CLINICAL HANDOVER EXPERIENCE AMONG NURSES WORKING AT JIMMA
MEDICAL CENTER, SOUTH WESTERN ETHIOPIA, 2022: A PHENOMENOLOGI
CAL STUDY DESIGN.

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A THESIS SUBMITTED TO JIMMA UNIVERSITY INSTITUTE OF HEALTH, FACULTY OF HEALTH SCIENCES, SCHOOL OF NURSING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN ADULT HEALTH NURSING.

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JIMMA UNIVERSITY INSTITUTE OF HEALTH FACULTY OF HEALTH SCIENCE SCHOOL OF NURSING

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ABSTRACT

Background: A nurse's clinical handover is an important and complex form of communication in healthcare organizations that involve the exchange of patient-related information during shift change. Nurse-to-nurse clinical handover is frequently implemented at inpatient and emergency units, with an increased risk of information loss. Ineffective clinical handover is responsible for about 80% of the causes of serious, preventable adverse health events. However, the evidence is unknown in Ethiopia, particularly in the study setting.

Objective: This study aimed to explore the clinical handover experience among nurses working in the Jimma Medical Center, South Western Ethiopia, 2022.

Method: A descriptive phenomenological qualitative study design was carried out from July 01, 2022, to August 31, 2022. An individual semi-structured in-depth interview was conducted with a purposively selected nine nurses working in medical, surgical, and emergency outpatient departments and five key informants. Twenty non-participatory observations were also implemented. Interview recordings and field notes were transcribed verbatim, translated, and then coded line by line with Atlas Ti.8 software. Colaizzi's (1978) method of data analysis was used. The trustworthiness of the data was enhanced as outlined by Lincoln and Guba (1985). Results were presented with the narration of themes and quotes.

Result: The study explored the clinical handover experience of nurses. Analysis of the data revealed three emerged core themes of the clinical handover experience: (i) Routine practice of the clinical handover: communication styles, location of handover, time of handover, the content of handover, patient involvement, and handover responsibility. Nurses have reported that they have ever experienced clinical handovers as inconsistent, incomplete, and not standardized across all units. (ii) Influencing factors of the clinical handover, such as healthcare system-related factors, care provider-related factors, and patient's health status-related factors. (iii) Consequences of ineffective clinical handovers. All participants reported that ineffective clinical handover was harming the holistic quality of nursing care.

Conclusion: This study found that routine clinical handover practice had a significant deficit, which was influenced by factors related to nurses, the organizational healthcare system, and the patient's health status. Therefore, important intervention with standardization is needed to improve the clinical handover in nursing practice.

Keywords: Clinical handover, patient safety, nurses handover communication, Jimma medical center.

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ABBREVIATIONS/ACRONYMS

СНР	Clinical Handover Practice				
EHSTG	Ethiopia Hospital Service Transformational Guideline				
HIC	High Income Countries				
IDI	In-Depth Interview				
ICU	Intensive Care Unit				
TJC	The Joint Commission				
JMC	Jimma Medical Center				
KII	Key Informants Interview				
LMIC	Low- And Middle-Income Countries				
MICU	Medical Intensive Care Unit				
NPSG	National Patient Safety Goal				
OPD	Out Patients Department				
SBAR	Situation, Background, Assessment, and Recommendation				
SICU	Surgical Intensive Care Unit				
UK	United Kingdom				
USA	United States of America				
WHO	World Health Organization				

CHAPTER ONE: INTRODUCTION

1.Background

Clinical handover is a real-time process of transferring and accepting patients' care information and responsibility to ensure the continuity and safety of patient care (1). Among the identical words used to describe handover (i.e., shift changes, handoffs, shift report, sign out, report) (2,3), the term "clinical handover" is used in this study. Clinical handovers are varied in terms of locations, people involved, time of handover, and types of handover (4,5). Although hospitalized patients are exposed to different types of handover, the scope of this study focused on the nurse-to-nurse clinical handover during shift change alone.

Nurse clinical handover is frequently performed in inpatient settings and emergency units, on average three times per day for each patient (6) with a risk of error. Literature shows that at teaching hospitals, more than 4,000 handovers occur daily; 1.6 million handovers occur annually, and 70% of them are ineffective (7). In addition to this, the estimated number of handovers between healthcare professionals is estimated at over 300 million in the United States of America and over 100 million in England each year (8).

Effective clinical handover with standardized tools can reduce the loss of patient information during the clinical handover (9). The Joint Commission (TJC) in 2006 (10), the World Health Organization (WHO) in 2007 (11), and the Australia Commission on Safety and Quality in Healthcare in 2012 (12) were among the organizations that recommended and implemented: structured handover tools (i.e, SBAR.), adequate time and space, the use of oral and written report, face-to-face bedside handover, patient and family involvement. In Ethiopian Health Sector Transformation Guideline recommended to implement clinical handover with well-coordinated, fixed timing and adequate and clear information (39).

Nurses, patients, and healthcare settings are facing various challenges with communication breaks during clinical handovers(13,14). Patient harm, including ineffective handover communication, is the 14th leading cause of global disease burden, according to WHO estimates (15). The previous studies in the Netherlands in 2008 (16), Spain in 2021 (17), and Iran in 2015 (14), showed the clinical handover implemented was quite opposite to that recommended by experts, leading to a serious problem for patient safety and quality care. A few studies in Africa, such as those in Kenya in 2020 (18) and Nigeria in 2018 (19) show that clinical handover by nurses was poor, which raises serious concerns about patient safety. In Ethiopia, such evidence is unknown, despite patient safety being poor (20). Influencing factors of nurse clinical handover such as noise, distraction, lack of time, workload, lack of information about patients, duties outside of nursing practice, poor management, number of admitted patients, communication methods, non-coordination, documentation practice, and other factors have been identified (21).

2. Statement of the Problem

Effective nursing clinical handover is essential for clinical decision-making and the delivery of safe, highquality care (22). The primary role of clinical handover is to communicate accurate, critical, and up-to-date information about patient care, patient condition, treatment, medications, any recent or anticipated changes, health service needs, clinical assessment monitoring, and evaluation, and goal planning (23).

Ineffective clinical handover causes a leak of information between the cracks, leading to a serious problem for patient safety and quality care, particularly in emergency settings (17). Poor clinical handover in inpatient and emergency departments shared major roles in most commonly reported adverse health incidents (24,25). According to WHO 2019 global estimates, 42.7 million adverse medical errors occurred out of 421 million hospitalizations (15). According to this, ineffective clinical handover is responsible for an estimated 80% of cause of serious medical errors (26).

In addition, one out of every ten patients in high-income countries is harmed by a 50% preventable range of incidents or adverse events while receiving hospital care. In low- and middle-income countries (LMIC), the rate of adverse events was around 8%, of which 83% could have been avoided and 30% resulted in death (15). One recent study in Ethiopia in 2022, found that the immediate postoperative patient handover practice was poor (27). However, inpatient and emergency departments were not addressed. Furthermore, the poor handover was one of the major contributing factors to the low level of patient safety culture in Ethiopian hospitals (20,33–36).

Literature shows communication failures during handover were responsible for at least 30 percent of malpractice in US hospitals and medical practices, resulting in 1,744 deaths and 1.7 billion dollars in costs over five years (28). A study in China in 2016 identified breaks in handover communication that resulted in severe patient harm (29), and standardization reduced harm from 9.2% to 5.7% (30). Medication errors were mostly reported due to ineffective clinical handover in emergency and inpatient units (31). In Ethiopia, night-shift medication administration problems shared major roles of reported errors (32)

Moreover, failure to share clinically relevant information accurately and on time may result in adverse events, delays in treatment, procedures, and diagnosis, inappropriate treatment and omission of care, medication errors, patient falls, and infection risk (37).

There is growing evidence that supports the use of standardized and structured nurse handover using evidence-based mnemonic tools such as Introduction, Patient, Assessment, Situation, Safety Concern, Background, Action, Timing, Ownership, Next (I-PASS the BATON); Identification, Situation, Background, Assessment, and Recommendation (ISBAR); and other checklists (3,25,38) to reduce the burdens.

Regardless of, the Global efforts to reduce the burden, no substantial change was achieved (13). The literature on the practice of nurse clinical handover is scanty in Africa.

In addition to this, no previous published study has explored the experiences of nurses' clinical handover. Exploring the experience of nursing clinical handover practices is important for optimizing best practices and supporting intervention programs (38). Therefore, this study aimed to explore the clinical handover experience of nurses working at Jimma Medical Center in Southwestern Ethiopia.

3.Significance of the Study

Nurses' clinical handover is a pillar of patient safety that helps to provide a safe transition of care among healthcare teams. Addressing nurses' clinical handover experiences is important to enhance patient safety and improve quality nursing care. There is a gap in related literature that addressed the clinical handover of nurses in Ethiopia. Particularly, the evidence of nurse clinical handover needs to be clear in healthcare settings with rapid turnover of patients including emergency and inpatient units.

Identifying the experience of nurses' clinical handover practice will be input to adapt the best practice and improve nursing care quality. Further, it will enhance care provider attention to decrease admitted patient harm related to poor clinical handover in the study setting.

Furthermore, this study will generate evidence to help front-line nurses and nurses' directors' to design an interventional plan for standardizing the handover process. Also, it will contribute evidence for governmental and non-governmental organizations' work on patient safety.

Moreover, it will assist policymakers in designing strategies for implementing structured and standardized handover protocols and guidelines. Finally, it will be an input for future researchers who volunteer to do further study in these areas.

CHAPTER TWO: LITERATURE REVIEW

2.1. Nurse's clinical handover practice

Nurses' clinical handover, a key aspect of patient care, is an area that needs effective communication. There is growing evidence that dig-out the practice of clinical handover. A handover is defined by the Joint Commission as a transfer and acceptance of patient care from one caregiver to another or from one team of caregivers to another to ensure the continuity and safety of the patient's care (1).

The WHO suggested different strategies during the transition of care such that the healthcare organizations implement a standardized approach including the use of the SBAR (Situation, Background, Assessment, and Recommendation) technique, allocation of sufficient time for communicating important information, and provision of key information regarding discharge diagnoses, treatment plans, medications, test results, patient's status, and any significant status changes. Further, recommended patient and family involvement, incorporating training on effective handover into the educational curricula and continuing professional development for healthcare professionals (40).

The nurse's clinical handover needs structure and arrangement to provide adequate time for discussion of patient care. According to the Joint Commission suggestion, healthcare organizations must provide support, time, and budget resources to the handover quality improvement initiatives (26). Similarly, a qualitative study conducted in the United States in 2018, revealed that medical–surgical nurse clinical handover had adequate preparation of incoming and outgoing nurses before they met each other (41). This study explored that the ineffective clinical handover process significantly affected the incoming nurse's transition into care and administration of nursing care.

Furthermore, a qualitative study conducted in the United Kingdom in 2016 showed various forms of medical-surgical nurses' clinical handovers such as office-based whole nursing teams, between the nurse in charge, and bedside. Further, revealed no structured bedside handover practice was observed and the location, style, and content varied according to individual preference on both wards (42). This study also identified nurses' concerns about patient confidentiality and talking over them during bedside handover. Similarly, a study in Ireland in 2020 found that the content of the information shared during bedside handover predominantly focused on the patient's physical and physiological symptoms, with limited emphasis on a holistic care plan (5).

A qualitative study conducted in Australia in 2015, explored that gaps in medication information at handover were evident as contained restricted and incomplete information (31). The cultural context of the ward influences the handover practice accordingly, a qualitative study conducted in metropolitan Atlanta in 2022 explored how the cultural context of the ward influenced nurses' perceptions of clinical handover (43).

A qualitative descriptive study conducted in South Korea in 2022 that showed nurses receive nonstandardized and insufficient handover training, lack of standardized handover guidelines, inconsistent handover content which depended on the preferences of nurses, overlapping handovers, and unnecessarily prolonged handovers (44). Similarly, a qualitative descriptive study conducted in 2020 in Brunei, Southeast Asia explored inconsistent handover among wards nurses and unstructured nurse handover. This study showed nurses' clinical handovers usually happened three times a day in a variety of ways such as verbal, face-to-face methods, and telephone communication. In addition to this, there was a shift leader, who is responsible for the handover report for all patients (45).

Patient and family involvement during the clinical handover provides a chance to share their concerns and to contribute clinical information related to their care or progress, which may influence patient safety (46). Despite recommended patient and family involvement in clinical handover, the literature reported that the nurses worried about sharing confidential and sensitive information (47–49).

The nurse's clinical handover recommended including critical, updated, and important information to communicate during transition care (26). Similarly, according to a Colombian study, the desired information transferred included general patient data such as age, gender, diagnosis, status, and history; a plan of care; lab and radiology tests (results, trends, and pending); allergies; IV drips, fluids, or tubes; wound, dressing, or skin assessments; pain management; code status; and any relevant personal or social information regarding the patient or family that might alter patient care (2). Similarly, a study in Rio de Janeiro revealed that lack of handover attention and incomplete information, which compromised their handover effectiveness (50).

Another descriptive exploratory study conducted in Iran in 2015 identified non-holistic and unstructured content, and non-patient-centered approach, poor time and space management, and poor task management (14). There has been little research addressing clinical handover practices in Africa. A study conducted among nurses in Kenya in 2020 investigated the structure and location of handover, which varied from hospital to hospital and from nurse to nurse (18). The status of nurses' handover is still unknown in Ethiopia. Overall, the clinical handover practice of nurses varied across healthcare settings which causes challenges to the quality of care.

2.2. Consequences of ineffective clinical handover

Potential harm is introduced when the receiver gets information that is inaccurate, incomplete, not timely, misinterpreted, or otherwise not what is needed (1). Ineffective clinical handover continues to cause patient harm in different dimensions (14). Despite extensive measures taken to improve clinical handover processes, participating health professionals and patients experienced adverse events relating to clinical handover. A study in Australia identified the effect of ineffective clinical handovers such as delays in treatment or procedure, or, prolonged treatment or procedure; lack of monitoring information given on clinical assessment, leading to patient deterioration; errors involving medications; patient falls; disruptive, aggressive behavior and confused state leading to injury; putting patients at risk of infections (48).

2.3. Factors associated with the shift handover practice of nurses

Clinical Handover is communicative nature that is influenced by different factors related to the environments, senders, receivers, and the patient's conditions. World health organization and the The Joint commission (1,51) identified potential barriers of clinical handover, such as resistance of caregivers to change behaviours, time pressures from patient care needs and other responsibilities, training and time cost of implementing new hand-over processes, cultural and language differences among patient population and workforce, low health literacy, lack of financial resources and staffing shortages, lack of knowledge about how to improve systems, Failure of leadership to require implementation of new systems and behaviours, lack of information technology infrastructure and interoperability. A qualitative-descriptive study conducted in Ireland in 2018 revealed the barriers to nurses' clinical handover (52). Further, showed the patient's condition was an important determinant during clinical handover. A qualitative study conducted in Oslo, Norway, revealed handovers of vitally stable patients were associated with more information omissions (53).

The identified factors associated with nurse handover were relatively similar in different healthcare settings. A qualitative study conducted in four Canadian medical and surgical units in 2021 identified handovers as being interrupted by considerable background noise as the location of handoffs could compromise confidentiality (54). Similarly, a qualitative study conducted in 2020 in Brazil showed little participation of all nurses, with side talks, a lack of attention, and incomplete information that compromised their effectiveness (50).

Another study conducted at Indiana University in 2010 identified different barriers and facilitators of handover, like too little or incomplete information, too much or irrelevant information, inconsistent quality, and interruptions. It further revealed facilitators of quality handover, including pertinent contents and face-to-face bedside handover (55). Limited literature in Africa, a study in South Africa in 2018 revealed that nurses focused on non-lifesaving tasks such as transferring the patient from the ambulance stretcher to the bed rather than on patient handover and performing a handover of stable patients was not the priority (56). Similarly, a study conducted in Kenya explored that nurses' shift handover was influenced by the shift system, time available for handover, familiarity with patients, medical emergencies, and use of notes(18).

To conclude, the clinical handover practice of nurses is a means of healthcare provider communication to provide continuous patient care and improve patient safety. Throughout the literature, various challenges of clinical handover hinder effective practice. Moreover, despite efforts made to improve it, still, it's the main cause of patient harm across countries. Therefore there is a great need for literature to dig out each dimension of clinical handover to provide a safe climate for patients.

CHAPTER THREE: STUDY OBJECTIVES

1.General Objectives

• To explore clinical handover experience among nurses working at Jimma Medical Center, Oromia Regional State, Southwestern Ethiopia, in 2022.

2.Specific Objectives

- To explore the routine clinical handover practice among nurses working at Jimma Medical Center, Oromia Regional State, Southwest Ethiopia, in 2022.
- To identify the factors influencing clinical handover practice among nurses working at Jimma Medical Center in Oromia Regional State, Southwest Ethiopia, in 2022.
- To explore the consequences of ineffective clinical handover practice among nurses working at Jimma Medical Center, Oromia Regional State, South-West Ethiopia, in 2022.

CHAPTER FOUR: METHOD AND MATERIAL

4.1. Study area and Period

The study was conducted at the Jimma Medical Center (JMC) from July 1, 2022, to August 01, 2022. Jimma Medical Center (JMC) is one of the oldest public hospitals in the country, located in Jimma Town, 352 kilometers southwest of the capital of Ethiopia, Addis Ababa. Currently, it is the only teaching and referral hospital in the southwestern part of the country. It provides services for approximately 15,000 inpatients, 160,000 outpatient attendants, 11,000 emergency cases, and 4,500 deliveries in a year, all coming from the hospital's catchment population of about 15 million people. The hospital also has over 800 beds and 32 care units. It employs 1600 people, including 615 nurses (16 master's, 501 bachelor's degrees, and 98 diplomas). This study was conducted in adult medical-surgical units and an emergency department. These included a male medical unit, a female medical unit, a male surgical unit, surgical emergencies, a burn unit, a medical ICU, a surgical ICU, a pulmonary and cardiac ICU, and an emergency outpatient department. Some inpatient units were not involved in this study; considering the feasibility, diversity of healthcare professionals, and the unwillingness of some staff.

4.2. Study design

A descriptive phenomenological qualitative study design was employed to explore and describe the essence of lived experience. Descriptive phenomenology is rooted in a philosophic tradition developed by Edmond Husserl as an approach to exploring and understanding people's everyday life experiences within their lifeworld. Descriptive phenomenologists insist on the careful portrayal of ordinary conscious experience of everyday life a depiction of things as people experience them. Such as hearing, seeing, believing, feeling, remembering, deciding, and evaluating. The problem best suited for this form of research design is one in which it is important to understand several individuals' common or shared lived experiences of a phenomenon that have previously received little attention (57). The descriptive phenomenological approach is especially useful when a phenomenon has been poorly defined or conceptualized (58). The clinical handover is the topic appropriate to descriptive phenomenology which is the shared lived experiences of nurses across different units which was previously not explored. Four aspects of lived experience that are of interest to phenomenologists are lived space, or spatiality; lived body, or corporeality; lived time, or temporality; and lived human relation, or relationality. The ontological and epistemological foundations of this qualitative research are subjectivity, multiple realities; and finding are the creation of interactive process respectively. The best paradigm that fits this design is constructivism (59).

4.3. Population

4.3. 1. Source Population

✓ All professional nurses working in the Jimma Medical Center.

4.3.2. Study population

✓ Study populations of this study were all purposively selected professional nurses who fulfilled inclusion criteria.

4.3.3. Eligibility Criteria

4.3.3.1. Inclusion Criteria

✓ Professional nurses who currently work in medical-surgical units and emergency outpatient departments, and were available at the time of data collection.

4.3.3.2. Exclusion Criteria

✓ Professional nurses who worked in that unit for less than six months, and who were unwilling to participate.

4.4. Sample size determination and sampling procedures

The sample size was determined by saturation of required data; sampling to the point at which no new information from data, and at least three redundancies is achieved for each code (60). Despite the sample size of the phenomenological study range from 5 to 25 (57) or 3 to 10 (61), the number of interviews was not predetermined. Nurse recruitment stopped after saturation was achieved at 14 study participants who worked in adult inpatient units (a male medical unit, a female medical unit, a male surgical unit, surgical emergencies, a burn unit, a medical ICU, a surgical ICU, a pulmonary and cardiac ICU), and an emergency outpatient department. From a total of 14 nurses, 9 participated in an in-depth interview (IDI), and 5 department head nurses participated in key informant interviews (KII). Key informant were used for the purpose of management related issues raised on the field. Further, 20 event-sampled observations were implemented to assure emerged themes from interviews.

Sampling procedures: After getting permission from all concerned bodies, a discussion was made with the nurse's service director and the unit head nurses that helped us to address nurses who had lived experience in the clinical handover. A Criteria based purposive sampling technique was used to recruit study participants who had lived experience of clinical handover, who can communication articulate, providing direct patient care, and who coordinated the clinical handover in the unit. Consequently, the lists of individuls were identified and informed ahead as per the inclusion criteria. Priority was given purposively to the shift leader who

coordinates and performs clinical handover frequently during data collection. The recruitment continued until a minimum of one nurse from each unit was recruited and interviewed. Further, event sampling and semi-structured non-participatory observation were employed during nurse-to-nurse handover time across the units.

4.5. Data collection tool and procedure.

Data were collected through face-to-face, one-on-one, semi-structured, in-depth interviews with staff nurses, including unit head nurses, and semi-structured, non-participatory observations of clinical handovers. It was collected by the researcher and four BSc nurses who had experience with qualitative data collection. All data collectors were recruited from Shanan Gibe Hospital. An open-ended, semi-structured interview guide was developed in English, translated, and conducted in local languages (Afan Oromo and Amharic as preferred by interviewees), then back-translated to English by the language expert. One day of training was given to data collectors. The questions were refined and ordered, based on the emerging idea after each data collection.

Written informed consent was obtained from all the interviewees on a day before initiating the interview. The participants were primarily approached by phone, and then the face-to-face discussions were made. The researcher gained and maintain a high level of trust with participants through prolonged engagement. The place that provides privacy ,was free of interruptions and was suitable for recording arranged by communicating with each interviewee. The duty room and morning hall were arranged. The interviews were conducted with one respondent at a time each day to facilitate transcription and analysis. Each IDI and KII was held at a time convenient for the participants. All interviews were implemented by the researcher and one data collector assistant. Interviewers arrived an hour before the appointed time. Four participants refused the interviews, which lasted from 45 minutes to an hour, were tape-recorded and transcribed verbatim. Further follow-up (probing) questions were used for clarification when needed. Additional data collection methods (observation) were employed after interviews to refute and supplement the emerging concepts. Despite data collection procedures that typically involve interviewing individuals who have experienced the phenomenon, its possible to involve varied sources of data, such as observations (59).

Observation: Event-sampled, semi-structured, non-participatory observations were employed after the interview. A Semi-structured observational checklist was developed. From the selected unit, 20 handover events (10 morning-to-afternoons, 10 afternoon-to-evening) were observed. Each observation took about 10 to 15 minutes. Observations were implemented to check for consistency between words and actions, to check the practice as it occurs in naturalistic settings, and to confirm self-reported data. Being aware of the

Hawthorne effect and the possible impact on behavior during patient handover practices, the observers wore the gawn during observation sessions in an effort not to be seen as a threat, use the habituation process through prolonged engagement, and blend in with the environment. Further, participants were aware of the presence of observers but not of their underlying motives, which gives researchers access to more in-depth information. Detailed observation notes were taken immediately after each observation. The saturation was identified when interviews, and observations with new participants, no longer elicited themes not already raised by previous participants.

4.6. Study variable

Clinical handover experience of nurses.

4.7. Definition of terms

Clinical Handover is the transfer and acceptance of patient care responsibility and accountability during shift changes between incoming and outgoing nurses (26).

Lived experiance – is refers to a representation of the experiences and choices of a given person, and the knowledge that they gain from these experiences and choices.

Communication- is defined as the process by which information is exchanged between senders and receivers of care responsibilities.

A sentinel event- is defined by the Joint Commission (TJC) as any unanticipated event in a healthcare setting resulting in death or serious physical or psychological injury to a patient or patients, not related to the natural course of the patient's illness (26).

Adverse health event: one that causes injury to a patient as the result of a medical intervention rather than the underlying medical condition.

Sender: Those caregivers who transmit patient information and transition the care of a patient to the next clinician (10).

Receiver: Those caregivers who accept the patient's information and take care of that patient(10).

Standardized tool: validated forms, templates, checklists, protocols, and mnemonics, such as ISBAR, that are used to communicate patient care information during clinical handovers.

Unstructured patient information: the transfer of unstandardized patient care information at an unsafe time and involving an unsafe patient.

4.8. Data Analysis Procedure

Data analysis occurred concurrently with data collection to determine the saturation of the data. Seven Colaizzi's (1978) phenomenological method was used to analyze participant transcripts. Colaizzi's (1978) preferred data analysis method for descriptive phenomenology, which is rigorous and robust, enhancing the credibility and reliability of its results (62). In this method, the researcher and Assistants read all written transcripts several times to get a general sense of them and note down initial ideas separately. From each transcript, significant phrases or sentences that pertain directly to the lived experience of the clinical handover were extracted after the accuracy of transcribed data was checked. Meanings are then formulated from significant statements and phrases. Transcribed interviews were entered into ATLAS ti 8 software to facilitate sorting, annotating, and coding the data separately by two independent researchers.

The formulated meanings are clustered into themes allowing for the emergence of themes common to all of the participants' transcripts. After each field contact, an average of two more days are taken to do a preliminary analysis, which involves reviewing the main concepts, issues, and questions seen during the contact. This guided planning for the next contact, gave a chance for modification in approach, and to decide on continuing the data collection until a point of saturation. The results are then integrated into an in-depth, exhaustive description of the phenomenon. Once descriptions and themes have been obtained, the researcher in the final step approached some participants a second time to validate the findings. New relevant data that emerge were included in the final description.

4.9 Research Team and Reflexivity

Reflexivity is researchers "position themselves" in a qualitative research study that conveys (i.e., in a method section, in an introduction, or other places in a study) their background and how it informs their interpretation of the information in a study, and what they have to gain from the study. Bracketing, a process of setting aside one's beliefs, feelings, and perceptions to be more open or faithful to the phenomenon (57) was applied. The researcher has clinical work experience doing clinical handovers, which can influence the selection of the topic; the researcher has training in qualitative data analysis which can support a vigorous data analysis process, and the researcher is a graduate student in adult health nursing. The researcher was closely engaged throughout the study process. Although the principal investigator has a good understanding of clinical handover in another setting, no previous qualitative study experience. No researcher's background affected the interpretation of the result. The research assistant (peer debriefer) and advisors all held master's degrees and had prior experience with qualitative research; they were involved in the sampling of the participants. Before the start of the study, the researcher had no established relationship with study participants.

4.10. Trustworthiness

The criteria for rigor as outlined by Lincoln and Guba (1985), namely: credibility, transferability, dependability, and conformability, were used to enhance the trustworthiness of the findings. The following steps were taken to achieve credibility: the establishment of themes based on the method triangulation of several sources of data (observation, KII, and IDI) to build a coherent justification for themes; the use of member checking (participants were asked to review the findings), use of audiotaping and verbatim transcription, clarifying the researcher's position via reflexivity notes and spending extended time in the field. To ensure transferability, a thick description of the research context, the people who participated in the study, and the experiences and processes observed during the inquiry were employed. Also, confirmation of saturation and lucid participant's statements was quoted directly. Dependability was achieved through record keeping for an audit trail, repeatedly checking the transcripts for error, triangulation of data and cross-checking (researcher and assistant) until consensus was reached, and accurately documenting the processes undertaken. By providing congruence between independent researchers (the researcher, advisors, and assistant) about the data's accuracy, relevance, or meaning during data coding and analysis, confirmability was achieved.

4.11. Ethical considerations

Before the commencement of actual data collection, Ethical approval was obtained from the Institutional Review Board of Jimma University. A formal letter from the Institute of health was given to the study area. The aim of the study was explained to the participants in a language they can understand. Informed, voluntary, and written signed consent was taken from each participant. The participants' information was kept confidential and used for study purposes only. There was no direct benefit provided and no harm to the participants.

4.12. Dissemination of the results

The result of the study will be presented to the Jimma University scientific community and disseminated to Jimma University institutes of health, the school of Nursing, and the Jimma Medical Center. Further, the result will also be accessed for utilization by all recognized bodies working on cliical handover practice improvement. Finally, the effort will also be made to publish in a peer-reviewed journal.

CHAPTER FIVE: RESULT

I. Sociodemographic Characteristics of Participants

For a description of the Sociodemographic characteristics of the study participants, the participants in this study were fourteen nurses (3 female and 11 male) with an age range from 25 to 40 years, 12 bachelor's degrees and two master's degree holders, 2-8 years of experience and have an experience of clinical handover in different wards (medical wards, surgical wards, and emergency OPD) of Jimma Medical Center. (See. Table-1)

Participants	Age	Sex	Educatio	Working	Working unit
			nal status	experience	
1.	25	F	BSc	2 years	Male Medical unit
2.	27	М	MSc	7 years	Medical intensive care unit
3.	28	М	BSc	4 years	Female medical unit
4.	25	М	BSc	4years	Emergency OPD
5.	28	М	BSc	6 years	Pulmonary and cardiac unit
6.	32	F	BSc	3years	Surgical intensive care unit
7.	40	М	MSc	6 years	Chronic surgical unit
8.	34	М	BSc	7years	Burn unit
9.	30	М	BSc	6 years	Chronic Surgical unit
10.	29	М	BSc	4 years	Surgical emergency
11.	35	F	BSc	6 years	Burn unit
12.	30	М	BSc	3years	Medical intensive care unit
13.	26	М	MSc	6 years	Male-medical unit
14.	33	М	BSc	8 years	Emergency OPD

Table 1: Socio-demographic characteristics of study participants at JMC, Southwest Ethiopia, 2022.

II. Clinical Handover Experience.

Main Themes

From 14 interviews and 20 observations, three major themes of clinical handover practice lived experience were identified. The essence of the lived experience of the clinical handover was explored. The identified themes were: 1) Routine clinical handover practice 2) Influencing factors of clinical handover, and 3) Consequences of ineffective clinical handover practice. Each main theme consists of multiple sub-themes. (See Fig 1).

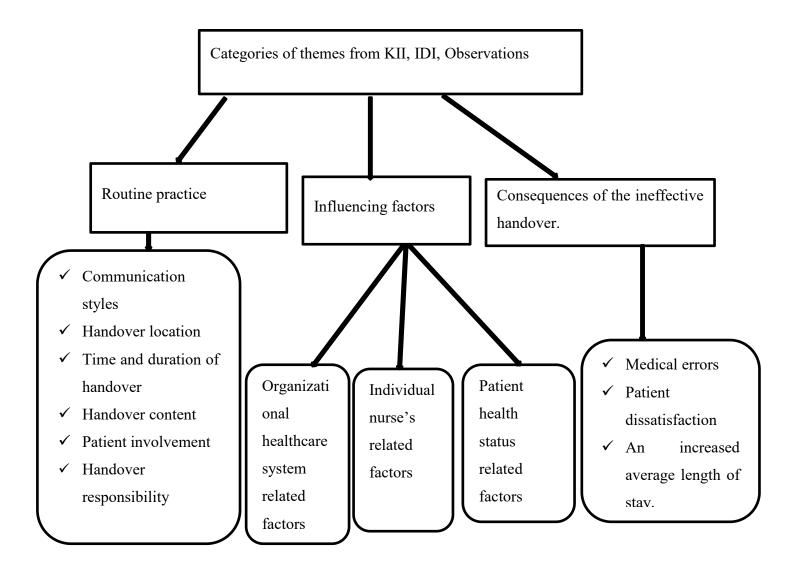


Figure 1: Themes and sub-themes identified from an in-depth interview, KII, and observation of nurses' clinical handover experience at JMC, Southwest Ethiopia, 2022.

Theme 1: Routine clinical handover practice.

During the interviews, nurses mentioned different experiences with handover practices across the units. There were daily activities of clinical handover practice that participants experienced during their stay in the unit. From this major theme; different sub-themes such as communication styles, location of handover, handover time and duration, the content of handover, patient involvement, and handover responsibilities were identified.

1.1. Clinical Handover Styles/methods

A nurse's clinical handover is a routine practice that is performed in various ways. In some units, verbal communication took place face-to-face and over the phone, while in other circumstances, written forms were employed, or a combination of all three. The ward report book was found to be the main information source during all observations. Most participants during the KII and IDI reported that they were given clinical handovers in both written and oral form. Some participants also described how they sometimes ask for unclear information through the telephone when physical contact is impossible. A participant described his experience as follows:

"We are doing handovers orally and with a written handover book. A critical patient handover is done both orally and through a handover book. If the receivers and senders fail to meet physically, we will refer to the handover book written by the sender" (KII-P4).

Similarly, during the observation of nurse handover, the outgoing nurses share some information that the receiver should take priority over. One day during the observation, the outgoing nurse said, "The patients on beds 6 and 10 haven't brought the medications; please give them when they are available." Further, he said "no discharge; all patients are stable" (observation 15).

Most participants reported that face-to-face handovers of stable patients were not a must. They stated that they documented the information believed to be important in the handover book. One participant described her perception as follows:

We are implementing handover face-to-face and orally supporting it with recorded documents in the handover book. ... We don't perform face-to-face handovers routinely. Patients who have been admitted for an extended period are rarely reported, as all staffs are familiar with them. If the patients are in critical condition, we transfer them to the receiver at the bedside (IDI-P1).

Furthermore, during the observation, the face-to-face handover was less likely performed; the use of a handover book was common. It was sometimes implemented haphazardly.

One day, during the observation of the handover, the outgoing nurse wrote in the handover book and gave the report orally while walking along the corridor. There was no standardized tool observed during the patient exchange among the staff (Observation -4).

Further, the observed handover practice lacks consistency across all the units. Face-to-face bedside handover was rarely performed in a structured way. In some units, it was hard to see a face-to-face handover. During observation of the afternoon handover, the outgoing nurse wrote on the handover book available in the unit without physical contact, and the incoming nurses came late and read the document (Observation -6).

1.2. Content of transferred information:

The critical contents of the information communicated during the clinical handover depended on the context and condition of the patients. Most of the study participants reported that they routinely communicated patient information during shift changes. They stated that there were no recommended minimum criteria customized across the units. They stated that all nurses had been transferring the patients' information that they believed to be important.

Our handover contents include the medication that is ordered but not given during my duty or not brought by patients, the treatment plan that has not yet been initiated, unfinished nursing care, patient condition or status, medication changed or added, transfer, discharge, the next planned course of care, patient refusal of care, and the like. The contents are almost similar, but with different communication methods (IDI-P6).

Most study participants further reported that the contents of the handover were subjective and depended on the patient's condition. They stated that the contents of the transferred information were incomplete, superficial, inconsistent, and unstructured across all units. The only demographic data supplied at handover were patients' bed numbers. No detailed personal information or health status was reported during the handover. A participant stated as follows:

Our handover is not uniform across the unit. We refer to their bed number when giving the handover. For example, we write, for the patient on bed 6, and the patient on bed 7, who are critical, there has been no death, no admission, no discharge, and so on. But it may not be uniform for all patients. I don't know if it's standardized, and it depends on the patient's condition. Everyone wrote what seemed important; actually, it's important, but it's not uniform (IDI, P9).

The observed contents of the information shared during the handover were mainly focused on critical patients and newly admitted patients.

During observation of the handover, nurses call the patients' bed numbers and remind the arriving nurses about the planned activities and the patients' unstable health conditions. In addition to this, they recorded in the handover book information like admission, discharge, transfer, critical illness, change of medication, and unfinished duty (Observation-2).

Further, the observed contents of information were very superficial and unstandardized across units, which did not address important elements like the patient's name, the reason for admission, background, assessment, the results of assessments performed, dated vital signs, and dated lab results. (All observations)

During observation of the handover event, we heard a nurse say, "Good afternoon. The ward is okay; there are only two critical patients on beds 8 and 10 that need follow-up. All patients took their medication except the patient on bed 7, who did not bring her ordered medications; for the patient on bed 5, her cannula was removed, and she is complaining. For the patient on bed 12, ceftriaxone was changed to ceftazidime (Observation 10).

1.3. Location of handover:

It's a sub-theme of experienced handover practice where urses gave clinical handover. Most participants reported that the clinical handover was performed everywhere in the working unit. They reported that there was no identified location for the handover. All participants also described they were doing the clinical handovers at the nurse station, duty room, and corridor. Further, some participants reported that they sometimes do handovers at the bedside for critical patients.

The location of handover in this unit is here and there. I mean varied. Most of the time, we implement handover in the nurses' station room, corridor, and duty room. We didn't perform bedside handovers for all patients. Sometimes we may do so at the bedside for critical patients. We are doing the handover of critical patients at the bedside, focusing on oxygen, fluid, intravenous venous, and the like (IDI, P2).

Another respondent also stated that bedside handover is not mandatory for stable patients. They stated that the handover of critical patients was performed at the bedside focusing on recent hemodynamic changes. A participant described as follows:

The location of handover is determined depending on the patient's health condition. Example: If the patient is critical, I give handover at the bedside by showing the patient to the receiver. If patients are stable, we do handover at the station room or corridor or elsewhere (IDI, 14).

Further supplemented observation revealed that the handover location was context based implemented haphazardly. In one room, the nurses entered the ward while speaking with each other; one of them approached the patient and assessed the intravenous line and its functionality. Then, he said, this patient is critical; please consult the seniors. Finally, they left the room after visiting this unit (Observation 8).

1.4. Handover time and duration

Handover time is the time during which the receiver and sender are expected to implement clinical handover. The duration is the time it takes to complete each clinical handover. Most study participants reported that handover was implemented two to three times a day, every eight hours. They described handover time as a busy time with activities during which the senders and receivers had time pressure. Further, many participants reported that there was not adequate time for handover.

Handover is a busy-time activity. The time we physically meet is on and off. Sometimes they performed handover as routine activities, and sometimes they neglected it. This is because of the problem of the transport service during the rainy season; staff lateness and early releases are some problems in the unit (KII, P4).

Other key informants described that the staffs have competing priorities i.e. (new admission, procedures, critical patient care, private issues and others), at the time of clinical handover.

"The receiver and sender may meet together for at least two to five minutes to communicate orally, but still those staff going home are rushing to do the handover" (KII-P5).

During observation of the handover, many nurses faced challenges in transferring the responsibility of care face-to-face. We have heard when one staff nurse said that "the time is running out of my duty; let them read the written document and I will go." Then, he left the unit after writing some notes in the handover book (Observation 4).

The participants were rushing home during shift change because of competing priorities. It was observed that the time of handover overlapped with the time of the outgoing home. So, the face-to-face handover was difficult to implement. Nurses' handover was observed to be mainly conducted at a fast pace, which took less than five minutes (Observation 12).

1.5. Patient involvement:

The study participants across all units reported that patients and families were not involved in the handover process. One study participant reported as follows:

"The patient may hear what we discussed during the bedside handover communication." ...But we didn't intentionally involve them" (IDI, P1).

Some participants stated that implementing patient-centered clinical handover is greatly important to deal with their concerns. Despite this, there were no such practices across the units. A key informant also described as follows:

"There is no organized bedside patient involved in the handover in this unit. But, this may be good to hear their concern" (KII, P8).

Further, no patient involvement was observed during the data collection time (all observations).

1.6. Handover responsibility:

This sub-theme was extracted from the response to the question of who is responsible for performing handover in the unit. All participants reported that the beds were proportionally allocated to nurses in the unit. Even though the patient's bed was shared amongst them, no individual was observed who gave handover accordingly during observation. One of the staff members wrote some information on the handover book and showed patients with unstable conditions to two of the incoming nurses (observation 6).

Further, they described a lack of handover policy and clear job description assigned among the staff to do clinical handover effectively. Quotes illustrated from interviews show:

"Handover in this unit is sometimes performed as routine activities and other times neglected. This may be because of a lack of clear accountability and responsibility assigned to the staff with clear policies and guidelines. ...sometimes, it's good to have it... "(KII, P7).

In some units, the participants also reported that there was a shift leader to all shift change who was responsible to facilitates clinical handover. They replied to further probe how to question, and all outgoing staff discussed important information expected to be shared with incoming nurses ahead. A participant described: A participant described:

"According to our unit, there were assigned staffs who give handover in rotation at every shift. ...Also there are shift leaders, who facilitate the handover process of the unit" (KII, P12).

Furthermore, in some units, it was unclear who was responsible to attend the handover and how many nurses from each shift should attend the handover and their level of participation. From observation of the handover, two nurses were physically met with incoming nurses for the handover and others go home without implementing the handover (Observation 20).

Theme 2: Influencing factors of clinical Handover

Nurses' Clinical handover was affected by various hindrances that reduced the quality of care and patient safety. The main obstacles to experiencing clinical handover can be summarized as organizational healthcare systems-related, care-provider-related, and patient's health status-related factors.

2.1. Organizational healthcare systems-related factors

The absence of an organizational healthcare system supporting the handover training, handover supportive policy and protocol, standardized and structured handover communication method, transport service facility, supportive supervision, and inadequate nurses' workforce negatively influenced the clinical handover of nurses.

Most participants perceived the lack of supportive policy and protocol, the scarcity of transport services, the workload, and the lack of handover standards as contributing factors to their ineffective handover experience. A participant described as follows:

"Many times, when we have a heavy workload, we do have time pressure at the handover time. We are providing care to patients with critical health problems. So, the numbers of the nurse to patient ratio are not balanced, there is workload here in this unit" (IDI, P2).

Another participant stated the absence of clinical handover policies and responsibility as follows:

"In our previous trend, there were many problems with the handover. ...The handover policy and standards are very important to improving our practice further. It may be the responsibility of top management to design it. We implement what seems important to us, which may create communication gaps during the handover. I think there should be supportive policy and standardized guidelines to do a quality handover" (IDI, P 9).

All participants reported that the scarcity of transport service severely affected their handover quality, mainly during the night time shift change. Further, they reported poor time arrangements for the clinical handover. A participant described her perception as follows:

"Due to time constraints, we face challenges to obtain a transport service. There is an overlap in the timing of entry and release. For example, if the receivers arrived at 2:00 p.m. and the senders were released at 2:00 p.m., there would be no time for a handover... In addition, the sender sometimes releases five to ten minutes early to obtain transport service "(IDI, P11).

All participants reported that the clinical handover standardized tool was not practiced in their unit. Further, they stated that there were no minimum criteria for key information contents to be transferred. Many participants reported that it's unclear to know "Who, What, When, Where, and How" to do the clinical handover. A participant described his concern as follows:

"To know what is correct or not, there should be standards." In this ward, we are doing without any standards. The higher official sometimes says to "do a handover" But, there is no standardized checklist to do that. There is no minimum requirement for key information to be transferred. We only transfer what is subjectively supposed to be important. I believe that the handover standard is mandatory to avoid ambiguity and inconsistency." (IDI, P10).

2.2. Nurses' care-provider-related factors.

Nurses play a key role in the provision of patient care, particularly in an inpatient unit. Identifying nurserelated factors affecting clinical handover is optimal to improve the practice. These factors included nurses' job satisfaction, nurse perception, nurse commitment, nurse knowledge of effective handover, interpersonal communication skills, i.e., inter-departmental communication during patient transfer, and the attitude of nurses towards the clinical handover practice played a pivotal roles.

Some participants in this study reported that there were gaps in their knowledge of handover. They further claimed that there was no training given on the new handover processes. They further stated that handover is a routine practice shared by experienced staff. Quotes illustrated from the interviews:

"I have learned the handovers from other staff here, and I have just followed them. There is no training provided to improve our knowledge of handovers yet. I think it's important to improve the practice" (IDI, P11).

Many participants also perceived that the attitude and perception of nurses were important for safe handover practice. They further reported that working on the attitudes of nurses is very important. During shift changes, many employees are careless and have competing priorities. A key informant stated:

"Handover is inconsistent at this unit. It is not uniform among the staff. Individuals who fear God will act effectively. There is sometimes a preference for personal cases, a blame culture, a lack of commitment, a chain of certain preconditions, and negligence" (KII, P8).

Some key informants claimed that nurses' job satisfaction and commitments were essential for the quality of clinical handover. A participant stated that staff sometimes complained about unrelated issues that hinder effective practice.

"...Sometimes, if you ask the staff why they don't give face-to-face handover, they may respond with something you can't answer at this level. Their level of job satisfaction matters a lot. They respond to unrelated an issue such as the patient has stayed in the unit, the fact that the patient as a whole is stable, and the lack of a need for urgent care. Also, some of them arrive late and leave early" (KII, P7).

Further, nurses' commitments to their duty varied from one staff member to another. The clinical handover is an activity with time constraints that require the commitment of the nurses. Many participants stated that commitment is very important. Interview quotes show:

"Staff commitment during handover time is the big issue.... It's difficult to say all staff is committed. ...Poorly committed individuals who show minor carelessness, lateness, and early release are sometimes made problems in this unit" (KII, P5).

For continuity of care and quality clinical handovers, effective interpersonal communication between nurses during a patient transfer is far more important. Some participants reported that there was unorganized interpersonal communication during the patient transfer that affected their clinical handover quality. They reported that there were many interpersonal communication gaps when patients were transferred from the emergency unit to the inpatient ward. Further, they stated that when critical patients were transferred to their unit, most patient information was lost. This may lead to severe harm to the patients. A participant stated as follows:

"At this unit, unstructured patient information and unsafe time transfers of patients from different units before preparations, which affects our handover, are major issues. ...They silently send us critical patients. The patients may expire without getting important care. ...If this is at the time of handover, there is a big concern about information loss" (KII, P8).

Participants in the study also reported that nurses' attitudes were critical to the attention they paid to handovers. They stated that nurses give more attention to the handovers of medical equipment, which leads to accountability following a loss. A participant stated the issues as follows:

"Many solutions were attempted. At every meeting, it was handover issues that first rose. ... There are many problems with current practice. The staff gives more attention to medical instrument handover due to potential accountability following the loss of instruments. ... As a result, improving attitudes among nurses is critical (KII, P13)

2.3. Patient conditions-related factors

This includes the conditions of the patient at the time of clinical handover such as stable health status critical health conditions, and length of stay. All participants reported that the clinical handover depends on the patient's clinical health status at the time of exchange. Further, claimed that the handover location, methods, and contents were influenced by the patient's clinical health status.

If the patient has undergone a recent medical procedure, and changes in condition, they provided more information face-to-face, otherwise rarely reported: From the participants quote illustrated as follows:

We do clinical handovers depending on the conditions of the patients. If the patients are critical, we will do a handover at the bedside. If patients are stable, we write important things on the handover book... This may cause stable patients to be forgotten (IDI-6).

Furthermore, other participants reported that clinical handovers varied based on the conditions of the patients at the time of handovers.

Handovers may not be uniform for all patients. It depends on the patient's condition at that time. If patients have an unstable vital sign, a newly diagnosed infectious disease, or an emergent intervention plan" we will do face-to-face handover (IDI, P11).

Similarly, many participants reported the handovers of prolonged admitted patients and newly admitted patients were also different in some dimensions. They reported that all nurses became familiar with the patients, as long as the patient was admitted for a long time. Due to this, the clinical handover of stable patients was more superficial and context-based.

"In this unit, all staffs know the patients admitted for a long time. For example, five, six, seven, and more patients stay admitted here for a long time. Further, most of our handovers were focused on the new patients; since our staff knew other patients well before" (KII, P7).

Theme 3: The consequences of the ineffective clinical handover.

The nurses described the consequences of the ineffective clinical handover practice such as medical errors, patient dissatisfaction, and increased average length of stay.

Some participants stated that the nurse's clinical handover requires stakeholder attention to avoid patient harm related to ineffective practice. A participant described his perception as follows:

"As of now, the gap with the current handover in our unit is not bolded. However, I believe that handover should be given more consideration. ...Sometimes medication administration problems occurred. If it lacks attention today, further problems may occur tomorrow." (IDI, P10)

The majority of the participants reported that the current clinical handover affected the patients in hidden ways. Further, they believed that patients were harmed daily by poor clinical handover practices during shift changes. *A participant described it as follows:*

"There is no question about patient harm related to ineffective practice. Our patients are severely harmed by the poor handover. I am convinced that poor handover practices harm our patients daily. ...Our patients sometimes keep silent despite their pain. This is because they are unsure to whom they should address their concerns. ...Mostly, they complain about missed medication. I believe this is because of poor handover"(KII, P4).

Many study participants stated that poorly implemented clinical handovers sometimes severely affected their patients. They stated that despite being unreported, the patients were daily exposed to errors due to poor clinical handover. Further, they decribed that poor clinical handovers caused delays in care provision. A participant stated as follows:

"Poorly implemented handovers may increase the average length of stay, increased mortality, poor quality of services, a lack of early management, delays in care, delays in medication administration, delays in procedures, and delays in laboratory investigation" (KII, P7).

Study participants further reported that poorly planned clinical handover impairs the daily activities of nursing care. They perceived that it was dangerous for all dimensions of care. They reported that, despite the strict work to improve the poor practice, it's inevitable. Key informants described the experience as follows:

"Medical errors will be inevitable if the clinical handover is not implemented effectively. Medication administration problem occurs. Sometimes, medications are not given at an ordered time and ordered laboratory investigations are forgotten and delayed ordered procedures occur. ...This is because of poor communication during the shift change" (IDI 2).

CHAPTER SIX: DISCUSSION

This study aimed to explore the clinical handover experience among nurses who work at Jimma Medical Center. Specifically, aimed to explore factors influencing a nurse's clinical handover and identify the consequences of ineffective clinical handover practice. The study's findings revealed that there were various gaps in the clinical handover of nurses. Therefore, it seems essential to explore the experiences of nurses in clinical handover at Jimma Medical Center to improve the practice.

Accordingly, analysis of the transcript revealed three main themes with their respective subthemes, such as (i) routine practice: communication styles, contents of handover, location of handover, time and duration of handover, handover responsibility, and patient involvement in handover. (ii) Influencing factors: care provider-related, patient-related, and organizational healthcare system-related factors; and (iii) the consequences of ineffective handover practice: medical errors, patient dissatisfaction, and increased average length of stay were identified.

To ensure high-quality handover practices, previous studies have highlighted the improvement of routine clinical handover practice with the use of standardized handover tools, handover training, patient participation, and structured dimensions of interest (23,26,40,63). However, the current study found that the routine practice of nurses' clinical handover had significant gaps because the handover location was varied, the time of handover was not organized, the clinical handover responsible nurse was not specified, there was no patient involvement in clinical handover, and the contents of the information communicated were not standardized, inconsistent, and unstructured. This implied that there were no policies explicitly promoting effective clinical handover with the standardized tool. Further, it is implied that the current clinical handover of nurses requires reformation to improve patient safety.

Furthermore, the current study supports a previous study in Brunei Darussalam (45) that found the routine practice of clinical handovers with unstandardized, inconsistent, and incomplete information that overlapped at the time of handover and during patient handovers across the units. The consistency may be attributed to the fact that an inpatient unit and emergency room are known for rapid patient turnover and the presence of other competing priorities (44) during clinical handover. Structuring and enhancing the routine practice of nurses' clinical handover at the medical-surgical and emergency units of Jimma Medical Center require coordinated activities. Similarly, a study in Iran in 2015 explored a non-patient-centered approach (14) during clinical handover, which is in line with the current finding. This indicates poor culture of patient-centered care practices, which need the future attention of health care professionals.

The study findings in the United Kingdom in 2016 (42) and South Korea in 2022 (44) showed poorly structured bedside clinical handover practice, handover style, and content, which support the current finding. The similarity may be because the dimensions they explored were related to the current study. Despite different literature recommending the structured contents of the information during the clinical handover with validated mnemonics such as ISBAR (11,26), the current study findings indicated that no study unit used standardized checklists. A ward-specific handover book was commonly used during clinical handover. This shows a major concern to patient safety that requires the right next step that would yield more credible results at Jimma Medical Center.

In regards to influencing factors of clinical handover, the current study identified different key factors related to nurses as care providers. Accordingly, nurses' attitudes, nurses' knowledge, nurses' job satisfaction, nurses' commitment, effective interpersonal communication, and nurses' perceptions toward clinical handovers were explored. This study revealed a lack of those identified nurses' related factors, negatively affecting the quality of clinical handover and patient safety. Similarly, the previous studies at Indiana University (55) in 2010, in Canada in 2021 (54), and in Brazil in 2020 (50), found various nurse-related factors similar to the current finding. This shows that handover communication failures continue to challenge patients and nurses across different healthcare settings. Because nurses are frontline healthcare workers who are subjected to frequent clinical handovers, more work is needed to improve patient outcomes. The identified nurse-related factors that influenced the clinical handover require timely interventions to improve the patient's safety and the safe transition of care.

This study also explored key organizational healthcare system-related factors that affected the nurses' clinical handover. such as a lack of handover training, a lack of supportive policy and guidelines, a lack of standardized and structured handover communication methods and tools, a lack of adequate transport service facilities, a lack of supportive supervision, and an inadequate nurse workforce. However, the Joint Commissi on in 2017 and the World Health Organization in 2007 (26,40) have recommended that organizational healthcare systems facilitate effective clinical handover. These identified factors require organizational-level strategies to minimize these barriers. Further, the current study finding is consistent with previous research from Ireland (52), and Iran (14), which were affected by different organizational system-related factors. This demonstrates that clinical handover in medical-surgical and emergency units still requires great work from the healthcare facility. Furthermore, while organizational healthcare system-related factors have been identified in various literature sources, further robust interventional studies can enhance the quality of the clinical handover practice of the study setting.

Furthermore, this study explored patient-related factors that influenced nurses' clinical handover in the study setting. Patient health status-related factors are those that relate to patients' characteristics at the time of clinical handover, such as stable physiological health conditions, critical health conditions, and the average length of stay at the unit. Accordingly, in the current study, the method of communication, the location of the handover, the contents, and the timing of the handover depends on the patient's clinical health status. This implied that there was more information omitted for the stable patients. This finding is consistent with a study conducted in Oslo, Norway in 2021 (53). The consistency may be explained by the fact that the handover process is a context-based activity implemented with many other competing priorities and time constraints. Similarly, this finding also showed patients admitted for a prolonged period were rarely involved in the clinical handover process. This finding is consistent with the study finding in Canada (54) that nurse handover focused on recently admitted and acute patients. The consistency may be due to the nature of nursing care priorities and the staff's familiarity with the long-term admitted patients.

Finally, the majority of the study participants described the consequences of the ineffective clinical handover practice that resulted in medical errors (medication administration errors, incorrect procedures), patient dissatisfaction, and an increased average length of stay. This indicates that when information is not adequately and completely shared, it causes patient harm and patient dissatisfaction. Applying effective clinical handover is mandatory to improve patient safety. This is in line with the study's findings in Australia (48). The consistency may be because of clinical handover is holistic, which puts the patient at risk of information loss. The current finding contributes to a clear understanding of the consequences of ineffective clinical handover, which require important intervention. This result also contributes to the evidence for improving patient safety through the optimization of the clinical handover.

Strengths and limitations of the study

Strengths

This study uses multiple data sources such as interviews and observation, to develop a comprehensive understanding of phenomena.

Limitations

The qualitative nature of the study limits the generalization of the finding to other settings. Further, the findings were generated from a single institutional study with a purposive sample at a single point in time which limits the generalization to a wider population of healthcare professionals in other healthcare settings

CHAPTER SEVEN: CONCLUSION AND RECOMMENDATION

7.1. Conclusion

This study aimed to explore clinical handover experience in nursing practice at Jimma Medical Center. The study explored the routine practice of clinical handover, the influencing factors of clinical handover, and the consequences of ineffective clinical handover practice.

Accordingly, this study found that the routine practice of a nurse's current clinical handover, such as communication styles, location of handover, time of handover, the content of handover, patient involvement, and handover responsibility, was inconsistent, incomplete, unstandardized, lacking in the protocol, and did not follow recommended guidelines by the literature. Finding from indepth interviews, key informant interviews and observation explored that there were significant gaps that need tailored intervention across different units.

Furthermore, different factors that influenced the nurses' clinical handover practice were explored, including the lack of organizational healthcare systems-related factors that support nurses' clinical handover; care provider-related factors that negatively or positively influenced clinical handover; and patients' health status-related factors that greatly influenced the routine practice. These factors severely affected the routine practice of nurses' clinical handover.

This study also identified the consequences of ineffective clinical handover practices that caused significant harm to the patients. Participants reported ineffective clinical handover processes were found to cause medication errors, medical errors, and patient dissatisfaction, which reduced patients' safety and the quality of their services. This study facilitated an understanding of the need to improve nurses' clinical handover at Jimma Medical Center.

7.2. Recommendation

According to the findings of this study, the nurse's clinical handover had significant flaws that required the attention of the stakeholders. As a result, the following recommendations are made in consideration of the result and conclusion of the study.

Jimma Medical Center: should provide handover training, customize context-based handover standards tools, and facilitate adequate transport service, especially during nighttime shift changes.

Further, should work on the arrangement of adequate handover time, clinical handover guidelies and standardization.

The nursing director's office of Jimma Medical Center: should apply mentor and supportive supervision rather than hierarchical communication during clinical handovers. Further, should work on the adaptation of new styles of clinical handover supported by evidence-based practice.

The nurses' care providers and the head nurses: suggested of improving their knowledge, attitudes, interpersonal communication, commitments, and job satisfaction through continuous professional development and evidence-based utilization.

Future researcher:

✓ Should further explore how the documentation system and other contextual factors affect the nurse's clinical handover quality. Because the current study did not evaluate the quality and completeness of inpatient documentation concurrent with the handover process.

✓ Suggested to employ direct observation of the clinical handover events pursued with intervention.

 \checkmark Further, recommended assessing the magnitude and quality of the nurse's clinical handover.

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APPENDICES

ANNEX ONE: ENGLISH VERSION OF INFORMED CONSENT

PART I: INFORMATION SHEET

My name is Gurmu Dumbala; I am a graduate nursing student in the Adult health nursing program at Jimma University. I am conducting a research study with the title "clinical handover lived experience in nursing practice at JMC, Ethiopia, 2022".

The purpose of the study is to examine the handover practice of nurses working in JMC.

What we will ask you to do: If you agree to participate in this study, the interviewer will proceed to ask you questions on this paper. The questions cover the content-related demographic characteristics and the depth interviews of your opinion of handover practice experience. The interview will be audio recorded to get understand deeply. Answering the questions will take about 30 minutes to 1 hr to complete.

Taking part is voluntary: I would like to inform you that your participation is entirely voluntary, and if you wish to withdraw from the study, you may do so at any time. You will not be requested to give reasons for withdrawing from the study, and it will not affect you or any relative in your family.

Your answer will be confidential: neither your name nor any other self-identifying information will be collected.

Risks and **benefits**: There will be no direct benefits from participating in this study, but your participation will help to increase the practice of handover practice, to patient harm. Your participation will help to conduct other studies in the future. You are allowed to ask any question before you agree to take part in this study and be made to sign this consent.

Thank You!

PART II- INFORMED CONSENT FORM

I have heard the above information, and have received answers to any questions I asked.

I consent to take part in the study.

Signature of the participant:	Date:	/	_/
Signature of the researcher:	Date:	//	/
Name of the researcher:	_		
Phone number of the researcher:			

ANNEX TWO: AMHARIC VERSION INFORMED CONSENT

ክፍል አንድ፡ የጦረጃ ሉህ

ስሜ ንርሙ ዱምባላ እባላለሁ; በጅማ ዩኒቨርሲቲ የአዋቂዎች ጤና ነርሲንግ ፕሮግራም የነርስ ተማሪ ነኝ። በጄኤምሲ ውስጥ የሚሰሩ ነርሶች የርክክብ ልምምድ፣ በሚል ርዕስ የምርምር(HANDOVER PRACTICE OF NURSES WORKING IN JMC) ጥናት እያካሄድኩ ነው።

የጥናቱ አላማ በJMC ውስጥ የሚሰሩ ነርሶችን የርክክብ አሰራርን መመርመር ነው።

እንዲያደርጉ የምንጠይቅዎት፡ በዚህ ጥናት ላይ ለመሳተፍ ከተስማሙ፡ ጠያቂው በዚህ ወረቀት ላይ ጥያቄዎችን ይጠይቅዎታል። ጥያቄዎቹ ከይዘት ጋር የተያያዙ የስነ-ሕዝብ ባህሪያትን እና ስለ ርክክብ ልምምድ ያለዎትን ጥልቅ ቃለ-መጠይቆች ይሸፍናሉ። በጥልቀት ለመረዳት ቃለ ምልልሱ በድምጽ ይቀዳል። ለጥያቄዎች መልስ ለመስጠት ከ30 ደቂቃ እስከ 1 ሰአት ይወስዳል።

መሳተፍ በፈቃደኝነት ነው፡ ተሳትፎዎ ሙሉ በሙሉ በፈቃደኝነት ላይ የተመሰረተ መሆኑን ለማሳወቅ እወዳለሁ እና ከጥናቱ ለመውጣት ከፈለጉ በማንኛውም ጊዜ ሊያደርጉት ይችላሉ. ከጥናቱ ለመውጣትዎ ምክንያቶችን እንዲሰጡ አይጠየቁም, እና በእርስዎ ወይም በቤተሰባችሁ ውስጥ በማንኛውም ዘመድ ላይ ምንም ተጽእኖ አይኖረውም. መልስህ ሚስጥራዊ ይሆናል፡ ስምህም ሆነ ሌላ ራስን የሚለይ መረጃ አይሰበሰብም።

ስጋቶች እና ጥቅማ ጥቅሞች፡ በዚህ ጥናት ላይ ከመሳተፍ ምንም አይነት ቀጥተኛ ጥቅማጥቅሞች አይኖሩም ነገር ግን የእርስዎ ተሳትፎ በትዕግስት ላይ ጉዳት ለማድረስ የመስጠት ልምድን ለመጨመር ይረዳል. የእርስዎ ተሳትፎ ወደፊት ሌሎች ጥናቶችን ለማካሄድ ይረዳል። በዚህ ጥናት ውስጥ ለመሳተፍ ከመስማማትዎ በፊት እና ይህን ስምምነት እንዲፈርሙ ከመደረጉ በፊት ማንኛውንም ጥያቄ እንዲጠይቁ ተፈቅዶላቸዋል።

አጦሰግናለሁ !

ክፍል ሁለት፡- <u>በጦረጃ የተደንፈ የፈቃድ ቅጽ</u>

በ ፍቲ አመሰትፍ ረ ቀየኛ ነኝ።

ከላይ ያለውን መረጃ ሰምቻለሁ፣ እናም ለጠየቅኳቸው ጥያቄዎች መልስ አግኝቻለሁ።

የተሣታፊው ፊርማ፡	ቀን፡	/	/		
የተሞራማሪው ፊርማ፡	_ ቀን፡	/		_/	
የተሞራማሪው ስም፡					
የተጦራማሪው ስልክ ቁጥር፡					

ANNEX THREE: AFAAN OROMOO VERSION OF INFORMED CONSENT KUTAA I: WARRAAQSA ODEEFFANNOO

Maqaan koo Gurmuu Dumbalaa jedhama; Ani Yuunivarsiitii Jimmaa keessatti sagantaa yaala fayyaa Ga'eessotaa keessatti barataa narsii eebbifamaadha. Mata duree "haala walitti kenninsa dhukkubsataa kan narsoota Giddugala Meedikaalaa Jimmaa, Itoophiyaa, 2022" jedhuun qorannoo gaggeessaa jira.

Kaayyoon qorannichaas gocha walharkaa fuudhinsa dhukkubsataa kan narsoota JMC keessatti hojjetan qorachuudha.

Waan akka gootu si gaafannu: Qo'annoo kana irratti hirmaachuuf yoo walii galte, namni af-gaaffii godhu waraqaa kana irratti gaaffii si gaafachuuf itti fufa. Gaaffiiwwan amala dimogiraafii qabiyyee waliin walqabatan fi af-gaaffii gadi fageenyaa waa'ee yaada shaakala dabarsuu kee irratti taasifamu kan hammatudha. Gaaffiiwwan deebisuun xumuruuf gara daqiiqaa 30 hanga sa'aatii 1 isin fudhata.

Hirmachuun fedhii ofiitiin kan raawwatamu ta'uu isaa: Hirmaannaan keessan guutummaatti fedhiidhaan akka ta'e, qorannoo kana keessaa bahuu yoo barbaaddan yeroo barbaaddanitti gochuu akka dandeessan isin beeksisuun barbaada. Qorannicharraa sababii adda kutte akka kennitu hin gaafatamtu, sirrattis ta'e fira maatii kee keessa jiru kamiyyuu irratti dhiibbaa hin qabu.

Deebiin keessa iccitiin taa'a: maqaan kees ta'e odeeffannoon of ibsu kan biraa hin sassaabamu.

Balaa fi faayidaa: Qorannoon kana irratti hirmaachuun faayidaan kallattiin hin jiraatu, garuu hirmaannaan keessan shaakala walirkaa fuudhinsa dhukkubsataa guddisuuf gargaara, dhukkubsataa saaii hiria kanaaf miidhamu hambisuu mala. Hirmaannaan keessan gara fuulduraatti qorannoowwan biroo gaggeessuuf gargaara. Qorannoon kana irratti hirmaachuuf walii galuu kee dura akkasumas hayyama kana akka mallatteessitu taasifamuu kee dura gaaffii kamiyyuu gaafachuun siif hayyamameera.

Galatoomaa!

KUTAA LAMA: UNKA HEEYYAMA ODEEFFANNOO

Odeeffannoo armaan olii kana dhaga'eera, gaaffii kootiif deebii argadheera.

Qorannicha irratti hirmaachuuf waliin gala.

Cufiinsa Mallattoo Hirmaataa			Guyyaa	/	/	·
Mallattoo qorataa	/	/	·			
Maqaa Qorataa:						
Lakkoofsi bilbilaa qorataa:						

ANNEX FOUR: QUESTIONARIES

PART I: Socio-Demographic Characteristics of the Study Participants.

Table 2: Socio-Demographic Characteristics of Study Nurses working in JMC, Southwestern Ethiopia, 2022

s/n	Variables	Responses
1.	Participants code	
2.	Age:	Years.
3.	Sex	1. Male 2. Female
4.	Educational status	1. BSc. Degree nurse
		2. MSc. Nurse and above
5.	Position/role	1. Staff nurses
		2. Dep't head
6.	Year of experience	1. 6 month-2year
		2. 3-5 year
		3. ≥ 6 years
7.	Length of time in	1. Six months to one year
	the unit.	2. Greater than one year
8.	Working Unit:	

PART II: SEMI-STRUCTURED OBSERVATION OF SHIFT HANDOVERS

Table 3: Semi-structured observational guides of handover practice among nurses working at JMCSouth Western Ethiopia, 2022

Sh	ift type: 1. MTA 2. ATN 3. NTM Date://
Ti	me spent (min):to Place No. of observation:
1.	What are the methods/styles of patient
	handover?
2.	What activities happened during the handover?
3.	What people are doing and saying?
4.	Where do handover interactions take place?
5.	What are the variations in the behavior observed?
6.	Types of tools used during handover
7.	When do conversations and interactions take place?
8.	Who and how many people are present in the setting or take part in the activities?
9.	Frequent report contents as per ISBAR:(Identification, Situation, Background,Assessments, Recommendation).
10.	Distractors of handover and distraction types
11.	Arrival time of receivers and time of departure of senders.

Name of observer ______ signature _____

PART III: In-Depth Interview Guide Questions.

I. English Version

✓ Interviewee: _____ Date of Interview: _____

✓ Place: ______ Time of Interview: _____

✓ Duration of Interview: _____

1. Would you tell me about the practice of handover during shift changes at this ward? Probe to, time of handover, patient involvement, and location of handover and handover responsibility. How? why?

2. Could you tell me about the contents of the information transferred during the handover? Would you describe the Information giving and receiving process? The preparation before patient transfer? How? why?3. What do you think about the methods of nurses' handover at this ward/unit? Probe to: - Standardized handover tool, structured handover checklists? How do you transfer patient information? What it should be?4. Would you explain the consequences of ineffective handover in this unit? Probe to: - What are the problems that occurred to the patients because of poor handover? How does it happen? What are the challenges?

5. What do you think about factors that influence your handover during shift changes? Probe to: - What are the facilitators, and barriers? "Is there anything else you would like to tell me?" or "is there any other question you think I should have asked you?"

Thank you!

2. AF-GAAFFII GOSA AFAAN OROMOO

 Hirmataa
 Guyyaa Af-gaaffii:
 .

 Bakka:
 Yeroo Af-gaaffii:
 .

1. Waa'ee shaakala walharkaa fuudhinsi dhukkusata narsootaa kutaa kana keessatti raawwatamu natti himtaa? Qorannoo gara: yeroo walharkaa fuudhinsa dhukkubsataa, hirmaannaa dhukkubsataa, fi bakka wal harkaa

fuudhinsa dhukkubsataa, fi itti gaafatamummaa yeroo wal harkaa fuudhinsaa.

2. Qabiyyee odeeffannoo yeroo walharkaa fuudhinsi dabarfamee natti himuu dandeessu? Adeemsa Odeeffannoo kennuu fi fudhachuu ni ibsita? Jijjiirraa dhukkubsataa dura qophii godhamu maali?

3. Waa'ee mala walharkaa fuudhinsa narsootaa kutaa/yunitii kana keessatti maal jettu? Qorannoo gara: -Meeshaa dabarsuu sadarkaa isaa eeggate, tarreewwan sakatta'iinsa dabarsuu caaseffama? Odeeffannoo dhukkubsataa akkamitti dabarsitu? Maal ta'uu qaba?,.

4. Taatee/ bu'aa walharkaa fuudhinsi bu'a qabeessa hin taane kutaa kana keessatti fidu haala kamiin ibsita? Gara Rakkoon sababa walharkaa fuudhinsi gaarii hin taaneef dhukkubsattoota mudate maali? Akkamitti ta'a? Qormaatni maal fa'a?

5. Yeroo wal harkaa fuudhinsa dhukkubsataa raawwattan, wantoota walharkaa fuudhinsa keessan irratti dhiibbaa geessisan maal jettu? Qorannoo gara: - Haala mijeessitoonni, fi gufuuwwan maali? "Wanti biraa natti himuu barbaaddu jiraa?" ykn "gaaffiin biraa silaa si gaafachuu qaba jettee yaaddu jiraa?"

Galatoomaa!

3. AMAHARIC VERSION

. የእንግሊዝኛ ቅጂ

 በዚህ ዋርድ በፈረቃ ለውጥ ወቅት ስለ ነርሶች ርክክብ ተግባር ይነግሩኛል? በጊዜ፣ የታካሚ ተሳትፎ እና የርክክብ እና የርክክብ ሃላፊነት ቦታን መመርመር።

2. በርክክብ ወቅት ስለተላለፈው መረጃ ይዘት ሊነግሩኝ ይችላሉ? የመረጃ አሰጣጥ እና የመቀበል ሂደቱን ይገልጹታል? ታካሚ ከመተላለፉ በፊት ዝግጅት?

 በዚህ ክፍል/ ክፍል ውስጥ ስለ ነርሶች ርክክብ ዘዴዎች ምን ያስባሉ? ምርጦራ ለ፡ - ደረጃውን የጠበቀ የርክክብ ምሣሪያ፣ የተዋቀረ የርክክብ ማረጋገጫ ዝርዝሮች? የታካሚ መረጃን እንዴት ማስተላለፍ ይቻላል? ምን መሆን አለበት?
 በዚህ ክፍል ውስጥ ውጤታማ ያልሆነ ርክክብ የሚያስከትለውን መዘዝ ያብራራሉ? ምርጦራ: - በደካማ ርክክብ ምክንያት በታካሚዎች ላይ ያጋጠሙ ችግሮች ምን ምን ናቸው? እንዴት ነው የሚሆነው? ፈተናዎቹ ምንድን ናቸው?
 በፈረቃ ለውጦች ወቅት በእርስዎ ርክክብ ላይ ተጽዕኖ ስለሚያሳድሩ ነገሮች ምን ያስባሉ? ምርጦራ ለ: - አመቻቾች እና እንቅፋቶች ምንድን ናቸው? "ሌላ ልትነግሪኝ የምትፈልገው ነገር አለ?" ወይም "ሌላ ልጠይቅህ ነበረብኝ ብለህ የምታስበው ጥያቄ አለ?"

አጦሰግናለሁ!

DECLARATION

I, the undersigned, declare that this thesis is my original work, has not been presented for a degree in this or any other university, and that all sources of materials used for the thesis have been fully acknowledged.

Name:			
Signature:			
Name of the institution:			
Date of submission:			
This thesis has been submitted for examination	with my approval as a	University advisor	
Name and Signature of the first advisor			
Name and Signature of the second advisor			
Approval of the examiners			
Internal examinor	Signature	Date	
External examinor	Signature	Date	