD health may benefit from improved quality of care, improved patient safety, and reduced harm and risks.

1.8 STRUCTURE OF THE STUDY

CHAPTER 1: INTRODUCTION TO THE STUDY

This chapter provides an overview of the study. It addresses the background to the study, the problem statement, key objectives and significance of the study

CHAPTER 2: REVIEW OF LITERATURE

The review of the literature on the factors influencing PSI reporting is presented in this chapter.

CHAPTER 3: THEORETICAL FRAMEWORK

This chapter presents the theoretical framework that guides the study.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

This chapter presents the research design, methodology, and design. It further outlines the strategy used to address the research questions.

CHAPTER 5: PRESENTATION OF FINDINGS

This chapter presents the findings of the study using themes extracted from the data revealed by the interviews related to factors influencing PSI reporting in PHC facilities in KSD.

CHAPTER 6: DISCUSSIONS OF FINDINGS

Based on the study objectives, the results are discussed in this chapter.

CHAPTER 7: SUMMARY, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION OF THE STUDY

This chapter provides the summary, limitations, recommendations and conclusion of the study.

1.9 SUMMARY OF THE CHAPTER

In this chapter, the researcher briefly introduced the research study Including the background, research problem, aims and objectives, significance of the study and the research questions that the study endeavoured to answer. The following chapter is a review of relevant literature in order to gain a better understanding of the topic.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

A literature review, which is commonly created to contextualise a research problem, is a critical synthesis of research on an interest topic (Polit and Beck 2017: 733). According to Gray, Grove, and Sutherland (2017: 207), the literature review of a research report is a structured and interpretive presentation of what the study author has read. Finding the most current and pertinent information about a specific topic is the goal of performing a literature review. The goal of this study's literature review was to locate and evaluate research on the factors influencing PSI reporting by nurses in the KSD sub-district PHC facilities.

2.2 STRATEGIES USED TO SEARCH LITERATURE

The relevant studies were identified by literature from different journals**,** books and online journals namely PubMed, Durban University of Technology (DUT) Open Scholar, CINAHL and Google Chrome using search words such as patient safety incident, patient safety incident reporting, and primary healthcare and patient safety culture.

2.3 PATIENT SAFETY INCIDENTS

Patient safety, according to the WHO (2023: 1), is the avoidance of patient harm and the prevention of errors and unfavourable effects related to medical care. It is a major global public health challenge. A patient's chances of suffering injury while receiving medical care are 1 in 300 (WHO 2023: 1). Health care professionals need to be on the lookout for anything that could hurt patients (WHO 2023: 2). Health care professionals are required to document and share events. Because incident reporting is a learning mechanism that will improve patient safety for health care professionals, it is incorporated in the patient safety program. According to Naderi et al. (2019: 1), factors affecting patient safety include human resources, organisation and management, interaction and teamwork, environment, patient related factors, quality improvement and documentation. A detailed report of incidents is necessary since there are many things that can compromise patient safety.

Ocloo et al. (2021: 5) indicated that there are barriers that safeguard patient safety. Domer et al. (2021: 1) state that patient safety is affecting public health globally and is a major concern. The researchers assert that as many as 20%-25% of the general population

experience harm in primary health care (Kuriakose and Xiao 2020: 1). The common unsafe practices in primary health care include errors in diagnoses, communication breakdown, and fragmentation of care (Fernholm et al. 2019: 1).Most of the studies admit that incident reporting about patient safety is crucial in the health care setting as it ensures safety of the patients as well as health care workers. Health care workers are directly affected by the compromise of patient safety as they are accountable for their actions. The pattern and rate of reporting by nurses in PHC facilities in KSD sub-district needs to be explored in order to identify the factors influencing this practice.

2.4 PATIENT SAFETY INCIDENT REPORTING

According to the National Guideline for Patient Safety Incident Reporting and Learning in the Health Sector of SA Version 2, the fundamental role of an incident reporting system is to enhance patient safety by learning from failures of the health care system (South Africa, Department of Health 2021: 3). To achieve this, policymakers need to retrieve evidence about performance and outcomes. Useful lessons can be obtained from PSIs. The South African National Department of Health (NDOH) developed and implemented the first National Guideline for Patient Safety Incident Reporting and Learning on 1 April 2018 to guide the health system to report PSIs (South Africa, Department of Health 2021).

Incident reporting systems may be compulsory or voluntary. Data from these systems can allow the identification of patient safety priorities for intervention, unsuspected hazards or reports of the malfunction of devices or equipment used for health care delivery (Saad and Hanna 2023: 1). All serious incidents are mandatory to report; it is also mandatory to report any incidents that have resulted in severe patient harm or death (South Africa, Department of Health 2021: 13). Available evidence suggests that annually 134 million AEs due to unsafe care occur in hospitals in low- and middle- income countries, contributing to 2.6 million deaths (WHO 2023: 1). The National Reporting and Learning System is one of the most comprehensive reporting systems in the world, having collected over 10 million incident reports since its creation. It provides a clear focus on patient safety within the overall quality programme through a systematic structure that enables the identification, recording, reporting and analysis of PSIs and their outcomes (Buttigieg et al. 2023: 2). All PSIs should be reported by health care professionals even if no harm occurred, to promote patient quality care and improve patient safety (South Africa, Department of Health 2021: 3).

2.5 NURSES' KNOWLEDGE AND UNDERSTANDING OF REPORTING PATIENT SAFETY INCIDENTS

Acquiring a better level of knowledge and awareness of PSI reporting would be advantageous in order to execute appropriate interventions for improvement in the overall knowledge towards patient safety and quality health care (Biresaw, Asfawu and Zewdu 2020: 2). Unsatisfactory patient outcomes can be avoided by ensuring PSI information exchange and facilitating error reporting among staff (Woo and Avery 2021: 2). Nurses play a key role in ensuring patient safety and care (Phillips, Malliaris and Bakerjian 2021:1). It is required of health care professionals to enhance their understanding, perspectives, and methods about incident reporting (Oweidat et al. 2023: 1). Shchory et al. (2020: 1) found that educational interventions can benefit PSI reporting. In their study in Israel they found that training programmes regarding provision of the relevant information about adverse drug reporting led to a behavioural change related to reporting and an increase in the number of reported events (Shchory et al. 2020: 1).

Patient safety culture plays an important role in nurses' attitude towards incident reporting (Kusumawati, Handiyani and Rachmi 2019: 1). The common attitudes, beliefs, and values that employees in an organisation have about patient safety are known as the patient safety culture (Mohammed, Taddele, and Gualu 2021: 1). Despite having a strong understanding of adverse event reporting, Brazilian nurses' low PSI reporting rates were caused by a lack of a safety culture and their fear of punishment and retaliation in the workplace (Maldonado, Nascimento, and Lazzari 2020: 1).

Even though nurses in Palestine have knowledge of the reporting system, they are hesitant to report due to fear of administrative sanctions, prevalence of blame and lack of proper structures (Rashed and Hamdan 2019: 1). Abukhalil et al. (2022: 2) found the lack of a regulatory system for reporting medication errors and lack of training in Palestine. The results show that 31.7% of participants did not know who to inform when an error occurred, while 61.2% report fears, and 41% said they were too busy.

In Japan, barriers to reporting were lack of knowledge on the criteria for incident reporting and time required to file a report (Kurihara et al. 2022: 2). Although 78% of Health care professionals had attended patient safety lectures, 44% had not submitted an incident report and 40% did not know how to report an incident (Kurihara, Nagao and Tokuda 2021:

1). However, medical staff at the two hospitals in the Greater Tokyo region stated that they were more sensitive to the idea that disclosing errors is the same as accepting them (Kodate et al. 2022: 1).

Lack of knowledge and understanding of the benefits of reporting, lack of understanding of the requirement for reporting, and the lack of knowledge about the anonymity of reporting in Indonesia resulted in low reporting of PSIs (Dhamanti et al. 2021: 3). Even though health care providers in South Australia were aware about patient safety incident reporting, some had no knowledge of how to access an incident form, whilst others did not fill out a report (Kaya et al. 2020: 3). The clarity and criteria of the reporting procedures had an effect regarding willingness to report PSIs (Kusumawati, Handiyani and Rachmi 2019: 4). Canadian Emergency Department staff lack awareness of the guidelines and the concept of patient safety incident reporting (Skutezky et al. 2022: 4). Insufficiency in the implementation of PSI guidelines resulted in noncompliance to reporting (Vaismoradi et al. 2020: 3).

Lack of staff capacity and lack of awareness hindered the reporting of PSIs in African countries (Sabblah et al. 2022: 1). Adverse drug reactions (ADRs) were not well understood in a tertiary care hospital in the Tigray region (58.3%); nonetheless, 59.9% of the staff were positive about ADR reporting, and 32.1% had good ADR reporting. Lack of training and poor knowledge was associated with low reporting, whereas higher working experience < 10 years was positively associated with ADR reporting practice (Gidey et al. 2020: 2). Health care providers in Ethiopia, complained of not getting feedback after reporting, knowledge gaps about PSI reporting procedures, and uncertainty about the drug causing ADR (Alemu and Biru 2019: 9). Similarly, in South Western Nigeria insufficient clinical knowledge and reporting systems that are not user friendly were factors hindering reporting of ADRs (Adisa and Omitogun 2019: 1). Even though health care providers in South Africa had good knowledge of the existing PSI guidelines, full implementation of guidelines was lacking (Abraham et al. 2022: 2; Gqaleni and Mkhize 2023: 6).

2.6 FACTORS INFLUENCING PATIENT SAFETY INCIDENT REPORTING BEHAVIOURS: INTERNATIONAL PERSPECTIVES

Since PSI reporting helps the health services find gaps in the provision of health care services, it is viewed as a crucial means of guaranteeing patient safety in Sweden (Carlfjord, Ohrn, and Gunnarsson 2018:1). The only reported barrier by the participants

was the reporting systems that are not user friendly. However, AEs were not reported to the extent that they should have been in a municipal care home. Reasons were distrust of management as the work situation exposed them to increased risks, lack of guidelines, uncertainty over the consequences of the reports, concealment and shame (Pejner and Kilhlgren 2018:1).

In the United States (US), unsafe medication errors may lead to morbidity and mortality (Tariq et al. 2022: 9-14). Prescription errors, such as omissions, incorrect timing, unapproved drugs, incorrect dosages, and inappropriate preparation, are the primary sources of the problems. Errors in the delivery of medication include administering the medication to the wrong patient, administering an excess amount, and using the improper infusion rate. Errors in monitoring include neglecting to record allergies or possible drug interactions, as well as failing to consider the patient's liver and kidney function. Statistics about suspected medication errors in the US account for about 100 000 reports per year (US Food and Drug Administration 2019: 2).

Medication errors in the US account for 7 000 to 9 000 deaths per year (Tariq et al. 2022: 1). Approximately 1%-3% of paediatric hospital admissions are complicated by medication errors (Asgarian et al. 2021: 2). Medication errors are defined by Shitu, Aung, and Kamauzaman (2020: 2) as any avoidable incident that could result in the use of medication inappropriately or pose a risk to the patient, health care provider, or consumer. Woo and Avery (2021: 2) reveal that 50% to 96% of medication errors were underreported by nurses. Factors associated with underreporting include dysfunction in organisational culture. Fear of culpability, fear of being accused, and the time-consuming nature of reporting are among the reasons why nurses at a faith- based community hospital in California choose not to report (Rutledge, Retrosi and Ostrowski 2018: 1).

In the United Kingdom (UK), the English government introduced a mandatory reporting system of AE with penalties in 2010, and a voluntary reporting system of AE at the national level was also developed, however studies report low reporting of AE by health care workers (Fujita et al. 2021: 1).

Dhamanti et al. (2021: 2) are of the view that incident reporting has been successfully implemented in the UK. The National Health System in the UK estimates 2 246 622 PSI reports yearly, with 1. 4 million adverse incidents each year, 75% being from the hospital

sector (Bovis et al. 2018: 3). Staff who continues to report the same or similar incidents can become demoralised. According to Aljabari and Kadim (2021: 1), the reasons why health care providers do not report PSIs were perceived to be lack of encouragement, repeated reports, failure to follow up on reported incidents, and lack of time.

A qualitative study conducted in Canada revealed that incident reporting systems are not used fully, doctors have a tendency of hiding very serious events, and nurses are reporting more incidents. This becomes a barrier in PSI reporting as these reports are supposed to be shared by all the multidisciplinary team so as to be able to rectify the gaps to prevent re-occurrence. Lack of experience with the incident reporting system, the absence of closure or feedback following an incident submission, and concerns about sharing the incident with the impacted patient were identified as barriers to physician submission (Ngo, Lau, and Ploquin 2022: 1).

For administration and quality assurance processes, the University Hospital of North Norway uses a web-based system; however, other health care professionals are unable to access the system. Less than one fifth of serious AEs were reported by obstetric units in Norway. This inaccessibility and unavailability of the reporting system resulted in inadequate reporting rate which undermines the national universal health coverage (Johansen et al. 2021: 5). Similarly, nurses in Norwegian hospitals cannot access the reporting system because their employment is not linked to specific wards (Waaseth et al. 2019: 4). Doctors prefer to solve the error directly rather than reporting an incident. Fear of punishment and blame by their managers was linked to the low reporting of incidents (Skutezky et al. 2022: 1). Furthermore, health care providers in Norway discovered that the majority of hospitals lack a clear electronic system for reporting prescription errors, and there are no training programs in place to address this issue (Alshammari et al. 2021: 1).

According to Choi et al. (2023: 2), the Patient Safety Act of 2016 and the creation of patient safety incident reporting raised awareness of error reporting in South Korea, after the accreditation system was put in place. Despite that, the rate of near miss reporting by general nurses was found to be 63.2% which suggests low reporting (Shin and Won 2021: 3). Because of uncertainty and gaps in their understanding about the reporting system, dissatisfaction with the outcomes of reporting near-miss errors, and fear of reporting near-miss errors, nurses from major hospitals refrain from reporting near-miss errors (Lee 2021: 6). According to Shin and Won (2021: 3), a near miss is an avoidable incident that involves

a circumstance that could hurt a patient but does not result in an injury. Korean Nurses felt reporting is time consuming (Woo and Avery 2021: 3). Heavy workloads, tiredness, no proper reporting system, management behaviour and discrimination have been found to be associated with low rates of error reporting (Afaya et al. 2021: 7).

According to Lee (2021: 5), South Korean nurses did not notice that they made errors, none of them had ever felt the urgent need to address such errors, and errors are considered as natural mistakes. However, Lee et al. (2022: 1) note that, out of concern for the unfavourable outcomes and potential legal action, Korean nurses working in general and tertiary hospitals feel more at ease reporting incidents to a doctor than submitting reports.

In Brazil the potential barriers to reporting PSIs include self-doubt, incomprehension, indifferences, the culture of disregard for nurses of the state of legislation, and low equity in the allocation of pharmacovigilance (Andrade et al. 2020: 5). Providers prefer to report an incident with severe consequences. Fears, a lack of feedback following a report, and a lack of awareness about the reporting system are factors that have been found to influence patient safety reporting among Brazilian health professionals (Alves, de Carvalho, and de Albuquerque 2019: 2).

Chinese health care providers were reluctant to report PSIs using a paper-based form. An increase in reporting and quality data of up to 36 498 incidents were reported after a web-based reporting system was developed. Secondary and tertiary hospitals reporting rates are estimated at 92.3% (Gao et al. 2019:3). In China, perceived benefit was a more important predictor for willingness of reporting and a more important mediator in the effect of organisational trust on willingness of incident reporting (Zhao et al. 2021: 1). Through establishment of positive work environment, nurses in eight tertiary hospitals showed willingness to report near misses (Yang and Liu 2021:1).

When there is support, rewards and motivation from the organisation, nurses feel comfortable to report incidents. Nurses in Indonesia are willing and committed to patient safety incident reporting although they experience obstacles such as embarrassment and fear of their colleague's negativity (Tage et al. 2021: 11). The reason for low reporting of PSIs in Lampung referral hospital was the absence of rewards to encourage nurses (Pramesona et al. 2023: 2). Furthermore, a culture of blame and shame were factors

preventing health care providers to report incidents in Indonesia (Nurdin and Wibowo 2021: 6). Naome et al. (2020: 4) argue that a naming and shaming culture may worsen PSI reporting culture, while a positive culture builds individual's awareness of reporting incidents (Hooiveld 2022: 3).

The reason why health care providers in University of Indonesia were not willing to report PSIs was the absence of rewards and appreciation as a result there is no positive change (Nurdin and Wibowo 2021: 7). Liu and Liu (2022: 12) emphasise and further explain that monetary incentives in the form of paid leave and bonuses can increase employee productivity. However, Rapala (2018: 2) disagrees with the idea of incentives as it may reduce the willingness of other professionals to report and may lead to the perception that the organisation does not value their reporting. Health care workers in Qatar were afraid and concerned that disclosing a colleague's mistake would harm their career connections, compromise their confidentiality, result in a reprimand or blame from their superiors, and have an adverse effect on the evaluation and appraisal procedure (Stewart et al. 2018: 17).

2.7 FACTORS INFLUENCING PATIENT SAFETY INCIDENT REPORTING BEHAVIOURS IN SUB-SAHARAN AFRICAN COUNTRIES

Approximately two thirds of all AEs worldwide are found in low- and middle-income Countries (WHO 2020: 1). Most of these events are caused by medical mistakes (Rodziewicz, Houseman and Hipskind 2022: 2). Kaware et al. (2022: 2) state that a number of unfavourable elements, including understaffing, inadequate infrastructure, unhygienic conditions and sanitation issues, overcrowding, a lack of medical attention, and a scarcity of necessary equipment, have led to the grave health condition of patient safety. Furthermore, heavy nursing workload, poor application of policies and procedures, lack of equipment, and system failures contributed to an increased risk for errors (Samlal, 2018: 3).

Sjöberg et al. (2020: 1) state that compared to institutions with lower workloads, those with higher workloads typically report more health concerns. Andel et al. (2022: 3) highlight the importance of addressing issues of understaffing especially during times of crisis, to better promote nurse and patient safety. The results of in-depth interviews with senior officers from thirty-six African countries revealed barriers such as lack of funding to support medication error reporting, inability to diagnose medication error, illiteracy and language

difficulties (Sabblah et al. 2022: 2).

Patient safety awareness and the safety environment affect PSI reporting. The development of an effective communication system, the implementation of corrective action on reported incidents, teamwork, written guidelines, the practice of an open door policy, and a no blame approach were factors that motivated medical incident reporting at Mbarara Regional Referral Hospital in southwest Uganda (Naome, Christine and Mugisha 2020: 1). In Ghana, low adverse events (AEs) reporting include fear due to stigmatisation and victimisation and lack of AE reporting guidelines (Tenza, Attafuah Abdul 2022: 2). According to Muftawu and Aldogan's study (2020: 1), only 14.6% of Ghanaian health care workers reported one or two adverse occurrences in the previous year, while 65.2% of professionals had not reported any adverse events at all.

According to Aboriogo et al. (2022: 2), lack of information on reportable AEs following immunisations (AEFI) and reporting structure, heavy workload, fear of blame by supervisors were found to be factors responsible for underreporting in Northern, Volta and Accra in Ghana. Nonetheless, it was discovered that nurses in Ghana's Savannah region were significantly more likely to report unpleasant events when they received constructive criticism for their mistakes and comments about them (Alhassan et al. 2022: 2). Reasons behind low reporting in Kebbi state, Northwest Nigeria include lack of knowledge and understanding of AEFI definition and its classification (Omoleke et al. 2022: 2).

In Ghana's Northern Region, Volta Region, Greater Accra Region, and Upper East Region, 7.5% of health care personnel reported ever encountering an AEFI, 55% reported AEFI and 31.7% completed a reporting form (Gidudu et al. 2020: 1). The most prevalent obstacles were belief that an AEFI was not serious enough to disclose, lack of information or training, and fear of personal repercussions.

The Ethiopian Hospitals Reform Implementation Guideline is followed for reporting safety events at Mizan Tepi University in Ethiopia, where quality improvement activities have been implemented. Professionals did not report medication errors, however, reported barriers included a lack of anonymity, asymmetric information disclosed by the media about medication errors, and health professional’s avoidance of confrontation and attitude, and lack of confidentiality (Derese and Agegnehu 2022: 4-6). In Addis Ababa, incorrect

dosage (20.1%), incorrect timing (56.8%), incorrect documentation (33.3%), and incorrect counsel (27.2%) were the most often reported drug problems. Short work experience, a lack of guidelines, and the absence of on-the-job training were all associated with errors (Mohammed et al. 2022: 2).

2.8 FACTORS INFLUENCING PATIENT SAFETY INCIDENT REPORTING BEHAVIOURS IN SOUTH AFRICA

In 2017, the South African NDOH recommended that health workers should report and record all incidents, investigate and implement recommendations. The National Guidelines for Patient Safety Incident Reporting and Learning in the Health Sector of South Africa, version 2, were updated and restated to provide clear guidelines for what types of information should be reported. The national web-based incident reporting system was also launched at the same time (South Africa, Department of Health 2021: 3). The guidelines aim to protect patients from harm by making sure that patient safety incidents are reported and that feedback is given. This will yield learning that can be used as preventative measures (South Africa, Department of Health 2021: 3).

In order for health care facilities to properly implement patient safety, the NDOH also created the National Core Standards in 2011 (Abraham et al. 2022: 3). These standards require yearly quality audits. In addition, the Ideal Clinic Realisation and Maintenance program was put into place to raise the standard of medical care provided in South Africa (West et al., 2021: 2). Maphumulo and Bhengu (2019: 2) conducted a critical analysis of the quality improvement challenges facing the South African health care system and found that the quality improvement programs implemented within the system were not meeting the expected standards for care quality. Instances included patients who experienced challenges and, in certain situations, passed away as a result of being turned away from the public hospital.

In South Africa, medication errors are a frequent occurrence, according to Van den Berg (2022: 1). More than 40% of incidents remain unreported, mostly due to assumptions that if the patient suffered no significant harm, there is no need to record the incident and fear of legal repercussions. Even in cases where an error does not result in harm, it is still hard to identify these errors and implement preventative measures if they are not reported.

In eThekwini District, distrust in the PSI reporting system, fears, and differences in the definition of PSIs were found to be factors associated with low reporting (Gqaleni and Bhengu 2020: 7). In addition, Gqaleni and Bhengu (2020: 6) demonstrated that poor attitudes and lack of training resulted in nurses not using the existing PSI reporting system. Other reasons for not using the system include that the system is not user friendly (Hooiveld 2022: 3). It was noted that time consuming, shoddy systems were designed, and PSIs were not promoted because of budgetary limitations (Pillay, Mulubwa and Viljoen 2021: 1).

In an attempt to lower adverse events (AEs), the Gauteng Department of Health reinstated mandated clinical governance mechanisms; nevertheless, no progress was seen (Nkosi, Armstrong, and Nkosi-Mafutha 2021:1). An adverse event is characterised as a situation in which a patient suffers harm associated with medical therapy rather than an underlying or disease-related condition (South Africa, Department of Health 2021: 2**).** According to the research, there were a total of 12,000 affected patients and an increase in AE from 4170 in 2019 to 4700 in 2020 in Gauteng public hospitals (Nkosi, Armstrong and Nkosi-Mafutha 2021: 1).

Inconsistencies in the investigation processes, indecisive event management, and unsupportive leadership are some of the factors contributing to the rise in AEs in the Western Cape (Daniels 2020: 100).

In 2020, there were more than 4.8 million patients in South Africa receiving antiretroviral therapy (ART), making it one of the largest HIV programs in the world. With increased use of ART, proper reporting on unexpected serious adverse reactions and continued insight into ADRs are needed for adequate information on safety of ART treatment in patients (Masquillier et al. 2020: 1). In South Africa, however, statistics indicate that 51.3% of doctors and 54% of nurses stated that they were afraid to report adverse drug reactions (Kunene and Teo 2022: 1).

According to Mayne (2018: 65), South Africa found that Eastern Cape Province had low ADRs due to a number of factors, including inadequate training, a heavy workload, a lack of feedback, and a fear of not being taken seriously. North West Province’s reporting rates were low (44%) and that the main obstacles being the lack of time (50%) and confusion about where to report (38%). The Western Cape Province's reporting rate was also low

because some individuals thought that ADR reporting was outside of their legal and clinical jurisdiction and because they were unaware of the ADR reporting procedure.

According to Shellack et al. (2020: 1), drug mistakes happen almost every day. Public complaints about incorrect dispensing are a common occurrence for the South African Pharmacy Council. Health care professionals fail to disclose adverse events (AEs) for a variety of reasons, such as embarrassment, fear of repercussions or legal action, or the belief that reporting will not result in better care. Additionally, a cross-descriptive study that evaluated the completeness of adverse drug reaction (ADR) reporting in South Africa discovered that health care professionals' reports lacked sufficient detail (Matlala, Lubbe, and Steyn 2023: 1).

The leading perceived barriers to reporting PSIs were the fear of being blamed, and punishment (Mjadu and Jarvis 2018: 5). Nkosi, Armstrong, and Mafutha (2021: 5) confirm and elaborate that placing blame on the staff members implicated and threatening legal action against them throughout the inquiry process exacerbates their psychological anguish and hinders the process of learning. Parker and Davies (2020: 2) recommend that health care facilities endeavour to establish a culture free from blame.

Additionally, the National Guideline for PSIRL in the Health Sector of South Africa Version 2 states that staff reporting adverse events (AEs) should not be met with a sense of guilt or anxiety, but rather should be handled fairly in order for learning to occur (South Africa, Department of Health's 2021: 4). Furthermore, Murray et al. (2023: 2) recommend that people need time to receive coaching in order to comprehend how and why the occurrence happened. The theoretical framework that served as the study's direction is presented in the next chapter.

2.9 RECOMMENDATIONS TO IMPROVE PATIENT SAFETY INCIDENT REPORTING

Several authors (Aboriogo et al. 2022: 2; Alves, de Carvalho, and de Albuquerque 2019: 2, Gidudu et al. 2020: 1, Mayne 2018: 67) conducted debates on nurses' failure to report PSIs as a result of their ignorance of the contents and procedures of incident reporting, including what kinds of incidents to report, when and how to report them. It is recommended that health care workers establish ongoing education and training programs to improve their knowledge and skills surrounding patient safety incident reporting.

Heavy nursing workload, work pressure, fatigue, nurse patient ratios hinder nurses' ability to report PSIs. Authors recommended that nursing managers and administrators must make means to recruit and retain nurses (Afaya et al. 2021: 7; Banda, Simbota and Mula 2022: 6, Mayne 2018: 67; Sjöberg et al. 2020: 1).

Studies from the literature showed that the following factors significantly influence PSI reporting: lawsuits, humiliation, fear of reprisals, fear of losing one's work, and guilt culture. It was suggested that in order to improve patient safety and reporting, health institutions should establish a just culture. A culture of trust, reporting, discipline, and transparency is necessary (Indriani, Kusumapradja and Anindita 2022: 2, Murray et al. 2023: 2; Samlal 2018: 4).

The reasons why health care providers do not report PSIs were perceived to be lack of encouragement, lack of motivation and support, lack of rewards and lack of recognition. Organisations could increase employee loyalty by giving meaningful incentives to their employees (Liu and Liu 2021: 12; Pramesona et al. 2023: 6).

PSI reporting was further hampered by insufficient, shoddy-designed, labour- intensive, and complex reporting systems. To encourage reporting by all health care professionals, most institutions should establish a web-based reporting system that is rapid, easy to use, and user-friendly (Carlfjord, Ohrn, and Gunnarsson 2018: 6, Gqaleni and Bhengu 2020: 12).

Numerous studies have found that one of the biggest obstacles is a lack of useful feedback. After a PSI report, staff members should receive useful comments to help them learn from their mistakes and make sure that systems are modified for greater patient safety in the future **(**Gqaleni and Bhengu 2020: 2; Pramesona et al. 2023: 3, Tarkiainen et al. 2022: 6).

2.10 CHAPTER SUMMARY

In Chapter 2, the researcher gained a better understanding of this phenomenon through the introduction, concept of patient safety, nurses' knowledge and understanding of patient safety incident reporting, as well as national, international, and African factors influencing patient safety incident reporting behaviors and recommendations to enhance PSIs. Patient safety

incident reporting in primary health care has received little research attention as the majority of studies on the subject were carried out in tertiary hospitals, many of which serve as teaching hospitals. Most of the studies are quantitative in nature; hence the researcher raised an interest to embark into qualitative research so as to get the in-depth knowledge from the participants. Further research is necessary to gain a greater understanding of PSIR, which will improve reporting in primary healthcare. The next chapter presents the theoretical framework that directs this inquiry.

CHAPTER 3: THE THEORETICAL FRAMEWORK USED TO GUIDE THE STUDY

3.1 INTRODUCTION

The literature evaluated to support the current study was reported in Chapter 2. The theoretical framework that served as the study's compass and its application to the current investigation are covered in Chapter 3.

3.2 BACKGROUND INFORMATION REGARDING USE OF THEORIES TO GUIDE THE RESEARCH PROJECT

According to Vinz (2022: 1), a theoretical framework is an overview of pre-existing theories that provides a basis for establishing the arguments a researcher will make in their own work. Researchers create theories to make connections, explain phenomena, and forecast future events. A theoretical framework provides an explanation of the current theories that underpin the research, demonstrating the relevance and foundational nature of the topic of the paper or dissertation. A theoretical framework is the overarching conceptual/theoretical foundation of a study (Polit and Beck 2017: 119). The Yorkshire Contributory Factors Framework (YCFF) served as the theoretical foundation for the current investigation.

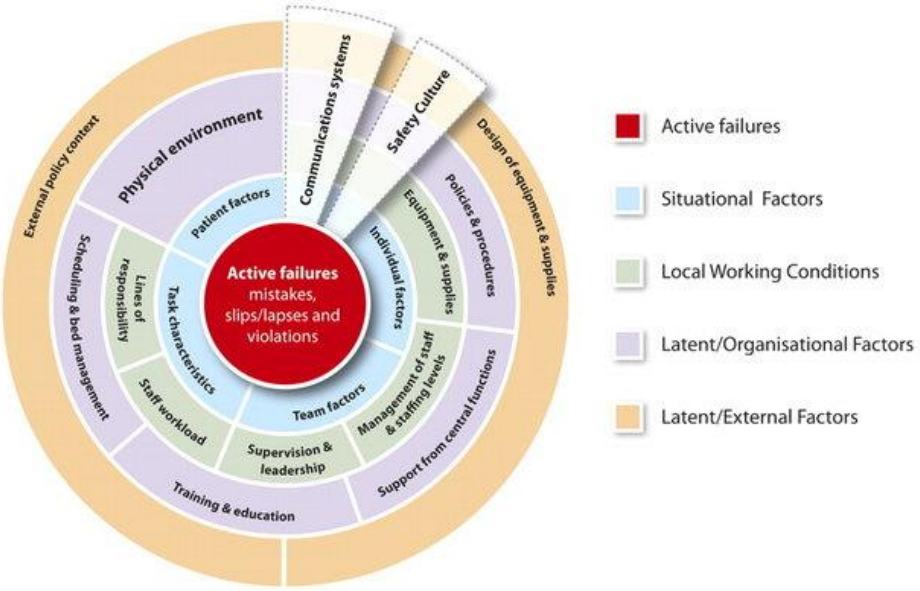
3.3 DESCRIPTION OF YORKSHIRE CONTRIBUTORY FACTORS FRAMEWORK

Lawton et al. (2012:1) developed this evidence-based approach by conducting a systematic review of 95 publications to identify the factors that contribute to PSIs.

The top five contributing elements—active failures, situational factors, local working conditions, latent organisational, and latent external factors—form the foundation of the YCFF framework (Figure 3.1). The framework is widely acknowledged as a complex tool that enables the clear and understandable identification and classification of contributing elements into many key (Peerally et al. 2022: 2). This is significant because it aids in the understanding of the factors influencing patient safety incidents by managers, health care professionals, and health care organisations. As a result, it can address the root causes of underlying problems with patient safety and assist organisations in developing an improvement plan based on the factors found (Macrae 2019: 4). It is evident that the quantity of PSIs and deficiencies in the patient safety culture is closely related (Ismail and Khalid 2022: 3). By identifying the factors that

contribute to PSIs, organisations can prevent incidents proactively rather than reactively because potential causes have been identified beforehand (Konlan and Shin 2022: 2). When preventive measures are implemented a patient safety culture that promotes reporting can be achieved. In order to improve safety results, this framework highlights the significance of safety knowledge, individual behaviour, education and training, communication, teamwork, and leadership. In the current study, wide ranges of influencing factors to PSI reporting were gathered using the YCFF.

Figure 3. 1: Yorkshire contributory factors framework



Factor	Definition
Active failures	Any failure in performance or behaviour (eg, error, mistake, violation) of the person at the 'sharp-end' (the health professional)
Communication systems	Effectiveness of the processes and systems in place for the exchange and sharing of information between staff, patients, groups, departments and services. This includes both written (eg, documentation) and verbal (eg, handover) communication systems
Equipment and supplies	Availability and functioning of equipment and supplies
External policy context	Nationally driven policies / directives that impact on the level and quality of resources available to hospitals
Design of equipment and supplies	The design of equipment and supplies to overcome physical and performance limitations
Individual factors	Characteristics of the person delivering care that may contribute in some way to active failures. Examples of such factors include inexperience, stress, personality, attitudes.
Lines of responsibility	Existence of clear lines of responsibility clarifying accountability of staff members and delineating the job role
Management of staff and staffing levels	The appropriate management and allocation of staff to ensure adequate skill mix and staffing levels for the volume of work
Patient factors	Those features of the patient that make caring for them more difficult and therefore more prone to error. These might include abnormal physiology, language difficulties, personality characteristics (eg, aggressive attitude).
Physical environment	Features of the physical environment that help or hinder safe practice. This refers to the layout of the unit, the fixtures and fittings and the level of noise, lighting, temperature etc.
Policy and procedures	The existence of formal and written guidance for the appropriate conduct of work tasks and processes. This can also include situations where procedures are available but contradictory, incomprehensible or of otherwise poor quality
Safety culture	Organisational values, beliefs, and practices surrounding the management of safety and learning from error
Scheduling and bed management	Adequate scheduling to manage patient throughput minimising delays and excessive workload
Staff workload	Level of activity and pressures on time during a shift
Supervision and leadership	The availability and quality of direct and local supervision and leadership
Support from central functions	Availability and adequacy of central services in support the functioning of wards/ units. This might include support from Information Technology and Human Resources, portering services, estates or clinically related services such as radiology, phlebotomy, pharmacy.
Task characteristics	Factors related to specific patient related tasks which may make individuals vulnerable to error
Team factors	Any factor related to the working of different professionals within a group which they may be able to change to improve patient safety
Training and education	Access to correct, timely and appropriate training both specific (eg, Task related) and general (eg, Organisation related)

Source: Lawton et al. (2012)

3.3.1 Active failures

Employees in the front end who exhibit hazardous behaviours or omissions are viewed as deliberate failures. Any behaviour or performance issue, such as an error, mistake, or violation by the person at the sharp end (the health professional), that could affect implementation (Torrens et al. 2020: 4). Failure to follow protocols or procedures (active failures), commonly involving prescribing, administering, were the common contributory factors directly involving nurses. For instance, mistakes in diagnosis, prescription errors, omissions, incorrect timing, unapproved drug, incorrect dosage, incorrect preparation, and improper timing are frequent risky practices in primary healthcare (Fernholm et al. 2019:2, Tariq et al. 2022: 9–14). Authors of the literature also showed that lack of knowledge, short work Experience, and poor attitudes contributes to underreporting of PSIs (Aboriogo et al. 2022: 2; Gqaleni and Bhengu 2020: 6; Mohammed et al. 2022: 2). Corrective measures can be established to prevent similar errors by recognising the shortcomings, failures, and risk factors that result in an unfavourable incident. It is crucial to this process that those involved in every aspect of health care are encouraged to report medical errors.

3.3.2 Situational factors

Situational factors pertain to the attributes of individuals within the workplace environment. This refers to the range of factors that affect the workplace, such as task characteristic factors, patient factors/service user factors, team factors, and individual staff factors. Situational aspects pertain to the attributes of individuals within the workplace environment (Albalawi, Kidd, and Cowey 2020: 12). Safe and effective patient care depends on the teamwork of multidisciplinary health care professionals (Zajac et al. 2021: 3). A climate of trust and cooperation is thus fostered by situational awareness. Enhancing critical decision-making, setting priorities, and optimising operational efficiency are all facilitated by this for health organisations. Health care professionals can also forge closer bonds with patients and one another if they are content and confident in their work.

3.3.2.1 Team factors

According to Albalawi Kidd, and Cowey (2020: 12), factors influencing the workplace means a variety of elements, including those related to task characteristics, patients' or service users' needs, teams, and individual employees. Research shows that teamwork and continuous improvement enhances PSI reporting (Yang and Liu 2021:

2; Zhao et al. 2021: 1; Naome, Christine and Mugisha 2020: 1). Failures in teamwork negatively impact health care delivery and patient safety (Zajac et al. 2021: 3). Promoting a culture of teamwork and continuous improvement enhances patient safety practices, especially reporting incidents. In the context of health care, collaboration can be defined as an organised team activity in which people with various backgrounds, specialisations, and abilities work together to accomplish a variety of tasks in order to accomplish shared objectives (Zajac et al. 2021: 5). Among the collaborative health care practices that are employed are communication and knowledge or information exchange. Unpleasant team environment related to reporting patient safety incidents in health care institutions; collaboration among team members enhances the chance of reporting. Reporting patient safety incidents is more likely when supervision is present. Reporting is influenced by the clinical environment and the team composition. Training in interpersonal teamwork and communication strategies promotes incident reporting

3.3.2.2 Individual staff factors

According to Barkhordari, Malmir, and Malakoutikhah (2019: 1), individual factors are those that originate from within the person to report an occurrence. Because the individual is the subject who conducts the reporting, there is a close relationship between individual factors and reporting. The lack of knowledge that people need to have in order to report PSIs is the first individual component. People are unable to report PSIs if they do not know how to do so. Individual perspective is the second significant element, with the fear of a lawsuit being the most common (Naome et al., 2020). When it comes to reporting patient safety incidents, another aspect are how busy people feel and how little time they have available (Oweidat et al. 2023:1).

3.3.2.3 Patient factors/services user factors and task characteristic factors

The services and task characteristic factors Users' factors, as outlined in the YCFF, address certain factors associated with activities or patients, such as aggressive behavior and aberrant physiology, which increase a person's risk of making mistakes (Lawton et al. 2012:3). Ahmadi et al. (2022: 2) state that patients are a valuable source of information about possibly preventable incidents, and their engagement can lower medical risks and enhance results

3.3.3 Local working conditions

The term "local working conditions" describes how well the working environment promotes patient safety and fosters a secure atmosphere (Brubakk et al. 2021: 2). The phrase encompasses the following: staff load, lines of responsibility, supervision and leadership, training and education, management of personnel and staffing levels, leadership and equipment supply, and physical environment. Workplace conditions influence the health outcomes. Working conditions that lead to a safety culture will optimise the role and performance of individuals in supporting patient safety programmes (Lu et al. 2022: 2). Improving work environment for health care employees improves patient satisfaction (Schram et al. 2021: 1). It is necessary to foster an atmosphere of cooperation that eliminates retaliation fears. Health care organisations may create an environment where staff members feel empowered to report incidents without hesitation by endorsing the basic principles of a just culture: openness, justice, and collaboration.

3.3.3.1 Leadership and equipment supply

Lack of equipment and resources or equipment malfunction, misuse or mal-design present threats to patient safety and discourage staff from reporting (Maphumulo and Bhengu 2019: 2). Other barriers to PSI reporting as identified by authors include: poorly designed systems and financial constraints (Pillay, Mulubwa and Viljoen 2021: 1); lack of funding to support medication error reporting (Sabblah et al. 2022: 2); lack of a well-defined electronic system for reporting drug mistakes (Alshammari et al. 2021: 1); inadequacy of equipment and supplies (Samlal 2018: 3).

3.3.3.2 Management of staff and staffing levels

Adequate and appropriate staffing is critical to keep patients safe (Hooiveld 2022: 2). The results of the literature review indicate that understaffing of nurses have a negative effect on patient safety (Chen 2022: 2). Sathvik, Krishnaraj and Awuzie (2023: 1) indicate that work pressure affects an individual’s mental health and increases psychological risks, contributing to unsafe behaviours.

3.3.3.3 Supervision and leadership

Leadership and supervision have been found to be among the most common elements impacting patient safety incident reporting. Leadership dynamics in the health care setting can contribute to medical errors (Zajac et al. 2021: 2). Lack of effective

leadership in the form of failure to promote staff support or encouragement, provide feedback and debriefing following reporting, or create a sustainable safety culture are contributory factors to lack of PSI reporting (Konlan and Shin 2022: 2; Woo and Avery 2021: 1). In agreement, Noviyanti, Ahsan, and Sudartya (2021: 2) go on to say that nurses in their research felt that nursing administration was ineffectual, which resulted in job discontent and a bad attitude toward PSI reporting.

3.3.3.4 Staff workload

Findings show that a heavy nursing workload adversely affects patient safety. According to two studies (Herraiz-Recuenco et al. 2022: 2) and (Søvold et al. 2021: 1), health care workers face challenges such as working long hours, which can put them in crisis mode and prevent them from providing the best possible care for patients. Ikonen, Jylhä, and Kuusisto (2022: 1) claim that a shortage of human resources led to incomplete documentation, erroneous information being documented and insufficient information sharing amongst experts. One can list the following: workload and mental load, social support for coworkers, work-family conflict, management feedback, job reward, leadership caliber, and stress related to the workplace. These factors may have an impact on employees or may combine with other factors to have an impact (Barkhordari, Malmir, and Malakoutikhah 2019: 1).

3.3.3.5 Lines of responsibility and physical environment

The authors of the literature found that the clinic environment can significantly impair service delivery and put pressure on patient safety (Kaware et al. 2022: 2, Samlal 2018:3). Afework et al. (2023: 5) stated that well maintained and properly designed health care environments are vital elements of patient safety culture.

These cover the physical setting in which care is provided, the assistance from other departments needed to carry out care, bed management and scheduling, staff education and training, and the availability of appropriate medication, devices, and equipment (Lawton et al. 2012: 5).

3.3.4 Latent / Organisational factors

These cover the physical setting in which care is provided, the assistance from other departments needed to carry out care, bed management and scheduling, staff education and training, and the availability of appropriate medication,

devices, and equipment (Lawton et al. 2012: 5).

3.3.4.1 Staff training and education

Lack of necessary training for nurses makes it more difficult to understand the importance of incident reporting and the definition of error (Aboriogo et al. 2022: 2; Mayne 2018: 65-67; Johansen et al. 2021: 5). Through determining the need for training Individuals' ability to report incidents can also be enhanced by the presence of organisationally structured training, since training is an essential input step that organisations must perform and is one method of managing their human resources. In addition to raising awareness of incident reporting, training will improve healthcare provider's skills and experience.

3.3.4.2 Policies and procedures

Gqaleni and Mkhize (2023:1) declare that applying PSI reporting and learning concepts is necessary to minimise preventable patient harm. The following authors also reported the lack of implementation of patient safety guidelines (Krishnamoorthy et al. 2023:11; Abraham et al. 2022: 2).

3.3.4.3. Physical environment

It has been demonstrated that the physical surroundings are crucial for staff productivity, patient comfort, and patient safety (Abraham et al. 2022: 7). The literature revealed that one of the main causes of the unfavourable working circumstances experienced by employees was inadequate physical infrastructure (Kaware et al. 2022: 2; Chaneliere et al. 2018: 3; Konlan and Shin 2022: 4).

3.3.4.4. Support from central services

Support from central services relates to availability and adequacy of services and support in the words/units related to information technology, and human resources, pottering services, estates, clinically related services such as radiology, phlebotomy, pharmacy (Lawton et al. 2012: 5).

3.3.5. Latent /external factors

These factors have to do with outside variables that could affect mistakes made by the organisation. For instance, the way that medications, supplies, and equipment are made, or the external policy environment that affects how care is provided (Lawton et

al. 2012: 4).

3.3.5.1. External policy context

The aim of patient safety guidelines is to guide clinicians to implement evidence-based decisions and improve clinical outcomes (Gqaleni and Bhengu 2020: 1). However, research indicates that clinical guidelines are often not applied (Abraham et al. 2022: 2; Gqaleni and Mkhize 2023: 6). Poor application of policies and procedures contribute to an increased risk of errors (Samlal 2018: 3).

3.3.5.2 Design of equipment and supplies

The conclusion that the PSI reporting process was overly drawn out and complex is consistent with other research of a similar nature (Gqaleni and Bhengu 2020: 3; Kurihara et al. 2022: 2). Similar findings include: no clear electronic system available for the reporting (Alshammari et al. 2021: 1); health providers are aware of incident reporting but do not know how to access the reporting system (Kaya et al. 2020: 3; Oweidat et al. 2023: 2); lack of knowledge on the criteria for incident reporting was also found to be a contributing factor (Naome et al. 2020: 4; Oweidat et al. 2023: 3).

3.3.6 General factors

3.3.6.1 Communication

Written and spoken communications are two ways that information can be shared amongst staff, patients, departments, and services within an organisation; these processes and systems must be available and successful (Lawton et al. 2012: 5). Poor communication systems hinder PSI reporting (Pramesona et al. 2023: 2; Mjadu and Jarvis 2018: 30). Naome et al. (2020: 1) and Hooiveld (2021: 2) discovered that one obstacle was the absence of efficient reporting mechanisms to assist and motivate employees to report occurrences.

3.3.6.2 Safety culture

According to Lawton et al. (2012: 4), an organisation's values, beliefs, and practices regarding safety management and learning from mistakes are all part of its safety culture. More events being reported are correlated with a strong safety culture (Kaya et al. 2023: 6). Albalawi, Kidd, and Cowey (2020: 1) state that the primary obstacles to a healthy patient safety culture are inadequate communication, staff workload, blame culture, and ineffective leadership. Since the health team is made up of several units and professions that together form a larger healthcare organisation,

the values, beliefs, and actions of the group can have a greater effect than the work of a single professional group. Understanding the safety culture is essential for improving undesirable workforce attitudes and behaviours including miscommunication on PSI reporting thereby instituting non-punitive approaches to errors by managers, which can improve PSI reporting.

3.4 APPLICATION OF YCFF TO GUIDE THE STUDY

The study's theoretical foundation for examining the factors influencing PSI reporting was the YCCF. The focus of the current study was on nurses working in PHC facilities. The YCCF was appropriate because it identifies and provides understanding of contributory factors to PSIs. For the benefit of the patients, determining the real causes of PSIs will present an opportunity to successfully remedy systemic weaknesses. The elements are divided into five domains by the YCFF: (1) situational factors, (2) active failures, (3) local working conditions, (4) latent/organisational factors, and (5) latent external factors (Figure 3.1). The YCFF was designed to identify contributing elements in hospital environments; however, in this study, the framework was applied to investigate the factors influencing the reporting practices of PHC nurses. The YCCF provided direction for the data collecting, analysis, and discussion of the study's conclusions**.**

Table 3. 1: Contributing factors to PSI reporting according to the literature

Active failures	Situational factors	Local working conditions	Latent external factors	Organisational factors	Latent external factors
Mistakes made by the nurses for example: misdiagnoses of patients, prescribing the wrong treatment	Negative attitudes, fears, lack of staff cooperation Fear punishment	Knowledge gaps, lack of awareness, ineffective supervision, shortage of Communication breakdown	Insufficient supplies, communication failures, blame and punitive culture	Lack of feedback, environmental hazards, non-adherence to guidelines	Inadequate supplies of medicines, communication, lack of supervision and support

3.5 SUMMARY OF THE CHAPTER

Chapter 3 described the theoretical framework that was used to guide the study. A description on how the framework guided the study was presented. The study's design and methods are the main topics of the next chapter.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter presents an outline of the research methods that were followed in the study, inclusion and exclusion criteria, population and sampling method, the instrument that was used for data collection, the procedures followed to carry out the study, and the methods of data analysis. Lastly measures of trustworthiness and ethical issues that were followed in the process are discussed.

4.2 RESEARCH DESIGN

According to Polit and Beck (2021: 801), research design is the comprehensive strategy for answering a research topic that includes guidelines for preserving the integrity of the study. Research design is a broad strategy for carrying out a study that aims to address a particular research issue (Gray, Grove, and Sutherland 2017: 124). The researcher in this study employed a qualitative, exploratory, descriptive design technique to investigate the factors influencing nurses' reporting of PSIs in KSD primary health care institutions.

4.2.1 Qualitative research

Through the gathering of rich narrative materials and the application of a flexible research strategy, qualitative research seeks to study phenomena in an in-depth and comprehensive manner (Polit and Beck 2017: 741). Gray, Grove, and Sutherland (2017: 143) define qualitative research as a methodical, participatory, subjective methodology that is used to explain and give meaning to life.

Creswell and Creswell (2018: 23) state that qualitative studies are conducted because researchers need a detailed understanding of the issue. Qualitative research is an effective method to obtain information based on first-hand experiences that is rich, authentic and original. This was a suitable approach to obtain information related to the factors influencing reporting of PSIs in PHC facilities by nurses.

4.2.2 Explorative design

According to Polit and Beck (2017: 15), the purpose of exploratory qualitative

research is to reveal the underlying processes and the different ways in which a phenomenon

manifests itself. When little is known about an area of interest or when a new subject is being examined, exploratory studies are conducted. To investigate the complete nature of the phenomenon and additional aspects associated with it, explorative design is employed. Semi-structured interviews were used in this study to investigate nurses' experiences with factors influencing PSI reporting in PHC facilities. The interviews were guided by an interview guide created by the researcher.

4.2.3 Descriptive design

Descriptive designs help highlight problems with current practice in order to enhance practice results (Gray, Grove, and Sutherland 2017: 402). The goal of descriptive research is to examine and describe real-world situations. The goal is to depict people or circumstances as they actually exist (Polit and Beck 2017: 15). The researcher's goal was to outline the several circumstances that affect nurses' reporting of PSIs. The researcher aimed to describe the various situations influencing reporting of PSIs among nurses.

4.3 STUDY SETTING

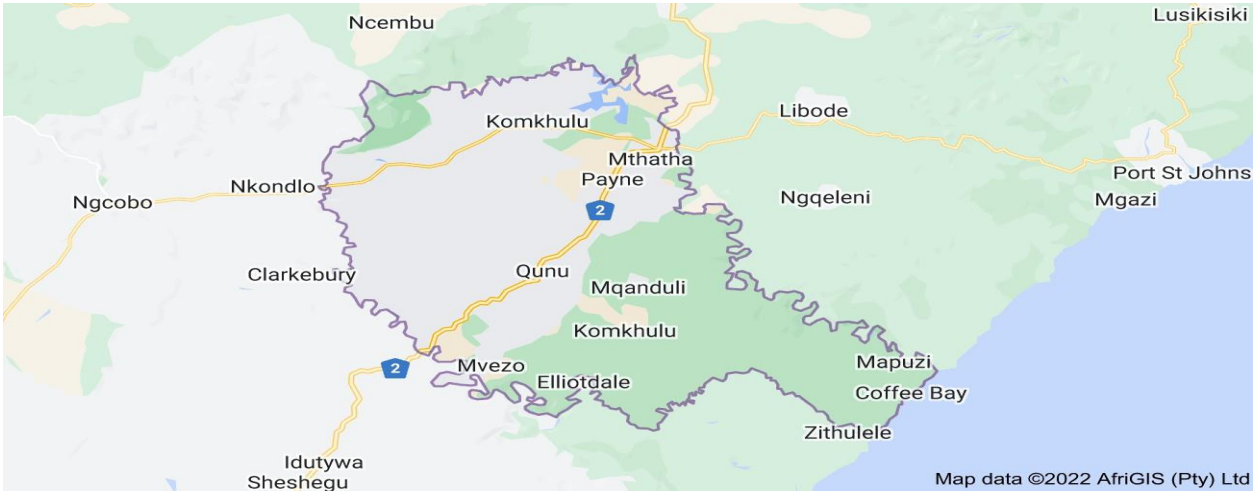


Figure 4. 1 Map of King Sabata Dalindyebo sub-district municipality

Source: Municipal Demarcation Board (2021)

Study setting refers to the location where the study is being conducted (Gray, Grove and Sutherland 2017: 660). Qualitative researchers usually collect their data in real world naturalistic settings (Polit and Beck 2017: 464). In the inland region of the Eastern Cape Province, the KSD sub-district is one of five municipalities that make up the OR Tambo district municipality. The sub-district comprises two magisterial areas namely Mthatha (urban area) and Mqanduli which is largely rural in character. This sub-district is named after King Sabata Dalindyebo who was seen as a unifying figure by the people of Mthatha and Mqanduli. The sub-district serves a population of approximately 488 349 (Eastern Cape Socio Economic Consultative Council 2023: 4). The sub-district has 49 PHC facilities offering 8-hour services, five community health centres and one district hospital and one regional offering 24-hour services.

The total number of nurses working in KSD PHC facilities is 362 including contract workers. Mqanduli is a cluster within the Sub-District which consists of one district hospital, one community health centre and eight PHC clinics. The total number of nurses working in PHC clinics in the cluster under study is 63. This number includes contract workers employed by non-governmental organisations (NGOs) health partners, and community service nurses. This study was conducted in five PHC facilities in the Mqanduli cluster in King Sabata Dalindyebo in the province of Eastern Cape. The five study sites and ten participants were purposively selected using a non-

probability sampling method. These sites are where the problem was identified by the researcher. The total sample was 15 but because of data saturation only 10 participants were interviewed. Five participants used for the pilot study were not included in the main study.

4.4 STUDY POPULATION

Polit and Beck (2017: 739) define the population as the whole of people or things that share a certain set of characteristics. It consists of things (people, animals, plants, occasions, locations, and substances) that are similar in at least one way (Gray, Groove and Sutherland 2017: 124). The target population for this study consisted of all 48 nurses who were engaged full-time in primary health care facilities in the Mqanduli cluster of KSD. Four operational managers, five registered

nurses, and one enrolled nursing assistant made up the study's sample.

4.5 SAMPLING PROCESS

Sampling, as defined by Gray, Grove, and Sutherland (2017: 617), is the process of choosing a group of individuals, events, or behaviors to examine. A sample is a portion of the population that has been chosen to take part in the research (Polit and Beck 2017: 46). This study employed a purposive sampling strategy that is non-probability. Researchers employ their judgment to choose study participants based on their familiarity with the phenomenon when using non-probability purposive sampling (Polit and Beck 2017: 740). Purposive sampling is a method used in qualitative research to acquire insight into a new topic of study or to obtain a thorough knowledge of a complex experience or event (Gray, Grove, and Sutherland 2017: 644).

The researcher deliberately chooses which subjects, components, occasions, or occurrences to include in the investigation. Not every component of the population has an equal chance of being included in the sample when using non-probability sampling (Gray, Grove, and Sutherland 2017: 644). This strategy was chosen since the researcher was investigating the factors influencing nurses' reporting of PSIs in PHC settings. Because of their extensive expertise in the field, nurses who were specifically selected to participate in this study gave valuable information.

4.5.1 Eligibility criteria

Polit and Beck (2017: 495) state that eligibility criteria are used to establish population characteristics and to determine who can be included or excluded in a study. According to Gray, Grove and Sutherland (2017: 619), eligibility criteria are a list of characteristics that are required for the membership in the target population.

Inclusion criteria

- Nurses that are permanently employed by the Department of Health and currently working in PHC facilities in Mqanduli.
- Nurses that have been employed for three years or longer because of their in-depth understanding of the subject and capacity to deliver rich, comprehensive, accurate data, nurses were chosen as study participants.

Exclusion criteria

- Nurses employed by NGOs.
- To ensure that the sample is appropriate for addressing research questions, the researcher excluded nurses employed by the Department of Health with less than three years.
- All nurses that were on different types of leaves during data collection.

4.5.2 Sample size

There are 63 nurses currently working in Mqanduli cluster PHC facilities. Eleven nurses are community service nurses with experience of less than three years and four nurses are contract workers employed by NGOs health partners, and thus 48 nurses were eligible to participate in the study. A sample of 15 nurses in total had been proposed by the researcher. The definition of sample size in qualitative research is unclear, as stated by Vasileiou et al. (2018:2). Although sample sizes are frequently advised by academics, they are typically established after data saturation rather than before data collection. A range of 8–17 participants are suitable for data saturation, according to some researchers. A sample size of fifteen may be proposed for an interview-based study; however, the researcher may feel they have run out of fresh ideas or themes after conducting ten interviews.

Five participants were used for pilot study and were not included in the main study. There were 10 nurses that participated in the interviews and data saturation was achieved. The participants came from various PHC locations. As is typical with qualitative research, data saturation served as a guide and voluntary involvement was used to gather data. According to Polit and Beck (2017: 497), data saturation describes a level of closure reached during data collecting when new data gives redundant information. Data saturation for nurses was monitored together for all categories of nurses and was confirmed when no new information was evident from the interviews**.**

4.6 RECRUITMENT OF RESEARCH SAMPLE

After provisional ethical clearance was obtained from the Durban University of Technology's Institutional Research Ethics Committee (DUT IREC), Reference number 116/23, permission to conduct the study was obtained from the Eastern Cape Provincial Department of Health Research Unit, Reference number EC-202307-005, OR Tambo district and King Sabata Dalindyebo Sub-District Managers as well as participating clinic facilities. Permission letters were hand delivered to managers of the

participating facilities. Appointment dates for data collection were arranged telephonically with the facility managers. All participants were informed about the study by the researcher prior to commencement on the date of interviews and were given an opportunity to read the information letter (Appendix 1) and provided written consent to participate in the study. After informed consent (Appendix 2) was obtained, the researcher scheduled interviews at a time that was convenient for the participants. In addition, no other persons except the researcher and interviewee were allowed into the designated interview area. Interviews lasted for approximately 15 to 20 minutes per participant. The researcher terminated each interview when the participant had answered all questions and no had no new information to impart.

4.7 PILOT STUDY

According to Crossman (2019: 1), a pilot study is a preliminary small-scale study to help them decide how best to conduct a large-scale research project. Using a pilot study, a researcher can identify or refine a research question, figure out what methods are best for pursuing it, and estimate how much time and resources will be necessary to complete the larger version, among other things. The Wilo Clinic served as the trial location and was not included in the research. Data was collected from five nurses who met the inclusion criteria of being permanently employed by the Department of Health and working in primary health care facilities within Mqanduli Cluster for more than three years. The time for interview was enough and the participants understood the questions and probing went well without any misunderstandings. The researcher conducted five interviews to check if data saturation can be reached. The language used was clear to every participant and communication was running smoothly. There were no changes in the interview guide following the pilot study.

4.8 DATA COLLECTION TOOL

Taherdoost (2021: 2) states that tools/devices to gather data include case studies, checklists, interviews, observation, surveys, and questionnaires. An interview is a qualitative data gathering technique that usually entails two persons and is used to get information from an interviewee on a particular subject. Structured, semi-structured, and unstructured interviews are all possible (Alamri 2019: 2). Semi-structured interviews were conducted for this study. In order to fully grasp the research issue, the researcher can go deeper into the interviewees' comments by probing them during a semi-structured interview (Polit and Beck 2017: 510). During the in-person interview procedure, an

interview guide including open-ended questions was used.

The interview guide was written in English and the duration was between 15 to 20 minutes for each individual participant. The language used was understandable and the questions were clear to all participants. There were no names attached to the interview guide, numbers = 1-10 and letters A-E were used to ensure confidentiality. The main question in the interview guide for all the participants was, “Tell me about your experience of patient safety incident reporting in your facility that you will never forget”. This was accompanied by probing questions to obtain more information regarding the phenomena under study

4.8.1 Data definition

In order to preserve anonymity and confidentiality, codes were allocated to both the study sites and the participants. This content makes use of these codes throughout. Data was collected from five study sites from 10 participants. Study sites are coded with alphabet letters. The first study site is coded A and the first participant is coded A1. The participants were assigned codes as follows: (A1 & A2) in one study site A (B3 & B4) in the second study site . The first example refers to the first participant from study site A.

Table 4. 1: Data Definition

DATE	SITE	PARTICIPANT	GENDER	CATEGORY
23/10/2023	A	A1	FEMALE	Operational Manager (OM)
23/10/2023	A	A2	FEMALE	Registered nurse (RN)
24/10/2023	B	B3	MALE	OM
24/10/2023	B	B4	FEMALE	Enrolled Nursing Assistant (ENA)
25/10/2023	C	C5	FEMALE	OM
25/10/2023	C	C6	MALE	RN
26/10/2023	D	D7	FEMALE	OM
26/10/2023	D	D8	FEMALE	RN
27/10/2023	E	E9	FEMALE	RN
27/10/2023	E	E10	FEMALE	RN

4.8.2 Data collection process

The researcher arranged a consulting room in each PHC clinic to ensure that there was privacy and no disruption during the interview. Outside the door was a note that said, “No entry please”, to ensure privacy.

The researcher collected the data at the participants’ health care institutions. The researcher, who would be conducting the study in each of the locations, was introduced to the participants during the recruitment process. The time and availability of the participants determined when the interviews took place.

Data was collected using one-on-one, face-to-face interviews. Data collection only commenced after full ethics approval had been granted by the DUT IREC and permission granted to conduct the study by the relevant gatekeepers. An audio recorder was used to capture participant responses verbatim during interviews after obtaining consent. Field notes were also taken by the researcher during interviews as a backup of data and to capture non-verbal communication from participants.

Through semi-structured individual interviews, nurses were able to freely express their personal opinions and experiences without feeling threatened or intimidated by other members of the group. The time of the interviews was convenient for the participants. The researcher conducted interviews in English between October 23 and October 27, 2023. Every interview lasted between fifteen and twenty minutes. Additionally, the researcher was able to view the participants' emotional states and facial expressions.

4.9 DATA MANAGEMENT AND STORAGE

Data was collected and has been stored in a manner that ensures that participants’ confidentiality and anonymity will be maintained throughout the research and the dissertation writing process and also during the entire storage period which will be five years post completion of the study. No participants’ personal details or any information that could directly link the participants was recorded on the interview sheets, field notes or audio recordings. At the beginning of each interview session, the researcher announced and recorded the code that was assigned to the participant. This code was then documented on the interview sheet and the field

notes.

During the audio recording of the interview, the researcher did not address the participant by name. Since the consent papers included the participants' personal information, they were promptly sealed following verification and kept in a locked cabinet. The collected data was kept in a safe, secure area for the research duration and will be stored in this locked cupboard for five years should they be required for audit trail.

All electronic data has been secured by a secret code that is only known to the researcher. Immediately after all voice recorded data was transcribed and confirmed, it was removed from the audio recorder onto a disc and was completely wiped off from the audio recorder. For the length of the study and for five years afterward, the disc was safely kept in a secured cupboard together with all other physical copies of research materials. The hard copies will be destroyed by shredding, the disc burnt and the soft copies will be wiped off after five years.

4.10 DATA ANALYSIS

Data analysis is the methodical organisation and synthesis of research data as well as the use of such data to test hypotheses in quantitative studies (Polit & Beck 2017: 725). The data gathered from the participants was analysed using the thematic data analysis approach. Thematic analysis is a technique for analysing qualitative data. It is usually applied to a variety of texts, such as transcripts or interviews (Nowell et al. 2017: 2). The researcher was directed to analyse the data through the six steps outlined by Braun and Clarke (2006).

This was done to monitor data saturation and to ensure a better comprehension of the information gathered while the interview session was still fresh in the mind. The first step during data analysis was to listen to the voice recorded information. This assisted the researcher to get a clearer understanding of the information. The audio-recorded information was transcribed into a written format. The analysis of information involved the following six steps:

Phase 1: This was fulfilled by the researcher reading the transcript now and again with the purpose of familiarising herself with data before starting to analyse.

Phase 2: The researcher used colours in order to categorise the codes that are similar so as to assist in the formation of themes.

Phase 3: In this phase the researcher engaged into data coding. Identified patterns among them and started coming up with themes.
Phase 4: The researcher was making sure that the themes are useful and accurate representation of the data.
Phase 5: The researcher linked the similar subjects, each theme was named and defined.
Phase 6: In this case the researcher ended up having 5 themes and 19 sub-themes. These themes formed preparation for the researcher to move to the following chapter which was interpretation of findings.

4.11 MEASURES OF TRUSTWORTHINESS

It is thought that a suitable criterion for assessing qualitative research is reliability. Guba and Lincoln (1985) suggest that credibility, transferability, and dependability, and confirmability— four criteria—be satisfied by the research in order to guarantee the process's reliability (Nowell et al. 2017:1).

4.11.1 Credibility

Credibility is a gauge of the truth value of qualitative research, or the degree to which the conclusions drawn from the study are accurate and true. It depends, in part, on how credible the researchers are as well as how they conduct their studies. The following techniques can be applied to strengthen the credibility of qualitative research member checks, extended engagement with data, persistent observation, negative case analysis, triangulation, and referential sufficiency (Korstjens and Moser 2018: 2). Throughout consultation with the participants, the researcher presented herself in a professional and dignified manner to all the participants to develop a sense of trust with the participants. Furthermore, during the data processing process, credibility was maintained by double-checking the accuracy of the data by reading the transcripts more than once and comparing them to the audio recordings.

During the interviews the interviewer now and again paraphrased the information shared by the participants. The responses were read to the participants for them to confirm that the correct information was captured. In addition, the study supervisor verified the information's accuracy by contrasting the transcription with the original data.

4.11.2 Transferability

According to Korstjens and Moser (2018:2), transferability is the extent to which the findings of qualitative research may be applied to different situations or contexts with different participants. A clear rationale for the study was identified, description of data collection was done ensuring the sample size, and response rate is sufficient. Transferability was enhanced through providing detailed descriptions of the research context, participants, and the study setting. This allows readers to assess the relevance of findings to their own contexts. Another way was to ensure that data collection continued until theoretical saturation was reached. This means that no new themes or insights emerged from additional data. A well-saturated study increases the likelihood of transferability. Furthermore, involving participants in the research process by sharing findings with them and seeking their feedback helped validate interpretations and ensured that the findings resonated with participants' experiences.

4.11.3 Dependability

Dependability, as defined by Korstjens and Moser (2018:3), is the degree to which the results of qualitative research can be used in other contexts or circumstances with other participants. In this study, the researcher provided detailed information on the research process, findings, and recommendations, so that the other prospective researchers could replicate the study to their context. The results of an investigation must be repeatable and replicable using the same participants in the same setting (Polit and Beck 2021:569).

4.11.4 Confirmability

Confirmability is the extent to which the results of the research work could be verified by further researchers. The aim of confirmability is to demonstrate that the data and interpretations of the findings are clearly derived from the data rather than being the result of the inquirer's imagination (Korstjens and Moser 2018: 3). In this study, the research report conveyed participants' experiences and not the perspectives of the researcher. The themes generated during data collection reflected the tone of the participants. After the data transcription, participants were contacted telephonically, to confirm that the information provided was captured accurately.

4.12 ETHICAL CONSIDERATIONS

The following principles guided all actions of the researcher:

4.12.1 Approval by research ethics

The Eastern Cape Department of Health granted ethical permission for the current study under reference number EC-202307-005 and the Durban University of Technology research ethics committee under reference number 116/23. Two letters of authorisation were issued by the district manager and the sub-district manager to conduct the study.

4.12.2 Informed consent

The researcher made sure that everyone who participated in the study did so willingly and free from coercion, and that those who chose not to participate faced no consequences. The participant's understanding of the study's goal and specifics, the voluntary nature of their involvement, and their unrestricted right to withdraw from the study at any moment were all made sure of by the researcher. Written informed permission was acquired from every research participant. The participants had the chance to ask any questions they had about the benefits, hazards, and storage and protection of their data before giving their agreement.

4.12.3 Principle of beneficence

The beneficence principle states that one should not injure. Participants received guarantees that the information they gave the researcher would not be used against them and were shielded from exploitation. Interview transcriptions and audio recordings are being stored securely. Researchers have an obligation to minimise damage and maximise benefits in accordance with beneficence (Polit and Beck 2017: 139). When the researcher asked pointed questions, she was considerate of the participants' feelings. During data collection, there were no indications of distress from the participants.

4.12.4 Respect for human dignity

The rights to full disclosure and self-determination are essential components of

respecting human dignity (Polit and Beck 2021: 171). This means that participants in this study had the option of taking part or not. Participants were free to reject to provide information, to ask questions, and to leave the study at any moment. No one was asked to say anything that would make them feel uncomfortable, compromised, lessen their sense of self, or make them feel embarrassed. Participants in the study were guaranteed the utmost confidentiality regarding the data they submitted. The participants' names and the names of the clinics were kept secret. The researcher did not offer excessive rewards, large sums of monies, jobs or special privileges to participants.

4.12.5 Confidentiality

According to Polit and Beck (2021: 141), a confidentiality promise is an assurance that whatever information participants submit won't be disclosed in a way that would allow for their identification or be available to third parties. Unless individuals specifically consent, no one other than the research participants will be given access to the data. Due to the identity of nurses being known to the interviewer, the interviewer is therefore mandated by ethical standards to keep information that will be collected confidential and anonymous.

The researcher made sure that no information disclosed to third parties during interviews was disseminated without the participants' consent. Institution names, addresses, names of participants were encrypted to protect identities, code numbers were given to each facility and participants. Participants' names were not mentioned during interviews. To preserve participant anonymity, the master list of names and code numbers was maintained apart from the data gathered.

4.12.6 Justice

According to Varkey (2021: 4), justice is the fair, equitable, and proper treatment of individuals. The inclusion and exclusion standards were met. Regardless of differences in age, years of experience, or nationality, all volunteers received the same treatment. The participants were under no obligation to reveal anything they were uncomfortable sharing, and were instead urged to share only that which they felt comfortable sharing. The investigator made certain that participants received pertinent study information. The participant names were converted into codes and

kept private from outside parties.

4.13 SUMMARY

This chapter concentrated on providing a thorough explanation of the study's research strategy and methodology. The chapter also covered the methods used in the study to ensure ethical considerations and measurements of reliability. The following chapter presents the findings of the study.

CHAPTER 5: PRESENTATION OF FINDINGS

5.1 INTRODUCTION

The study's methodology was covered in the previous chapter. The information on the factors influencing PSI reporting in KSD EC is presented in this chapter.

The findings were analysed using thematic data analysis, where themes and sub-themes emerged from the collected data. This helped the researcher to reach the final conclusions of the study. The findings emerged after one broad general question was asked from the participants, using individual interviews with the help of an interview schedule that guided data collection.

5.2 DEMOGRAPHIC DATA OF THE PARTICIPANTS

Data regarding characteristics of the study participants were collected before each interview session. The findings of this data were quantified to facilitate interpretation and better understanding. From a gender point of view, participants comprised eight females and two males. The majority of participants were above 35 years of age. Participants comprised four operational managers, five professional nurses and one enrolled nursing assistant. All the participants had three years or more nursing experience and had been working for more than three years in the selected PHC facilities.

Table 5. 1: Demographic characteristics of the study participant

Demographic characteristics	**Total number**	**Participants per Category**				**Total**
Age	31-40 = 1	41-50 = 7	Above 50 = 2			10
Gender	Male = 2	Female = 8	0ther = 0			10
Ethnicity	Indian = 0	Coloured = 0	White = 0	Black = 10		10
Highest qualification	Certificate = 1	Diploma = 4	Post graduate Diploma = 3	BCur .Degree = 2		10
Employment status	Contract worker = 0	Fulltime worker = 10				10
Work experience	3-<5 years = 0	5-10 years = 3	Above 10 years = 7			10
Category of nursing	Enrolled nursing assistant = 1	Enrolled nurse = 0	Registered nurse = 5	Operation manager = 4		10
Work Unit	Acute stream = 1	Chronic = 3	Mother & Child = 1	Observations = 1	Administration = 4	10
Participant	A1 & A2 =2	B3 & B4 =2	C5&C6 = 2	D7 &D8 = 2	E9 &E10 = 2	10
Dates	23/10/23	24/10/23	25/10/23	26/10/23	27/10/23	5 days

5.3 THE FINDINGS OF THE STUDY

The findings of the study were characterised by five themes and nineteen sub-themes after thematic analysis method was employed for the collected data.

Table 5. 2: Objectives, themes and sub-themes

OBJECTIVE	THEME	SUB-THEME
1. To explore and describe nurse's knowledge and understanding of PSI reporting and learning.	Theme 1. Experiences of PSI reporting	1. 1. Types of PSIs 1. 2 Management of patient incidents 1. 3. Minimal support by managers 1. 4. Emotional aspect 1. 5. Staff attitude
	Theme2. Contributory factors to patient safety incidents	2. 1 Health care worker contributory factors 2. 2 Patient contributory factors 2. 3 Clinic setting contributory factors
	Theme 3. Importance of PSI reporting	3. 1 Exposure to PSI reporting 3. 2 Prevention of re-occurrence of PSIs 3. 3 Teachable moments 3. 4 Dissemination of PSI reports 3. 5 Statistics of PSIs 3. 6 Quality assurance and PSI reporting 3. 7 Influence of litigation in PSI reporting
2. Explore factors influencing PSI reporting behaviours	Theme 4. Barriers to PSI reporting.	4. 1 Barriers related to health worker knowledge 4. 2 Barriers related to work environment
3. Provide recommendations for improving in PSI reporting	Theme: 5 Recommendations by participants	5. 1 Workplace related recommendations 5. 2 Health worker related recommendations

5.4 FINDINGS DISCUSSED ACCORDING TO THE OBJECTIVES AND THE RELATED THEMES

The objectives of the study were:

1. To explore and describe nurse's knowledge and understanding of Patient Safety Incident reporting and learning.
2. To explore factors influencing patient safety incident reporting behaviours in

primary health care facilities in KSD.

3. To provide recommendations for improving in Patient Safety Incident reporting.

5.4.1 Objective 1: Theme 1: Experiences of patient safety incident (PSI) reporting

From the ten interviews conducted, it was discovered that participants had experiences with PSI reporting. Under this theme, five sub-themes emerged: types of PSIs, management of PSIs, minimal support by managers, emotional aspects, and staff attitude as identified by the participants**.**

5.4.1.1 Sub-theme 1. 1: Types of patient safety incidents

Participants communicated that various types of incidents had been identified in their institution. Some of them were medical related, whereas others were just general incidents. The participants indicated any experiences they may have had with PSI reporting at work. The participants discussed the kinds of patient safety incidents they had encountered while providing care for patients in their place of employment. For instance, incidents involving no injury (near miss), mild harm, minor harm, and catastrophic harm or death. They specifically cited pulmonary, gynaecological, and other conditions, whereas the general issue was related to poor environmental maintenance and cleanliness. It was clear that all these incidents were detrimental to patients' lives and could had been prevented, as indicated in the direct words of the participants in the statements below.

> *In this incident the patient was severely ill with respiratory distress. The ambulance didn't arrive, the patient died.* (E9)

> *… child brought to the clinic with rash and high temperature and was treated and discharged, was misdiagnosed as he came back with severe measles.* (B3)

> *Patient saw a snake getting inside the bag, nearly bitten her and the patient was so scared.* (B4)

5.4.1.2 Sub-theme 1. 2: Management of patient safety incidents

The participants mentioned that there is management of PSIs in the workplace. Different processes like formation of PSI committee, gathering information about PSI, conducting investigation, and analysing data are applied to manage all types of PSIs.

> *When we investigate the PSI we take the heads of the streams because we want all professional nurses to be involved because we don't want the affected person to feel as if she is attacked.* (D7)

> *We investigated as a team the incident.* (D8).

> *We have got the patient safety record book where we record all our incidents monthly …. We also record on PSI reporting system online.* (C5)

5.4.1.3 Sub-theme 1. 3: Minimal support by managers

Participants stated that support is important when reporting the PSI. They indicated that their managers are not all supporting them during this period; in fact, the support is minimal. On top of that there are some health care workers that are supposed to be reporting the incidents but they are not supported by their managers and this brings certain frustrations.

> *We barely get support from our managers.* (D7)

> *I get support during my supervisor's visit, we review patient safety incidents.*(C5)

> *Managers do not support when an incident happened.* (C6)

5.4.1.4 Sub-theme 1. 4: Emotional aspect

The emotional reactions of participants to errors prevent them from reporting; after major errors, they report feeling anxious, guilty, and depressed, fearing disciplinary

punishment and worried about patient safety. The issue of fear was brought up and connected to a variety of circumstances, such as the dread of being punished, losing one's job, and having an impact on relationships with co-workers.

> *They don't want to give lot of information because they are nursing fears of losing their jobs.* (D8)

> *It is not easy to write a statement, I felt as if I am in court.* (B4)

> *I was afraid to report this incident because the management and colleagues would think I have mismanaged the patient and I was so emotional with feelings of regret.* (E9)

5.4.1.5 Sub-theme 1. 5: Staff attitude

Individual personal attitudes and lack of commitment to reporting influences individuals to not submit/write PSI reports.

> *Staff members are reluctant to report patient safety incident even if you in-service them they don't report even the near miss ones.* (C5)

> *The staff posed a negative staff attitude because they felt that they were going to be punished and maybe they're going to be given warning.* (D7)

> *Staff attitude, the negative staff attitude affects the reporting, they've got this resistance of not wanting to write statements because they think statement will be kept in their files, we will punish them, we want to take them through disciplinary procedures you want to write warnings against them.* (D8)

5.4.2 Objective 1: Theme 2: Contributory factors to patient safety incidents

The following examples, which illustrate how negligent and careless staff personnel resulted in patient safety issues or neglect, were shared by the participants. Examples

include instances where staff members failed to verify the patient's prescription, which resulted in the patient receiving the incorrect medication, and poor communication that led to patient incidents. Another nurse expressed concern about a culture of negativity and blaming, saying that staff covered up in order to avoid receiving verbal reprimands from superiors. The participants claimed that health care providers' irresponsibility had jeopardized patient safety. Three sub-themes complemented this main theme.

5.4.2.1 Sub-theme 2. 1: Health care worker contributory factors

The participants reported the following as examples of health care worker related contributory factors to failure to report PSI.

> *According to the guideline we are supposed to prioritise the patient according to their conditions, we didn't prioritise because of the long queue outside.* (C6)

> *… and there was no signature and also that a gap that was identified because you can't just write on the card without a signature.* (D7)

> *At the registration office, the first file was retrieved and the patient was given the treatment that was stopped.* (D8)

> *Child was missed to be seen that she has measles until she had severe symptoms after 2 days.* (B3)

> *… the communication was poor and another thing the staff didn't check the prescription before so it was the staff error.* (C5)

Participant feedback indicated that several healthcare professionals operate outside of the scope of practice established by their professional association, the South African Nursing Council (SANC). They have stated that there is a risk to patient safety as a result of this.

The complaint … the junior nurse wrote on the patient card and then in my understanding she did not know that she was not supposed to write on patient card, only a professional nurse is allowed to write there. (D7)

It is done by ENAs who are not informed they have no insight of what to do immediately on the cases of maternity cases. (C6)

The clinician was a community service nurse who was working alone in the absence of senior personnel. (B3)

5.4.2.2 Sub-theme 2. 2: Patient contributory factors

The participants highlighted some issues that demonstrated the lack of patient empowerment, which prevented them from being more active in-patient safety improvements.

They don't have the knowledge on when to come to the clinic, what to do when they feel or experience any illnesses, some of the patients they come to the facility at a later stage, some of them are coming for antenatal clinic (ANC) and the later stage of their pregnancies so we are unable to pick those illnesses at the early stage. (C6)

The patient went home with the treatment that was stopped long time ago. (D8)

Some patients come late to the clinics; they consult traditional healers. (E9)

5.2.3 Sub-theme 2. 3: Clinic setting contributory factors

The participants also discussed various concerns they had regarding the lack of resources needed to complete the tasks. The participants also talked about other concerns they had regarding the lack of resources needed to report incidents that jeopardise patient safety. Lack of supply and medications, resulting from a rise in demand, has a detrimental effect on patient safety. The participants also expressed concern about things like distance, bad roads, ambulance turnaround times, and other

modes of transportation that could compromise patient safety and delay the management of life-threatening complications.

The participants emphasised that although they wish to carry out their duties professionally, they are underfunded, endangering the patients' safety.

> *… and also the drugs that are always not available, so those are also the most causes of patient safety incidents.* (A1)

> *Make reporting quick and easy with an online form that is always accessible via both desktop and mobile devices.* (B3)

> *There was no betadine solution to dress the wound.* (D7)

The infrastructure was identified by participants as one of the contributory factors to patient incidents. The participants expressed concern about things like distance, bad roads, ambulance turnaround times, and other modes of transportation that could compromise patient safety and delay the management of life-threatening complications.

> *The child health room is very small to accommodate a firm and flat surface to put the scale, like a table or a counter. Scale was put on top of a couch which is not level, making the scale to lose balance.* (E10)

> *I think the infrastructure is the problem, because we are not doing these vitals in the same consulting room where the midwife will be able to see and act immediately*. (C6)

> *The clinic is about 85km gravel road away from town.* (E9)

The participants indicated that the environment is contributing to patient incidents. The physical layout and unhygienic conditions at these clinics may put patients' health at risk and result in patient safety incidents. With the purpose of ensuring patient safety, the clinic setting is essential. It includes a range of factors

that may have an immediate effect on patients' health during their time receiving healthcare care.

> *There is a long grass with weeds; the patient saw a snake getting inside her bag.* (B4)

> *A snake that falls on top of the patient.* (A2)

> *The clinic is overcrowded; there is no space for filing* (D8)

Staff shortage of human resource was portrayed by the participants as a contributory factor. They stated that there is a shortage of health care staff which makes it impossible to do their work as they wish.

> *The shortage of staff …. Because when you are short staffed you are also in a risk of mismanaging the patients.* (C6)

> *We don't have staff because we are short staffed, we are overwhelmed …. They ended up not reporting.* (A2)

> *… shortage of staff because the clinician was a community service nurse who was working alone in the absence of senior personnel.* (B3)

5.4.3 Objective 1: Theme 3: Importance of patient safety incident reporting

Participants agreed on the need to prevent incidents, report PSIs and promote patient safety. They were also aware of their direct responsibility for PSI reporting. Participants accept responsibility and blame themselves for serious-outcome errors. This theme was supported by seven sub-themes.

5.4.3.1 Sub-theme 3. 1: Exposure to PSI reporting

The participants emphasised the importance of reporting as crucial to both the health workers as well as other stakeholders including patients themselves. They indicated

that previous exposure to PSI is one of the important aspects of the PSI reporting process.

> *… we were not exposed to the incident before so we didn't know normal frame to report immediately.* (A2)

> *I mean when you are doing a PSI incident report the manager must involve nurses in that reporting process so that they can be exposed on how to report the incident.* (D8)

> *The more they know, the more likely they will be to report.* (E10)

> *We only reported to the sister in charge and I was not aware that there is a computer system that captures near misses.* (B4)

5.4.3.2 Sub-theme 3. 2: Prevention of re-occurrence of PSIs

When PSIs are reported, the information can help organisations better understand exactly what happened, identify the combination of factors that caused the incident to occur, determine its frequency, and predict whether it could happen again.

> *It is important so as to prevent further recurrence of the same incidents.* (E9)

> *It is very important so that the same incident must not happen again or somebody who is responsible for us to get something that was supposed to be prevented.* (E10).

> *To prevent future incidents.* (B3)

5.4.3.3 Sub-theme 3. 3: Teachable moments

The participants admitted that reporting of PSI is important as it is the part of a learning curve. Most of the participants reported that they were learning more about how to report PSIs.

I think awareness in our meetings because we do have our staff meetings; we do have reports backs of trainings. In our meetings every time we meet we need to introduce the topic of PSI so that they are aware. (D7)

To learn from mistakes, identify trends, analyse the root cause of an incident and make adjustments. (A2)

I think we need to sensitise our staff to read these guidelines and the policies because they are there to be read. (D8)

5.4.3.4 Sub-theme 3. 4: Dissemination of PSI reports

When PSIs are reported, organisations can utilize the data to acquire a better understanding of the occurrence, pinpoint the specific reasons that led to it, ascertain how frequently it occurs, and evaluate whether it is likely to happen again. Maintaining and enhancing the quality of treatment requires reporting PSIs and learning from experience. To learn from mistakes in the provision of care, health care organisations must receive useful feedback from their incident reporting systems.

… you have to report to the district as well as the system, families at times do not want to accept the patient's death …. (D7)

It is important to report incidents to keep workplace safe, accessible, and compliant. It also enables the Department to learn from mistakes, identify trends, analyse the root cause of an incident and make necessary adjustments to prevent similar incidents from occurring. (E10)

If it can be part of staff meeting reports, part of health promotion activities, and nurses familiarize themselves with the guidelines of PSI. (A2)

5.4.3.5 Subtheme 3. 5: Statistics of PSIs

Participants understand that they have an ongoing obligation to provide data and statistics to the board, administration, or both. Dashboards for incident reporting and management can be useful in gathering additional data about quality and safety.

Gathering incident data is only the beginning of enhancing quality and safety.

> *To have the accurate information of how often these incidents taking place and then for reduction of maternal death because we have a lot of maternal death.* (C6)

> *I think it is necessary to report PSIs for learning and statistics purposes.* (D7).
>
> *Improving our health services also to encourage the management to do more of service.* (A1).

5.4.3.6 Subtheme 3. 6: Quality assurance and PSI reporting

Participants agreed that patient safety reports improve care standards, help identify potential problems and facilitate learning from error.

> *It is necessary to report so that we can improve our quality of care to our patients.* (B3)
> *We can learn our mistakes and the way we treat our clients.* (A2)

> *… because we see our gaps and will be capacitating our staff.* (D8)

5.4.3.7 Subtheme 3. 7: Influence of litigation in PSI reporting

Participants noted that PSI reporting needs to be taken seriously to improve the safety of the patients thereby reducing litigation claims. The threat of litigation can be a great motivation for reporting.

> *I think now that there is a rise in litigation it is really important for us to take this reporting serious.* (D8)

> *The patient is supposed to get proper management and to prevent to medico - legal hazard.* (C5)

> *We have so many litigations in our institutions because we do not report.* (D7)

5.4.4 Objective 2: Theme 4: Barriers to patient safety incident reporting

The participants acknowledged that while some of them actively reported the PSIs, others chose not to. A number of obstacles to event reporting in health care settings were noted by the participants. These obstacles are linked to a number of people that are failing them as health care professionals. This theme was supported by two sub-themes.

5.4.4.1 Sub-theme 4. 1: Barriers related to health care worker knowledge

The participants indicated that there are barriers that are related to themselves which means that PSI reporting does not take place as expected. They also indicated that there are other barriers that are related to the work environment. The participants articulated that knowledge is one of these barriers.

> *We are not clear about PSI to be reported and categories of severity; if the PSI is not life threatening at times we ignore and do not report it. Fear to be blamed is also a barrier and distrust of reporting system.* (E10)

> *You cannot be sure if you are getting support or you getting punishment because during the PSI management when you are doing the report its always feel like you are being blamed more than being supported.* (C5)

> *I was not aware that there is a computer system that captures near misses.*(B4)

> *The staff member was not exposed to the incident before so we didn't know normal frame to report.* (C6)

> *Some of the PSIs we don't know really which one to report and which one not to report.* (A1)

> Pressure during service delivery was highlighted as one of the barriers that hinder the participants to report the incidents. Because of the strain they operate under, personnel obstacles, and an absence of recent in-services, participants cannot remember the protocols for reporting incidents.

The pressure that we are working under, we were short staffed, and also we didn't have the recent in-services to remember what steps to take. (A2)

… working under a lot of pressure and the reporting period is sometimes short.(C5)

We see more than normal for example if we supposed to see 30 per nurse we end up seeing 40 so we manage them having a pressure that there are lot of people outside. (C6)

5.4.4.2 Subtheme 4. 2: Barriers related to work environment

The participants shared that it becomes difficult for them to report the PSIs when there are barriers in the work environment that hinder them from doing so. They indicated that data, internet and phones are examples of these barriers.

… poor network connectivity, clinic doesn't have phones … and Wi-Fi. (E9)

The major challenge is the network, the password …. (A1)

We see that this is a PSI, and then you ended up not reporting because we are short staffed. (C5

Infrastructure was also identified as a barrier that influences the rate of PSI reporting.

We are a high-volume facility and we see lot of patients and our filling room is too packed, there are so many files … it makes it poorly managed. (D8)

The contributory factors were one, I think the infrastructure is the problem because we are not doing these vitals on the same consulting room where the midwife will be able to see and act immediately, the vitals are done on the other consulting that is far from the one we are doing consultation and number two it is done by an ENAs who are not informed they have no insight of what to immediately on the cases of maternity cases (E10)

The small waiting area that not does not accommodate all patients, long waiting queues in the clinic and staff shortages. (B4)

Participants mentioned third parties like trade unions in the reporting of PSI. Trade unions seem to influence the reporting system of PSI in the health facilities. This influence causes a negative influence as it encourages health care workers not to perform as required. According to the participants, when certain staff members are asked to write a statement so that management can have a complete account and act, they report the incident to the unions because they fear they may be fired. The unions then tell the staff members not to write anything, so they fail to report the incident because no information is available.

There is a tendency of reporting to the unions by health care workers … unionist will say that they must not talk to us as managers …. And we ended up leaving it and not investigating the incident and not capture it. (D8)

They wanted to consult their unions because they said whenever they were told by the unions that whenever they have to write a statement the union must be involved. (D7)

*Nurses refuse to write comments because their trade unions warn them against doing so for fear of losing their jobs.(*C5).

5.4.5 Objective 3: Theme 5: Recommendations by participants

This theme is supported by two sub-themes. Participants putting forward their recommendations regarding the reporting of PSI. They indicated that these recommendations might bring about the improvement of the low rate of reporting.

5.4.5.1 Sub-theme 5. 1: Work place related recommendations

The participants detailed recommendations that are related to the work place regarding PSI reporting. Participants indicated that patient safety incident reporting might improve if the resources they require for reporting incidents could be made

accessible. These resources consist of telephone, internet data and Wi-Fi connection data for reporting.

> *If the department can supply us with telephones and Wi-Fi and the router since we are in deep rural areas away from town. If we can have a dedicated ambulance that can be stationed in the nearby hospital that is about 35km away from the clinic.* (E9)

> *If the guideline can be part of our normal routine so that all professional nurses can be exposed to the guideline.* (E10)

> *If this patient safety incident reporting can be part of the health talk.* (A2)

5.4.5.2 Sub-theme 5. 2: Health worker related recommendations

Participants expressed that debriefing and giving feedback after an event is a crucial part of event production. Officers receive feedback on events in order to conduct assessments and make sure that mistakes are not made again. In order to help health care workers, become aware of potential errors that may arise during patient service providing, feedback regarding errors that have happened is crucial.

> *… Debriefing and feedback after reporting.* (E9)

> *We should be well orientated about the incidents to be reported, also feedback should be done after incident is reported and about the measures to be done to prevent such incidence.* (A2)

> *It is important to monitor and measure reporting and quality as well as provide feedback and follow up.* (E10)

Availability of resources was indicated by participants as a barrier to PSI reporting. The participants recommended that resources should be made available if the job is to be done successfully.

It can be better, if the department can supply us with telephones since we are in deep rural areas away from town. (E9)

If we can have a dedicated ambulance that can be stationed in the nearby hospital that is about 35 km away from the clinic(C6).

If there can be sufficient consulting rooms. (E10)

The participants recommended that technology should be looked at so that reporting can be done smoothly and accurately.

Make reporting quick and easy with an online form that is always accessible via both desktop and mobile devices (B3)

*If we can have login details that are working we can do that exercise successfully, but our main problem is our logging details to report PSI (*A1)

It can be better, if the department can supply us with wi-fi and the router, since we are in deep rural areas away from town (E9)

There were recommendations that were related to the staff, where the participants suggested that every health care worker needs to know about how to do PSI reporting. There should be a way to expose them to this.

… nurses for them to be rotated and involved in PSI reporting. Even if it is training. (A2)

Staff should be made aware of policies on patient safety incident reporting and made available to them. (B3)

Trainings and workshops should be done for all staff members so that we improve reporting. (B4)

I encourage the in-service on those PSIs on how we are doing the reporting. (C5)

The participants recommended that health education for both nurses and patients should be conducted regarding PSI reporting. They further indicated that this can assist awareness for all of them, to show them how important PSI reporting is.

… encourage health education to patients they can be encouraged so they may also compliant … they don't have the knowledge on when to come when they feel illnesses. (E9)

If this PSI reporting can be part of the health talk because sometimes the patient may not even report because they don't know sometimes and the rest of the staff, they also not report because they don't know the information. (A2)

The patient went home with the treatment that was stopped long time ago. (D8)

As lack of knowledge was picked up as one of the barriers for PSI reporting, participants came up with recommendations for the improvement of PSI reporting. Development of staff was picked up as a necessity.

Staff members be encouraged to register on knowledge hub and study online PSI to gather new information. (C5)

The trainers from our districts they should make it as part of their training topics where trainers will be trained by external trainers …. (D7)

If the guidelines can be part of our normal routine so that all professional nurses can be exposed to the guidelines … reporting can be improved. (B3)

Mentoring came up as another recommendation brought forward by participants. They mentioned that health care professionals need to be mentored so as to ensure that they are learning and are doing the correct thing whilst dealing with PSI.

To promote reporting, staff should be involved in the reporting process. Professional nurses with skills and knowledge should be allocated along with those with no experience … when need arise. (B3)

It is part of topic that our managers present every quarter to the staff trying to eliminate hazards and encourage staff to report incidents. (D7)

Having a good incident management platform helps to keep everyone involved in the know. (E10)

The participants indicated that there are some individual health care workers who are not willing to report PSIs for different reasons. In reference to these they came up with recommendations. They commented that the nurses need to be sensitised about this issue so that they can see the need and the importance of reporting incidents.

Ensure a safe and open reporting culture, make it clear why incidents need to be reported and make it quick and easy with an online form that is always available …. (E10)

I think we need to read guidelines and policies …. They can sit down and discuss guidelines. (A2)

If we can have login details that are working, we can do that excise successfully.(A1).

5.5 CHAPTER SUMMARY

The conclusions and data analysis were given in Chapter 5. The examination of the data produced five main themes and nineteen sub-themes. All the 5 themes and 19 sub-themes were further discussed in this chapter including direct quotes from the participants. The themes were experiences of PSI reporting, Contributory factors to PSI, Importance of PSI reporting, Barriers to PSI reporting as well as recommendations by participants. The next chapter presents a discussion of the study's findings.

CHAPTER 6: DISCUSSION OF THE FINDINGS

6.1 INTRODUCTION

This chapter discusses the findings on the factors influencing PSI reporting by nurses in relation to the objectives of the study. The discussions were according to the findings that emerged after analysis utilising thematic analysis method. These findings were characterised by five themes and nineteen 19 sub-themes.

6.1.1 Experiences of patient safety incidents

The study revealed various factors influencing PSI reporting by nurses. The participants indicated that PSI incidents were medical related as well as general. According to participants these were very unpleasant experiences as they felt that these should have been prevented, but there were numerous obstacles to prevent them. The function of nurses is to preserve life so an environment to support that should be created. Fukami, Uemura and Nagao (2020: 2) observe that there are different types of PSIs and that most PSIs involve medical doctors, most of these being related to surgical procedures.

The participants further revealed that insufficient support by managers was one of the reasons for them not to report the PSIs, because they did not get the emotional support they needed and felt very anxious when requested to do the reporting. Some participants were fearful that they might be expelled from work or that they may appear as if they are not competent. This finding is similar to the finding by Gluschkoff et al. (2021: 3) that nurses were uncomfortable relating to the consequences of incident reporting. The Gluschkoff et al. (2021: 3) study further advised that fair treatment of nurses may encourage reporting of PSIs.

Some participants mentioned that the negative attitude of nurses inhibited PSI reporting. Teamwork is crucial in order to have expected efficiency, but this was lacking according to the participants. The improvement of patient safety and care quality is the main goal of patient safety incident reporting, according to participants. There was a lack of a collaborative attitude among the nurses, according to participants, because some nurses were unaware of the necessity of participating in reporting. Some

participants also mentioned that they were reluctant to report without any apparent reason.

6.1.2 Contributory factors to patient safety incidents

The participants confirmed that they were aware of contributory factors to PSIs. These contributory factors were related to health care workers, patient related contributory factors and lastly clinical setting related contributory factors. Negligence was identified as one of the health care worker related factors, for example nurses not performing the way they are supposed to. Examples cited included performing their duties incorrectly (like failure to sign the patients' document where necessary), and prescribing medication to the wrong patient or giving the wrong medication to the patient. Nurses are supposed to perform their duty as they have been trained, but this is not always the case, as some nurses are not using their knowledge correctly. This can be detrimental to the patients, requiring PSI report writing, and may result in litigation.

Chaneliere et al. (2018: 3) note that PSIs do indeed occur in PHC setting and they are preventable. The authors listed the contributory factors as being related to human factors, health care, and technical factors. Peerally et. al. (2022: 3) reported PSIs as being due to environmental factors, organisational factors including supervisory and miscommunication. The authors concluded that investigations require independence and professionalisation of investigators, human factor expertise, and a systems approach.

The participants of this study also shared that not adhering to the scope of practice by some nurses was a contributory factor to PSIs. Nurses end up doing work that is not within their scope of practice as documented by the SANC (1991: 2). For example, the incidence of an enrolled nursing assistant documenting patient care on a patient chart and referring a patient without the patient's consultation with a professional nurse, as well as the issue of a community service professional nurse working unsupervised in the clinic due to a shortage of nurses. A scope of practice establishes the parameters and restrictions within which a practitioner may offer their services, as well as a general description of the services the practitioner is qualified to offer. According to Feringa, de Swardt, and Havenga (2020: 1), the nursing profession needs a precise definition of its scope of practice in order to guarantee safe and high-quality practice, support the

profession's identity, and encourage the most efficient use of resources. The SANC had documented the scope of practice for each and every category of nursing. Adhering to the scope of practice by individual nurses might reduce the PSIs as they will know how to carry their duties according to their level. Any nurse who failed to follow their scope of practice can be convicted of misconduct (SANC 1991: 2).

The findings of the current study are that the participants were not using the guidelines for PSI reporting. Guidelines explain how a particular process must be done to ensure accuracy. If nurses, follow the guidelines PSIs can be reduced. Although health care workers had knowledge of guidelines relating to patient safety, full implementation of these guidelines was lacking (Abraham et al. 2022: 2).

The participants indicated that one of the contributory factors was patients themselves. For example, some patients consult traditional healers first for the illnesses which sometimes make their conditions worse. One of the integral parts of nursing care is patient education and it is the responsibility of the nurse and should be individualised and be included in the patient plan.

Sufficient resources can increase one's sense of personal accomplishment, whereas insufficient resources can increase one's experience of personal failure (Yusefi et al. 2022: 3). As a result, the company needs to guarantee resource availability. According to the participants, one of the contributing factors to PSI is resources, notably personnel numbers. With the single goal of preserving life, nurses must collaborate as a team. The potential for a crisis to arise and jeopardise patients' health exists if there is a staff shortage.

6.1.3 Importance of patient safety reporting

The significance of PSI reporting was emphasised by the participants, who stated that patients, other stakeholders, and health care professionals all depend on it. One of the key elements of PSIs, according to them, is exposure to the reporting process. The fact that PSI reporting acts as a learning curve was accepted by the participants. The majority of participants were expanding their knowledge on PSI reporting. Organisations can acquire a better understanding of what transpired, identify the combination of circumstances that led to the occurrence, ascertain its recurrence, and make predictions

about whether it will happen again by reporting PSIs (Gluschkoff et al. 2021: 1). Maintaining and enhancing the quality of care requires reporting PSIs and taking lessons from the past. Participants understand that they have an ongoing obligation to provide data and statistics to all departmental levels. The more information available on safety and quality, the better. The first step in raising the standard of quality and safety is gathering incident data. Dashboards for managing incident reporting can assist with gathering and compiling data. Litigation threats in the service sector are another powerful incentive to disclose. According to Pramesona et al. (2023: 5), a person's behaviour can be influenced by how they perceive a situation and vice versa. An individual is less likely to desire to participate in a behaviour when they have a bad perception of it. Study participants observed that PSI reporting should be treated seriously in order to enhance patient safety and lower the number of lawsuits.

6.1.4 Barriers to patient safety incident reporting

Even though nurses may be willing to report PSIs, they are restricted or prevented by barriers. Participants listed environmental barriers as being: the shortage of resources, insufficient infrastructure, lack of technology like the internet, data login credentials that are not available, as well as union influence not to report PSIs.

Du, Zhang and Hun (2022: 2) point out that there is a relationship between infrastructure, resources and productivity as well as positivity of workers. The presence of infrastructure and facilities has a substantial effect on the quality of public services positive. The Department of Health should intervene to support the facilities so as to encourage the positive effects as well as full engagement of nurses.

Health care worker related barriers mentioned by participants were knowledge and pressure. Due to the pressure participant’s work under, staffing shortages, and lack of recent in-services, they are unable to recall the procedures for reporting incidents. Participants complained of a lack of knowledge on how to report PSIs. They were of the opinion that development of nurses can increase the knowledge leading to a higher rate of reporting. Knowledge is power; if the nurses can be empowered regarding PSI reporting the reluctance to report these incidents can be reduced. Adequate incident reporting procedures for clinical occurrences involving nurses and other health care

professionals in clinical practice settings are essential to enhancing patient safety and raising the standard of care delivery (Oweidat et al. 2023: 1). Sherwood (2021: 3) goes on to say that receiving up-to-date knowledge regarding patient safety during education boosts nurses' self-assurance in providing patient care and grounds their work in evidence, both of which improve the standard of care delivered.

6.2 DISCUSSION OF FINDINGS BASED ON THE STUDY OBJECTIVES

The three objectives of the study were to explore nurses' knowledge and understanding of PSI reporting and learning; to explore factors influencing patient safety incident reporting behaviours in primary health care facilities; and to provide recommendations for improving PSI reporting in KSD.

6.2.1 Nurses' knowledge and understanding of patient safety incident reporting and learning

A few participants understood the significance of reporting and were familiar with PSIs. It is widely believed that reporting can significantly lower incident rates and raise the standard of patient safety services. While nurses can learn new information by reporting PSIs, participants felt that the system was complex. According to the participants, people's personal attitudes and lack of dedication to reporting cause them to choose not to write or submit PSI reports. Employee reluctance to report patient safety incidents persists, even when you provide them with training; they fail to report near miss incidents as well. PSIs are obviously significant to health care organisations not only because of their effect on patients but also because they can offer insight into the calibre of service and opportunities for development (Gqaleni and Bhengu 2020: 3). Low reporting was caused by a lack of knowledge of the current PSI reporting system, with some participants even stating that they were unaware of its existence in their institutions. Additionally, organisational socialisation, which includes meetings and in-service trainings that provide staff with information on the PSI topic, was also lacking.

6.2.2 Factors influencing patient safety incident reporting behaviours in primary health care

The participants acknowledged that while some of them actively reported the PSIs, others chose not to. A number of obstacles to incident reporting in health care settings were noted by the participants. These obstacles are failing them as health care

professionals and are linked to a number of traits. Work environment was identified as a barrier that hinders reporting of PSIs in their facilities. Pressure during service delivery was highlighted as one of the barriers. Other barriers were the shortage of resources, insufficient infrastructure, and lack of technology like the internet and data, and log in details not being available. Poor internet coverage was identified as hindering the use of electronic systems for reporting. Agoro et al. (2018: 2) state that unavailable, unreliable, or expensive internet access hinders the optimal use of the electronic pharmacovigilance reporting system in Kenya.

Study participants report involvement of third parties like trade unions in the reporting of PSIs. Unions seemed to influence the reporting system of PSI in the health facilities. Unions' influence is negative as it encourages health care workers not to perform as required. O'Brady and Doellgast (2021: 5) confirm the findings and report that unions can have a direct negative impact on productivity by restricting managerial discretion. They also may obstruct the introduction of new technology.

The remarks made by the participants brought attention to the risk of errors because of the effects of a heavy workload. Supporting this statement, Salama et al. (2022:3) stated that staff members were seen to become more stressed and under strain from a heavy or stressful task, which led to a loss of focus. In the same breath error risk thus rises as a result, because nurses are managing too many difficult patients at once when there is a poor nurse-patient ratio, staff workload also jeopardizes patient safety (Banda, Simbota, and Mula 2022: 5). Staff feel tired and that negatively affects their performance.

It was indicated in the study that fears of a culture of negativity and blaming, saying that nurses conceal things from supervisors and coworkers. Indriani, Kusumapradja, and Banda (2022: 3) assert that management is vested with the power to renew contracts, terminate staff, or oversee personnel. This suggests that attitudes and behaviours among employees can be influenced by the actions of management.

A lack of feedback and debriefing to staff after an incident, as well as uncertainty about what to report which resulted in a high number of unreported PSIs were among the other concerns that participants described as having a negative impact on PSI reporting.

6.2.3 Recommendations by participants

Study participants indicated that these recommendations might bring about the improvement of PSI reporting.

6.2.3.1 Improve feedback and support

The participants revealed that insufficient support by managers was one of the reasons for them not to report PSIs. They felt that they were not getting the emotional support they needed, so felt anxious when requested to do the reporting. Some participants said they were fearful that they might be expelled from work or that they would appear as if they are not competent. Feedback and debriefing following the report should be provided. The participants mentioned that feedback regarding mistakes that have occurred ought to be made available in order for staff members to be aware of potential errors that may come up while providing patient care.

6.2.3.2 Conduct patient safety training programmes

The participants stated that while some people actively reported PSIs, others chose not to do so because of obstacles in their way. It was also clear that some participants were ignorant of the types of PSIs that should be reported, as well as how to identify and analyse PSIs. Participants indicated that there is no learning that takes place, where health care professionals can use the PSIs as learning opportunities to prevent recurrences, by learning from their mistakes. They were of the opinion that development of nurses can increase their knowledge leading to a higher rate of reporting. Mentoring came up as another recommendation by participants for Improving the knowledge of the nursing staff. They mentioned that health care professionals need to be mentored so as to ensure that they are learning and are doing the correct thing while dealing with PSIs.

6.2.3.3 Improve patient safety culture

The participants related incidents in which careless and irresponsible staff members disregarded their responsibilities or jeopardised patient safety The greatest obstacles keeping employees from reporting incidents were seen to be a culture of blame and negativity as well as the fear of losing their jobs. Because of this mentality,

nurses hide facts so they won't be verbally reprimanded by colleagues and superiors, who could hold them accountable.

The participants indicated that there are some individual health care workers who are not willing to report PSIs for different reasons. In reference to these they recommended that nurses need to be sensitised about this issue so that they can see the need and the importance of reporting incidents. The participants were aware that patient safety was compromised by negligence from health care professionals. Individual personal attitudes to reporting makes individuals not report. Ensuring a safe and open reporting culture that makes it clear why incidents need to be reported and provision of an easy reporting system could improve reporting.

6.2.3.4 Provide resources

Availability of resources was indicated by participants as barrier to PSI reporting. Such barriers include pressure during service delivery; shortage of staff because this increases the workload for the health care professionals which limits their ability to provide safe and high-quality care; and poor internet coverage which hinders the use of electronic systems for reporting. In relation to the above, participants recommended that resources have to be available if the job is to be done successfully.

6.3 CHAPTER SUMMARY

The discussion of the study findings presented in this chapter was supported by relevant peer journals and article reviews. The results of the study are summarized in the next chapter, along with the study's limitations, recommendations, and conclusions.

CHAPTER 7: SUMMARY OF FINDINGS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSIONS OF THE STUDY

7.1 INTRODUCTION

The study's conclusions from the analysis and interpretation of the data collected from the participants were covered in the preceding chapter. The presentation covered the factors influencing participants' reporting of patient safety incidents. The study comes to a finish with a summary of the findings, limitations, recommendations, and conclusions in Chapter 7, which also serves as the project's last chapter.

7.2 OVERVIEW OF THE STUDY

An exploratory descriptive technique within a qualitative research design was employed to perform the study. Ten nurses employed in primary healthcare facilities in the KSD sub-district of the Eastern Cape participated in one-on-one semi-structured interviews. The study's aim was to explore and describe, from the viewpoint of nurses, the factors influencing PSI reporting in primary health care facilities. The study focused on answering the following three research questions: What knowledge and understanding do nurses have of PSIs reporting in KSD? What are the factors influencing patient safety incident reporting behaviours in primary health care facilities in KSD? What recommendations can be provided to improve patient safety incident reporting in KSD?

7.3 ALIGNMENT OF RESEARCH OBJECTIVES, THE THEORETICAL FRAMEWORK AND THE THEMES

The three research objectives that were deemed necessary to ensure achievement of the overall aim of the study were to investigate nurse’s knowledge and understanding of patient safety incident reporting and learning, to explore factors influencing patient safety incident reporting behaviours in primary health care facilities in KSD and to provide recommendations for improving in patient safety incident reporting.

The Yorkshire Contributory Factors Framework (YCFF), which aims to create a framework in primary healthcare, served as the study's guidance. The factors are divided into several categories by the YCFF, including situational failures, active failures, local working conditions, latent organisational factors, and latent external

factors (Lawton et al. 2012: 1). The Yorkshire Contributory Factors Framework addresses the fundamental causes of patient safety incidents. The current study concentrated on the factors that influence PSI reporting. It was used in this study to look into factors that contribute to the reporting of patient safety incidents. In the current study the factors influencing PSI reporting by PHC nurses were highlighted in the five themes and the corresponding sub-themes that emerged from the analysis of data from the interviews with the study participants. It was evident that there is a strong relationship between the YCCF contributory factors and the research objectives that were laid out. The relationship between the study objectives, the themes and subthemes and the YCFF is discussed below and presented in Table 7. 1.

7.3.1 Situational factors

Situational aspects pertain to the attributes of the individuals within the workplace (Albalawi, Kidd, & Cowey 2020: 12). This is a reference to the range of elements that affect the workplace, such as task characteristic factors, patient factors/service user factors, team factors, and individual staff factors. Concerns were voiced by nurses regarding a lack of commitment to reporting, inadequate supervisory assistance, lack of teamwork, and ignorance of PSI reporting. Each of these elements has an adverse effect on PSI reporting.

7.3.2 Local working conditions

Whether or if the working environment promotes patient safety and fosters a safe environment is referred to as the local working conditions (Brubakk et al. 2021: 2). The phrase refers to the provision of leadership and equipment, instruction and training, staff load, supervision and leadership, personnel levels, lines of responsibility, and the physical environment. Enhancing patient care quality and safety while also fostering a positive work environment for health care professionals are complementary endeavours (Maassen et al. 2021: 1). One significant element that has been shown to impede PSI reporting in PHC facilities within KSD facilities is the work environment.

The lack of time resulting from the high workloads, pressures at work, and nursing staff shortages, as well as the absence of supportive leadership and necessary resources, were the causes of the low reporting.

7.3.3 Organisational factors

The physical setting in which care is provided, the assistance from other departments

needed to provide care, scheduling and bed management, staff education and training, and the availability of appropriate tools, devices, and medication are all considered organisational factors (Lawton et al. 2012: 5).

It was more challenging for nurses to comprehend the significance of incident reporting and the definition of error due to a lack of appropriate training. Employee development was either lacking or occurring too slowly. The PSI reporting suffered as a result. The study participants emphasised that staff knowledge acquisition and improved reporting would be greatly aided by education and training.

A study finding indicated that some participants were not following the PSI guidelines when reporting. Concerns about the availability of policies and PSI guidelines, as well as how they are implemented and shared with other staff members, were brought up by the participants. Some participants agreed that guidelines exist, but these were not communicated to them, hence the non-compliance. Some were not even aware that guidelines are available, hence low reporting.

One of the main causes of the lack of PSI reporting, according to the study, is inadequate physical infrastructure. The clinics' inadequate resources and infrastructure, which served as a barrier to the reporting of PSIs, were among the factors that the participants looked at. Clinics lacked proper infrastructure such as enough proper consulting rooms and waiting areas which affects many tasks involved with health care delivery. Lack of resources like telephones and Wi-Fi prevent reporting of PSIs. Unavailability of medication contributes to PSIs. There are also risk factors in the health care environment leading to harmful incidents for patients.
For example, inadequate maintenance of grounds leads to hazardous situations like snakes in the health care facility.

The primary factor influencing nurses' inability to report is a lack of knowledge about PSI reporting. Low reporting can be attributed to a lack of knowledge about the PSI reporting system currently in place, with some participants even stating that they were unaware of its existence in their institutions. It is not clear to nurses how to report PSIs. The issue of fear was brought to light and connected to a variety of circumstances, such as the dread of being punished, of losing one's job, and of having an impact on

relationships with coworkers. As a result, this is a significant problem that could lead to PSIs not being reported in KSD.

Participants in the current study noted that some nurses refused to work with their managers when asked to provide statements during PSI investigation meetings, which resulted in the PSIs not being recorded. The detrimental impact of labour unions and employees' anxiety about job loss affected PSI reporting. The low level of PSI reporting was caused by miscommunication of PSI policies and requirements. Nurses were deterred from reporting when they received no feedback or debriefing. Low PSI reporting was also a result of insufficient management support, since nurses were unsure about their managers' level of assistance. Some claimed that their supervisors are too preoccupied to offer assistance.

Table 7. 1: Relationship between the study objectives, the themes and sub-themes and YCCF

Research objectives	Themes	Sub-themes	YCFF Contributory factors
1. Nurse's knowledge and understanding of patient safety incident reporting and learning	1. 1. Experiences of patient safety incident reporting	1. 1. 1 Types of PSIs	1. 1. 1. 1 Organisational factors
		1. 1. 2 Management of patient incidents	1. 1. 1. 2 Organisational factors
		1. 1. 3. Minimal support by managers	1. 1. 1. 3 Situational factors
		1. 1. 4. Emotional aspect	1. 1. 1. 4 Situational factors
		1. 1. 5. Staff attitude	1. 1. 1. 5 Situational factors
	1. 2 Importance of patient safety incident reporting	1. 2. 1 Exposure to patient safety incident reporting	1. 2. 1. 1 Organisational factors
	1. 2 Contributory factors to PSIs	1. 2. 1 Prevention of re-occurrence	1. 2. 1. 2 Situational factors
		1. 2. 3 Teachable moments	1. 2. 1. 3 Organisational Factors
		1. 2. 4 Dissemination	1. 2. 1. 4 Organisational factors
		1. 2. 5 Statistics	1. 2. 1. 5 Organisational factors
		1. 2. 6 Quality assurance	1. 2. 1. 6 Organisational factors
		1. 2. 7 Litigation	1. 2. 1. 7 Situational factors
		1. 3. 1Health care worker contributory factors	1. 3. 1. 1 Situational factors
		1. 3. 2. Patient contributory factors	1. 3. 1. 2 Situational factors
		1. 3. 3. Clinic setting contributory factors	1. 3. 1. 3 Local working conditions
2. To explore factors influencing patient safety incident reporting behaviours in primary health care facilities in KSD	1. 4 Barriers to patient safety incident reporting	1. 4. 1 Barriers related to Health Worker knowledge	1. 4. 1. 1 Situational factors
		1. 4. 2. Barriers related to work environment	1. 4. 1. 2 Local working conditions
3. Provide recommendations for improving in patient safety incident reporting	1. 5 Recommendation s by participants	1. 5. 1 Work place related recommendations	1. 5. 1. 1 Local working conditions
		1. 5. 2 Health worker related recommendations	1. 5. 1. 2 Health work related situational

7.4. SUMMARY OF THE FINDINGS

7.4.1 Nurses knowledge and understanding of patient safety incident reporting

According to this study, some participants were aware of PSIs and the significance of reporting, while others were unaware of the idea behind PSI reporting. It is believed that reporting can significantly reduce the frequency of incidents and improve the caliber of patient safety services. By reporting PSIs, nurses gain new knowledge about patient safety issues, even when they believe the system is confusing. It was also evident that some participants had reservations about the kinds of PSIs that needed to be reported as well as the methods for locating and evaluating PSIs. The existing PSI reporting method was not well known, and some participants even claimed not to be aware of its presence in their institutions, which contributed to the low reporting. Moreover, organisational socialisation, that is, events or in-service trainings where staff members may receive PSI training was scarce.

7.4.2 Factors influencing patient safety incident reporting behaviours in primary health care

PHC nurses reported that although there are some actively reported PSIs, some did not. Several barriers to incident reporting were mentioned. These barriers are associated with various characteristics and are failing them as health care workers.

Work environment was identified as a barrier hindering reporting nurses of PSIs in their facilities. Environmental influences named were: pressure during service delivery; shortage of resources; insufficient infrastructure, shortage of technology such as the internet and data; and unavailable login details.

Study participants mentioned the involvement of third parties like trade unions in the reporting of PSIs. Unions seemed to influence the reporting system of PSIs in the health facilities. This influence is negative as it encourages health care workers not to perform as required.

One of the main issues and worries brought up by participants was the lack of staff, which made it harder for all health care providers to provide patient safety and enhance reporting because of the increasing workload. Staff felt tired and that negatively affected their performance.

It was also claimed that there is a culture of negativity, a fear of losing one's job, and labour union influences. One participant said they hide PSIs so they won't get caught by their co-workers and managers. This implies that employee attitudes and behaviour can be influenced by management behaviour. The participants reported a high number of undocumented PSIs, which can be explained by the fact that uncertainty about what to disclose makes health care workers less likely to use the reporting system successfully. Nurses are discouraged from reporting incidents when they receive no debriefing or response from the staff. Lack of debriefing and feedback to the staff after reporting incident discourages nurses from reporting. Participants indicated that there is no learning that takes place, where health care professionals can use the PSIs as learning opportunities to prevent recurrences, by learning from their mistakes.

7.5 LIMITATIONS

Because the study was limited to a single sub-district, its conclusions cannot be applied to the Eastern Cape Province, South Africa, or the entire area. The study's limited scope of one sub district was partly due to research resource limitations.

7.6 RECOMMENDATIONS

7.6.1.1 Education and training

Gqaleni and Mkhize (2023:1) suggests revising the implementation strategy in conjunction with routine in-service training for healthcare professionals to successfully promote and encourage adherence to PSI reporting standards. Therefore, in order to enhance healthcare workers' understanding and proficiency with PSI reporting, this study recommends education and training. Healthcare professionals ought to participate part in these programmes.

7.6.1.2 Improve communication

Develop effective communication channels between staff members, management and patients so as to maintain positive support, facilitation and better coordination. This should be taken as a number one priority in order to improve PSI reporting.

7.6.1.3 Establish positive patient safety culture

Create a just and faultless culture that empowers health care professionals to disclose patient safety incidents (PSIs) without hesitation, enabling them to grow from their mistakes. In order to guarantee that learning and practice improvement occur, supervisors ought to conduct debriefings and provide feedback.

7.6.1.4 Improve work environment

Establish positive redress in the physical work environment and actively encourage patient safety as a top priority within health care organisations. A positive work environment can bring success when sufficient staff is allocated. Improve the recruitment process, and ensure the appropriate nurse-patient ratio which will leave enough time for PSI reporting.

Make good changes to the physical workspace and aggressively promote patient safety as the top concern in health care institutions. Success can result from a positive work environment provided that there is enough staff assigned. Ensuring the right nurse-patient ratio and streamlining the hiring process will allow for adequate time for PSI reporting. It is important to have a supportive and encouraging work environment for nurses that values and encourages them so they feel comfortable reporting PSIs. Staff members should have access to sufficient resources and the tools they need to report PSIs.

7.6.2. Recommendations for policymakers and nursing practice

Following the results of this study, further research could examine factors influencing PSI reporting by nurses on a larger scale across the nation. Furthermore, primary health care providers in other districts, private hospitals, districts, and tertiary hospitals should be included in future studies. It would be beneficial for future research to be patient-centred in order to get input from those who use the health care system.

7.6.3 Recommendations for future research

Following the results of this study, further research could investigate factors influencing PSI reporting by nurses on a larger scale across the nation. Furthermore, primary health care providers in other districts, private hospitals, districts, and tertiary hospitals should be included in future studies. Future studies should focus on the needs of the

patient in order to get input from those who use the health care system.

7.7 CONCLUSION

This study aimed to explore factors influencing patient safety incident reporting by nurses in KSD, Eastern Cape. The factors influencing PSI reporting included fears and blame culture, staff attitudes, inadequate knowledge about PSI reporting, trade union influence, lack of awareness, heavy workloads, insufficient staff, lack of resources, minimal supervision support. Developing a positive safety culture that provides support and feedback and encourages learning from mistakes should be a priority. This study identified factors influencing reporting of PSIs in KSD. Minimal support from managers, inadequate knowledge of PSI reporting and guidelines, insufficient resources, and high staff workloads, need to be addressed in order to improve PSI reporting in KSD.

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APPENDICES

APPENDIX 1: Ethics clearance from DUT IREC

Institutional Research Ethics Committee
Research and Postgraduate Support Directorate
2nd Floor, Berwyn Court
Gate I, Steve Biko Campus
Durban University of Tec:hnology

PO Box 1334, Durban, South Africa. ◄001

Tel: 031 373 2375
Email: lavishad@dut.ac.u.
http:/fwww.dut.ac.u./research/institutionat_research_ethics

www.dut.ac.z.a

4 September 2023

Ms P T olobisa
22332 Callaway Street
Mthatha

Dear Ms T olobisa

Exploring factors influencing patient safety incidents reporting by nurses in Primary Health Care facilities in King Sabata Dalindyebo Sub-District, Eastern Cape
Ethics Clearance Number: IREC 116/23

The OUT-Institutional Research Ethics Committee acknowledges receipt of your notification regarding the piloting of your data collection tool.

Kindly ensure that participants used for the pilot study are not part of the main study.

In addition, the DUT-IREC acknowledges receipt of your gatekeeper permission letter.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events (serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the DUT-IREC according to the DUT-IREC SOP's.

Please note that any deviations from the approved proposal require the approval of the DUT-IREC as outlined in the DUT-IREC SOP's.

It is compulsory for a student or researcher to apply for recertification on an annual basis. The failure to do so will result in withdrawal of ethics clearance. It is the responsibility of the researcher and the supervisor to apply for recertification.

Please note that you are required to submit a Notification of Completion of Study form together with an abstract to the **DUT-IREC** office on completion of your study.

Yours Sincerely

Prof J K Adam
Chairperson: DUT-IREC

APPENDIX 2: Permission letter to ECDOH

No.22332 Callaway Extension
Mthatha

5100

19 June 2023

To: RESEARCH MANAGER
E. C. PROVINCIAL DEPARTMENT OF
HEALTH
Private Bag X 0038
Bisho
5605

Dear Mr/Ms

Request for permission to conduct a study

My name is Patiswa Tolobisa, registered for the masters in health science nursing at the Durban University of Technology. The research I wish to conduct for my Master's thesis and the title is: **Exploring Factors Influencing Patient Safety Incident Reporting by nurses in Primary Healthcare Facilities in King Sabata Dalindyebo Sub-District, Eastern Cape.**

I am hereby seeking your consent to conduct the study within primary healthcare facilities in King Sabata Dalindyebo Sub District. This qualitative study will involve nurses that are employed by the Department of Health, working in primary healthcare. The data collection will be a semi structured interview. The study poses no risks of any kind to the participants and the institutions. I have provided you with a copy of my proposal which includes copies of data collection tools and consent and/or assent forms to be used in the process, as well as the copy of approval letter which I received from the Institutional Research Ethics Committee (IREC).

To safe guard against COVID 19 transmission, all the necessary precaution to protect the participants from COVID 19 transmission will be ensured such as distancing, room ventilation, sitting arrangement, protective devices such as masks and disinfecting at no cost to the participants. The researcher will request, if available, a private room that is well ventilated and that will allow proper seating arrangement and distancing between the researcher and the participant.

If you require any other information, please do not hesitate to contact me on 060 960 1197 or my supervisors Dr. N. Naranjee on 082 577 6126 or Mrs. Moonsamy on 073 362 9559

Email addresses : NellieN1@dut. ac. za :

Thank you for time and consideration in this matter

Yours Sincerely
…….
Patiswa Tolobisa
(Masters Health Sciences Nursing candidate, Durban University of Technology)

APPENDIX 3: Permission letter from ECDOH

Province of the
EASTERN CAPE
HEALTH

Room 31 • 1• Floor• Grosvenor Lodge• 31 Taylor Street• King Williams Town• Eastern Cape Private Bag X0038 • Bhisho • 5605 • REPUBLIC OF SOUTH AFRICA
Tel.: +27 (0)'13 605 4540• 043 6054518 •EmaIl: ncebagixela22@gmail.com

Date: 18 October 2023

Exploring factors influencing patient safety incidents reporting by nurses in Primary Health Care facilities in King Sabata Dalindyebo Sub-District, Eastern Cape. (EC_202310_008)

Dear Ms P. Tolobisa

The department would like to inform you that your application for the research mentioned above topic has been approved based on the following conditions:

1. During your study, you will follow the submitted protocol with ethical approval and can only deviate from it after having written approval from the Research Ethics Committee.

2. You are advised to ensure, observe, and respect the rights and culture of your research participants maintain confidentiality of their identities, and shall remove or not collect any information which can be used to link the participants.

3. The Department of Health expects you to provide a progress update on your study every 3 months (from the date you received this letter) in writing.

4. At the end of your study, you will be expected to send a full written report with your findings and implementable recommendations to the Eastern Cape Health Research Committee secretariat. You may also be invited to the department to come and present your research findings with your implementable recommendations.

5. Your results on the Eastern Cape will not be presented anywhere unless you have shared them with the Department of Health as indicated above.

Your compliance in this regard will be highly appreciated.

SECRETARIAT, EASTERN CAP LTH RESEARCH COMMITTEE

APPENDIX 4: Permission letter to OR Tambo District

No. 22332 Callaway Extension
Mthatha
5100
19 June 2023

To: The-DISTRICT MANAGER

OR TAMBO DISTRICT HEALTH DEPARTMENT

Mthatha

Dear Mrs. Ntshanga

Request for permission to conduct a study

My name is Patiswa Tolobisa, registered for the masters in health science nursing at the Durban University of Technology. The research I wish to conduct for my Master's thesis and the title is: **Exploring Factors Influencing Patient Safety Incident Reporting by nurses in Primary Healthcare Facilities in King Sabata Dalindyebo Sub-District, Eastern Cape.**

I am hereby seeking your consent to conduct the study within primary healthcare facilities in King Sabata Dalindyebo Sub District. This qualitative study will involve nurses that are employed by the Department of Health, working in primary healthcare. The data collection will be a semi structured interview. The study poses no risks of any kind to the participants and the institutions. I have provided you with a copy of my proposal which includes copies of data collection tools and consent and/or assent forms to be used in the process, as well as the copy of approval letter which I received from the Institutional Research Ethics Committee (IREC).

To safe guard against COVID 19 transmission, all the necessary precaution to protect the participants from COVID 19 transmission will be ensured such as distancing, room ventilation, sitting arrangement, protective devices such as masks and disinfecting at no cost to the participants. The researcher will request, if available, a private room that is well ventilated and that will allow proper seating arrangement and distancing between the researcher and the participant.

If you require any other information, please do not hesitate to contact me on 060 960 1197 or my supervisors Dr. N. Naranjee on 082 577 6126 or Mrs. Moonsamy on 073 362 9559

Email addresses : NellieN1@dut. ac. za :

Thank you for time and consideration in this matter

Yours Sincerely

…….
Patiswa Tolobisa
(Masters Health Sciences Nursing candidate, Durban University of Technology)

APPENDIX 5: Permission letter from OR Tambo District

Province of the
EASTERN CAPE
HEALTH

DISTRICT MANAGER'S OFFICE

Room 41 • 9th Floor • Botha Sigcau Building • Cnr Owen & Leeds Streets • Mthatha • Eastern Cape Private Bag X5005 • Mthatha • 5099 • REPUBLIC OF SOUTH AFRICA

Tel: 047 502 9083. Fax +27 (0)47 532 3995 •Website: www. ecdoh. gov. za

INTERNAL MEMORANDUM

TO:	**SUB DISTRICT MANAGER: MR. LANDU**
FROM:	**DISTRICT MANAGER: O. R TAMBO**
SUBJECT:	**PROVISIONAL PERMISSION TO CONDUCT RESEARCH STUDY: MS. P. TOLOBISA**
DATE:	**21/08/2023**

Purpose

The purpose of this memorandum is to inform the Sub District Manager and K. S. D. Staff about the permission granted to conduct research study by Ms. P. Tolobisa.

Background

The aim of the research is to explore factors influencing patient safety incidents reporting by nurses in Primary Health Care Facilities in K. S. D. facilities. Ms. Tolobisa has submitted the required documents for the research study in the Eastern Cape Department of Health Head Office and as such permission has been granted to her by the Research unit to conduct the study in terms of research protocol and methodology.

Approval by the district

Kindly note that this memorandum serves as a PROVISIONAL approval at district level for Ms. Tolobisa to conduct the research study in terms of the approved research protocol, ethical clearance and permission letter from the research unit.

APPROVED

District Manager O. R Tambo

2023/08/21

---------- .....

N. S Ntshanga Date

APPENDIX 6: Permission letter to KSD Sub-District

No. 22332 Callaway Extension
Mthatha
5100
19 June 2023

TO: THE SUB-DISTRICT MANAGER

KSD

Mthatha

Dear Mr,Landu

Request for permission to conduct a study

My name is Patiswa Tolobisa, registered for the masters in health science nursing at the Durban University of Technology. The research I wish to conduct for my Master's thesis and the title is: **Exploring Factors Influencing Patient Safety Incident Reporting by nurses in Primary Healthcare Facilities in King Sabata Dalindyebo Sub-District, Eastern Cape.**

I am hereby seeking your consent to conduct the study within primary healthcare facilities in King Sabata Dalindyebo Sub District. This qualitative study will involve nurses that are employed by the Department of Health, working in primary healthcare. The data collection will be a semi structured interview. The study poses no risks of any kind to the participants and the institutions. I have provided you with a copy of my proposal which includes copies of data collection tools and consent and/or assent forms to be used in the process, as well as the copy of approval letter which I received from the Institutional Research Ethics Committee (IREC).

To safe guard against COVID 19 transmission, all the necessary precaution to protect the participants from COVID 19 transmission will be ensured such as distancing, room ventilation, sitting arrangement, protective devices such as masks and disinfecting at no cost to the participants. The researcher will request, if available, a private room that is well ventilated and that will allow proper seating arrangement and distancing between the researcher and the participant.

If you require any other information, please do not hesitate to contact me on 060 960 1197 or my supervisors Dr. N. Naranjee on 082 577 6126 or Mrs. Moonsamy on 073 362 9559

Email addresses : NellieN1@dut. ac. za :

Thank you for time and consideration in this matter

Yours Sincerely

…… …….
Patiswa Tolobisa
(Masters Health Sciences Nursing candidate, Durban University of Technology)

APPENDIX 7: Permission letter from KSD Sub-District

Province of the
EASTERN CAPE
HEALTH

KSO Sub District• Old Revenue Offices• 100 York Road • Mchacha • Eastern Cape
Private Bag X5005 • Mthatha • 5099 • REPUBLIC OF SOUTH AFRICA Tel.: +17 (0)47 531 4361• Fax: +27 (0)475326610 •
Email: n_ill1__rm!II_e_@f!_chmlt_b g ID'__ la

Enquiries: Mr. T Landu *Contact no: 0767939691*

To	**KSD Facilities**
From	**KSD Acting Sub-District Manager (Mr. T. Landu)**
Subject	**Permission to Conduct Research Study IRO Miss P Tolobisa**
Date	**23 August 2023**

Purpose

The purpose of this correspondence is to inform KSD health facilities of permission granted on a research study to be conducted by the above mentioned student.

Background

The research topic is **"Exploring Factors Influencing Patient Safety Incident Reporting by nurses in Primary Healthcare Facilities in King Sabata Dalindyebo Sub-District, Eastern Cape".** The researcher has submitted all the required documents for this research study for this stage of her study.

Approval by the sub-district

Kindly note that this correspondence serves as an approval at sub-district level for the above mentioned student to conduct research study in line with the approved departmental protocols.

Approved by: Mr T. **Landu**

Acting Sub-District Manager KSD LSA

ogether, moving the health system forward

f-r;i1Jd prt-venuon line. 0800 701 701
24 hou, C.111 Centre: 0800 032 364

APPENDIX 8: Letter of Information

LETTER OF INFORMATION

Dear Participant

Thank you for voluntarily agreeing to participate in the study

TITLE OF THE RESEARCH STUDY: FACTORS INFLUENCING PATIENT SAFETY INCIDENT REPORTING BY NURSES IN PRIMARY HEALTHCARE FACILITIES IN KING SABATA DALINDYEBO SUB-DISTRICT, EASTERN CAPE

Principal investigator/researcher: Miss Patiswa Tolobisa (MHSc: Nursing Student). Co-Investigator/s/supervisor/s: Doctor. Nellie Naranjee (D. Nursing)
Co-Investigator/s/supervisor/s: Mrs. Shamila Moonsamy M. Nursing)

Patient safety in healthcare is in danger due to human errors and unsafe procedures. Patient safety incident reporting is the essential step for improving safety. Patient safety reporting also supports healthcare providers to learn about why incident happened, what can be done to keep the patients safe from avoidable harm. Failure to report patient safety incidents, the institution allows repeated errors to go unnoticed and uncorrected. Nurses have the most direct interaction with patients of any healthcare profession as they consistently monitor patient's condition and administer medications.

This study aims to explore factors influencing patient safety incident reporting in Primary Healthcare facilities from the nurse's viewpoints.

Permission to conduct the study will be obtained by the researcher from Durban University of Technology Ethics Research Committee. Permission from the heads of the department of Health to recruit participants for the study will be obtained. Permission letters will be sent to the facility managers. The researcher will recruit only nurses that have been permanently employed by the Department of Health for three years or longer and currently working in Mqanduli facilities . Nurses employed by NGOs and nurses with less than three years' experience will be excluded from the study. The researcher will inform you about the study and you will be required to read the information letter before the commencement of interviews. You will be required to provide informed consent if you agree to participate in the study. Once informed consent is obtained the researcher will schedule interviews at a time convenient to you. Interviews will take place in an arranged room with the facility managers. No other persons except the researcher will be allowed into the designated area, which will be scheduled to last approximately 20 to 30 minutes per participant. An interview guide will be used with open ended questions during face to face interview process. Interviews will be audio recorded and subsequently transcribed. The research does not involve the use of no treatment or placebo control conditions and does not involve harmful procedures.

Nurses that are permanently employed by the Department of Health and currently working in PHC facilities in Mqanduli cluster and nurses that have been employed for three years or longer will participate in the study.

The study excludes nurses employed by Non-Governmental Organization (NGOs) and nurses employed by the department with less than three years' experience.

You will not be asked to perform any acts or make statements which might be expected to cause discomfort, compromise you, diminish self-esteem or cause you to experience embarrassment or regret.

The study is hoped to benefit you as nurses working in PHC facilities by improving patient reporting system for ensuring safety and improving quality in care settings.

Participation is voluntary. Please be assured that you can withdraw your participation at any time during this project without any penalty. The researcher may withdraw participants from the study due to non- compliance, an adverse event, or the event of participant being ill and cannot complete the interview.

There will be neither remuneration nor costs to you for partaking in the study.

Information shared during interviews will not be shared with others without your authorization. Institution names, addresses and your names will be encrypted to protect identities; you will be allocated code numbers. During interviews the researcher will be writing and recording the responses of the interviews for record keeping and referral for the study. Information provided will be kept confidential. Data collected during this study will be retained for a period of five years in a computer with a password only known to the researcher and a locked cabinet. Only researchers involved in this project will have access.

The nature of the study does not pose any potential risk of injury to you and other participants.

Hard copies of the interview guide and demographic data will be stored in a locked cupboard in the researcher's office for a period of five years. Only the researcher and the supervisor will have access to the data. The data will be securely shredded after five years. Electronic data will be password protected and stored on a secure laptop. Only the researcher and supervisor will have access to the data. Immediately after all voice recorded data is transcribed and confirmed, it will be removed from the audio recorder into a disc and completely wiped off from the audio recorder. The disc will be stored securely with all other hard copies of research material in a locked cupboard for the entire duration of the study and five years thereafter. The hard copies will be destroyed by shredding, the disc burnt and the soft copies will be wiped off after five years.

Persons to Contact in the Event of Any Problems or Queries:
Please contact the researcher Patiswa Tolobisa: Tel no. 073 466 1387. My
supervisor: Dr. N. Naranjee (Tel no. 082 577 6126) or
The Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support, Prof S Moyo on 031 373 2577 or moyos@dut. ac. za General:

Information letter will be issued to you. The information letter and consent form will be translated into Xhosa.

DU
DURBAN
UNIVERSITY OF
TECHNOLOGY

CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, (name of researcher)
  researcher), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Numbm: _____
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- D I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

_____	_____		_____	
Full Name of Participant	**Date**	**Time**	**Signature**	**Right Thumbprint**

I, _____ (name of researcher) herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

_____	_____	_____
Full Name of Researcher	**Date**	**Signature**
_____	_____	_____
Full Name of Witness (If applicable)	**Date**	**Signature**
_____	_____	_____
Full Name of Legal Guardian (If applicable) Date		**Signature**

APPENDIX 9: Demographic data questions

APEENDIX 9.

Section A: Demographic Data

This section seeks out some contextual facts about you. It is necessary to acquire this data as this will have an impact on the outcomes of the assessment. This data will be used to help build a picture of the overall staff characteristics. Please illustrate your preference by marking an "X" in the most appropriate block.

PHC clinic code: D Participant Code: D Date of interview.....

Please indicate with a **tick** ( )against the appropriate column for all the statements below

Question 1. What age bracket do you fall in

1. 21-30 ☐

2. 31-40 ☐

3. 41-50 ☐

4. Above 50 years ☐

Question.2 what is your gender

1. Male D
2. Female D
3. Transgender D
4. Prefer not to answer D

Question.3 What is your highest qualification

1. Certificate D
2. Diploma D
3. Post Graduate Diploma D
4. Bachelor's Degree D
5. Master's Nursing Science D
6. Doctorate Nursing Science D

Question .4 what is your employment status

1. Contract worker ☐
2. Full time worker ☐

3. Other ☐

Question.5 What is your work experience

1. Less than **1** year D
2. 1-2 years 0
3. 3-5 years ☐
4. 5-10 years ☐
5. Above 10 years ☐

Ouestion.6 Category of Nursing

1. Enrolled Nursing Assistant D
2. Enrolled Nurse D
3. Registered nurse D
4. Operational manager D

Question.? Stream where you are allocated

1. ObseNations ☐
2. Administration ☐
3. Acute stream ☐
4. Chronic stream ☐
5. Mother, neonate, child & women's health ☐

APPENDIX 10: Topic guide

APPENDIX.10

TITLE OF THE STUDY: EXPLORING FACTORS INFLUENCING PATIENT SAFETY INCIDENT REPORTING BY NURSES IN PRIMARY HEALTHCARE FACILITIES IN KING SABATA DALINDVEBO SUB-DISTRICT, EASTERN CAPE

Topic Guide

Topic guide is a list of broad question areas to be considered in a semi structured interview or focus group (Polit and Beck 2021:514).

1. Tell me about your experience of patient safety incident reporting in your facility that you will never forget. Why was it so important? What was your intervention.

2. What are the contributory factors or most common causes to these patient safety incidents, can you relate to these factors.

3. In your experience do you think it is necessary to report patient safety incidents. If yes, what is the importance of patient safety incident reporting in healthcare. If no, why do you think it is not necessary

4. What barriers have you encountered to patient safety incident reporting in your facility? How did you deal with them?

5. In your opinion what could be the possible solutions to the above mentioned barriers.

6. What are the motivating factors associated with nurses towards patients incident reporting.

7. How can reporting of patient safety incidents be promoted in your facility.

8. How often do you get support from your managers in connection with patient safety incident reporting.

9. What else can you tell me about incident reporting in your facility.

10. What recommendations can you suggest to improve patient safety incident reporting.

Appendix 11: Example of a transcript (A2)

Interviewer:	Good afternoon, participant 2. How are you doing Thank youfor agreeing to participate in this study
Participant:	Afternoon mam am good thanks
Interviewer	My name is Patiswa Tolobisa, a Master's degree student studying at the University of Durban. I am doing a study on Exploring factors influencing patient safety incident reporting by nurses in Mqanduli cluster, KSD, EC. All the information that we discuss will be confidential and used only for the purpose of the study. Your name will not be mentioned in the study but you would simply be referred to as participant A2. This information will be kept in a safe for 5 years just in case it is needed for audit trail.
Participant	OK mam, we can continue

Interviewer	My first question to you Can you please tell me about your experience of patient safety incident reporting in your facility that you will never forget?
Participant	The first incident that was very interesting to me was when I had a patient that was having an anaphylactic shock reaction, it was my first time to see a reaction like that and I didn't know what to give the patient and there was no oxygen at the moment, the patient was reacting and I dint even know I ended using asthma pump that I was not supposed to use because there was no oxygen, there was no adrenalin there were no drugs.
Interviewer	Why was it so important?
Participant	It was important to me because it was life threatening for the patient and I was the only professional nurse in the facility at that moment so I did not have any assistance from anywhere, it was stressing because life threatening to the patient and it was putting my profession at stake**.** I was the only professional nurse on duty that day then the assistant nurse and a general worker ad a community, healthcare workers.
Interviewer	What was your intervention
	My intervention first I took an asthma pump because the patient was complaining of shortness of breath I took a litter of a juice I cut the back of the litter I put the asthma pump at the front that litter plastic bottle and then I tried to pump the asthma pump the asthavent asthma pump to the patient so that the patient can breathe then I called the hospital, lucky for me there was a doctor that was working, the doctor came and tried toopen the vein for the patient and called other doctors,those doctors come in with solucoterf,they come in with the adrenalin they rescuscite the patient and they took the patient up to the nearest hospital.
Interviewer	What are the contributory factors or most common causes to this patient safety incident, can you relate to these factors?

Participant	The most courses of these PSI the first one is lack of knowledge from our side as professional nurses because we are not that exposed, patient safety information is not that popular it's not even discussed in workshops, and also the shortage of staff, because when you are short staffed you are also in a risk of mismanaging the patient and also the drugs that are always not available so those are also the most courses of the patient safety incident.
Interviewer	In your experience do you think it is necessary to report patient safety incidents. If yes, what is the importance of patient safety incident reporting in healthcare
Participant	It is necessary to report psi because the more you are involved in reporting the psi you ended up knowing which PSIs to report because at first you don't and also sometimes the psi will happen then you look over it because you don't know that you are supposed to report it and also sometimes you are scared but once you start reporting processes you see that it's not as if you are embarrassing yourself but you are trying prevent more incidents
Interviewer	What barriers have you encountered to patient safety incident reporting in your facility? How did you deal with them?

Participant	The major challenges, is the network, the password, the data that is not available that is the Wi-Fi and time we don't have time because we are short-staffed, we are overwhelmed then we ended up we see that this is a psi but you say you postpone reporting this psi then you ended up not reporting because we are short-staffed
Interviewer	In your opinion what could be the possible solutions to the above mentioned barriers you just mentioned
Participant	I think the possible solution were first to put weight on patient safety incident reporting.
Interviewer	What do you mean by putting a weight on PSIs
Participant	when I say to take it and treat it as other guidelines that are strictly monitored and motivated to the staff, because you see we only talk about PSI when there is an incident and that's it we don't have this in-service training we are not called in to be equipped regarding the psi,
Interviewer	What are the motivating factors associated with nurses towards patients incident reporting
Participant	I think the motivating factors for nurses is for them to be rotated and involved in psi reporting even if it's a training and there is no psi per say, but just to formalize the nurses with PSI reporting and then. If there was a PSI reported a feedback must come in, if Ican make an example we had a psi where there was a snake that fall on top of a patient, there was a positive feedback the grass was cut then the space was cleared if get a positive feedback on reporting you will be reminded when to report again, I mean when you are doing a psi incident report the manager mustinvolve nurses in that reporting process so that they can be exposed on how to report the incident, and what incidents are to be reported and when and how
Interviewer	What do you mean by rotation
Participant	If there is a psi that occurred the manager must involve us as staff in the reportingprocess or else we must be delegated
interviewer	How can reporting of patient safety incidents be promoted in your facility

Participant	If the nurses are exposed and are well informed they will be motivated to report because these incidents are prioritising patient safety and health so nurses will be part of it because they are dealing with patients on daily bases, If this patient safety incident reporting can be part of the health talk because sometimes the patient may not even report because they don't know at times, and the rest of the staff do not report because they do not have information
Interviewer	How often do you get support from your managers in connection with patient safety incident reporting?
Participant	Psi is not mentioned in our workshops and staff meetings
interviewer	What else can you tell me about incident reporting in your facility
Participant	That is all from my side mam
Interviewer	What recommendations can you suggest to improve patient safety incident reporting
Participant	If this patient safety incident reporting can be part of the health talk because sometimes the patient may not even report because they don't know at times, and the rest of the staff do not report because they do not have information. If it can be part of staff meeting reports, part of health promotion activities, and nurses familiarize themselves with the psi guidelines

Interviewer	Ok, you can continue and tell me more
Participant	I am done mam, there is nothing left
Interviewer	Thank you so much for your time

APPENDIX 12: Sample of a data analysis report (D7)

Interviewing Questions	Responses	Themes	Analysis Themes	Sub-themes
Tell me about your experience of patient safety incident reporting in your facility that you will never forget.	I think in my experience nurses think that we want to expose them that they do not do their stock taking because if it was not the case they would be reporting because we have tracer drugs that they supposed to report on SVS so those incidents are not reported to at all.	Nurses think that we want to expose them that they do not do stock tacking	Experiences of patient safety incident reporting	Staff attitude
What are the contributory factors or most common causes to these patient safety incidents, can you relate to these factors	The most contributory factor to me first of all is the lack of knowledge of PSI reporting because they don't know that when you report the incident the intention is to know what to do what should have been done in order for it not to require again.	Lack of knowledge of PSI reporting	Contributory factors to patient safety incidents	Barriers related to Health Worker knowledge

In your experience do you think it is necessary to report patient safety incidents. If yes, what is the importance of patient safety incident reporting in healthcare. If no, why do you think it is not necessary	Yes it is necessary to report PSIs because to me they are teachable moments and also they actually make a professional to think out-of-the-box as to say if I should have done this this could not have happened because when you investigate, investigation comes with recommendations and the recommendations that are written there they we need also to follow them as to see did we ever follow the recommendations that were made on this incident when the same incident now happened because it will mean we don't do follow up or supervision of saying what we gathered as a team then we should make it to IP so that this quality improvement plan also assisted the person who was directly involved	Teachable moments	Importance of PSI reporting	Teachable moments
	and also even to her or him it will it will teach him about what to react in such incidents because sometimes did the person did not know really what to do			

How often do you get support from your managers in connection with patient safety incident reporting.	We rarely get support from managers, it is actually a facility manager's responsibility to see that an incident is reported. In my understanding of PSI reporting, there should be a PSI committee from the sub-district, whereby managers would be allowed to present the common PSIs that occur in their facilities and whereby this committee now after having gathered all the common PSI from different facilities under the sub-district they should now be able to intervene as to say how best can we support these facilities in order for these PSIs to be reported	We rarely get support from managers	Experiences of patient safety	**Mi**nimal support by managers
What recommendations can you suggest to improve patient safety incident reporting.	I would recommend that PSI is part of our training plan and reinforcement because when you are training and training you are trying to reinforce why it's important for them to report. External trainers from sub district also they will assist the facility manager as to say why the facility manager need this PSI is because they are also important because sometimes they do not only end at a facility level litigation may arise so when litigation arrive is best it was reported because they know where to start when they are investigating this PSI.	PSI as part of our training plan	Recommendations by Participants	Health worker related recommendations

APPENDIX 13: Editing certificate

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EDITING CERTIFICATE

Re: **Patiswa Tolobisa**
DUT master's dissertation: **EXPLORJNG FACTORS INFLUENCING PATIENT SAFETY INCIDE T REPORTING BY NURSES IN PRJMARY HEALTH CARE FACILITIES** IN **KING SABATA DALINDYEBO SUB-DISTRJCT, EASTERN CAPE**

I confirm that I edited this dissertation and the references for clarity, language and layout. I returned the document to the author with track changes so correct implementation of the changes and clarifications requested in the text and references is the responsibility of the author. The intellectual content of the document is the responsibility of the author. I am a freelance editor specialising in proofreading and editing academic documents. My original tertiary degree which I obtained at the University of Cape Town was a B.A. with English as a major and I went on to complete an H.D.E. (P.G.) Sec. with English as my teaching subject. I was a part-time lecturer in the Department of Homoeopathy at the Durban University of Technology for 13 years and supervised many master's degree dissertations during that period.

Dr Richard Steele
01 February 2024
per email