



Arab American University
Faculty of Graduate Studies

**The Impact of nursing bedside handover using
(Situation-Background-Assessment-Recommendation)
SBAR on nurses and patient satisfaction during daily
change shift at Governmental hospitals in West Bank**

By
Talal Faraj Abd-Alsalam

Supervisor
Dr. Atef Al-Rimawi

**This thesis was submitted in partial fulfillment of the
requirements for the Master's degree in
the Quality Management in Health Institutions**

June/2024

© Arab American University - 2024. All rights reserved.

Thesis Approval

The Impact of nursing bedside handover using (Situation-Background-Assessment-Recommendation) SBAR on nurses and patient satisfaction during daily change shift at Governmental hospitals in West Bank

By

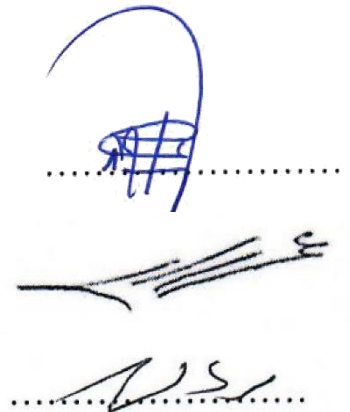
Talal Faraj Abd-Alsalam

This thesis was defended successfully on 27/06/2024 and approved by:

Committee members

Signature

1. Dr. Atef Al-Rimawi: Supervisor
2. Dr. Imad Abu Khader: Internal Examiner
3. Dr. Rebhi Bsharat: External Examiner



.....

.....

.....

Declaration

I, the undersigned, declare that I submitted the thesis entitled:

The Impact of nursing bedside handover using (Situation-Background-Assessment-Recommendation) SBAR on nurses and patient satisfaction during daily change shift at
Governmental hospitals in West Bank

I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

The Name of The Student: Talal Faraj Abd-Alsalam

ID: 202113100

Signature: Talal Abd-Alsalam

Date: 07/11/2024

Dedication

I want to express my deep appreciation to Dr. Atef Al-Rimawi for his exceptional guidance and invaluable feedback during my thesis work. His expert advice played a crucial role in shaping my research and bringing it to fruition.

I am also grateful to the esteemed professors, doctors, and committee members who participated in my research. Their insightful contributions and feedback have enhanced the quality of my work.

I would like to acknowledge all those who have contributed directly or indirectly to the development of this thesis. Their unwavering support, encouragement, and assistance have been invaluable, and I deeply appreciate their contributions. I want them to know they have my enduring friendship, appreciation, and respect

Immense gratitude to you all

Acknowledgment

First and foremost, I extend my heartfelt gratitude to God, the Almighty, for giving me various blessings, knowledge, and opportunities and finally allowing me to finish the thesis. Furthermore, I would like to convey my gratitude and appreciation to Dr. Atef Al-Rimawi, my supervisor, for his assistance and guidance.

Dr. Atef Al-Rimawi provided me with excellent knowledge in the field of research and considerable time assisting me in completing my thesis; with his guidance, support, and mentorship, I was able to progress to this point.

In addition, I would like to acknowledge the contributions of all those who have supported me in various ways during my study courses. Their encouragement, insights, and assistance have enriched my research and made this thesis possible.

Finally, I also want to express my sincerest appreciation to my family, whose constant support and care have been a continuous source of strength and motivation. Their belief in me and encouragement throughout my academic pursuits have been instrumental in my achievements.

Abstract

Introduction: Quality Improvement (QI) in healthcare settings is an essential part of continuously pursuing the optimal health outcomes and patient satisfaction. A major area of focus in QI is the communication process across healthcare teams, in which Situation-Background-Assessment-Recommendation (SBAR) tool has proven its efficiency and effectiveness in handoffs among nurses and between nurses and patients. The aim of this study was to assess the change in satisfaction levels among nurses and patients after implementing an educational session related to the application of SBAR tool on targeted governmental hospitals in West Bank – Palestine.

Method: A pretest-posttest design was conducted between 15/4/2024 and 15/5/2024 on a convenient sample of 259 nurses and 287 patients, and were asked to answer a self-administered questionnaire consisting of demographic factors and satisfaction scale regarding the communication process, including the quality of information, interaction and support, and efficiency domains. The data collection committed to ethical considerations of privacy and confidentiality, and were analyzed using SPSS.

Results: Median age was 31 years old for nurses and 47 years old for patients, and were mostly married, holding university degrees and more living in villages and cities. Moderate-to-high scores of satisfaction were noticed in the pretest phase among nurses and patients, which they have significantly increased in all domains among nurses, and except for efficiency domain among patients. Several demographic factors were related to significant differences in mean satisfaction scores in both phases.

Conclusion: Satisfaction among nurses and patients towards communication process when they were educated about SBAR tool significantly increased. It is recommended to conduct further studies with larger inclusion of departments and types

of hospitals and satisfaction tools. Nurses need to focus more on decreasing interruptions, and policy-makers should fund educational and training sessions of such topics.

Keywords: SBAR, Situation-Background-Assessment-Recommendation, patient satisfaction, nurse satisfaction, impact.

Table of Contents

Thesis Approval.....	I
Declaration.....	II
Dedication.....	III
Acknowledgment.....	IV
Abstract.....	V
Table of Contents.....	VII
List of Tables	X
List of Figures.....	XI
List of Appendices	XII
List of Abbreviations	XIII
Chapter One: Introduction.....	1
1.1 Background.....	1
1.2 Problem Statement.....	6
1.3 Significance of the Study.....	8
1.4 Study Aim and Objectives	9
1.5 Specific Objectives	9
1.6 Study Questions.....	10
1.7 Study Hypotheses	10
1.8 Definition of Terms.....	11
1.8.1 Conceptual Definitions	11
1.8.2 Operational Definitions	12
1.8.3 Conceptual Framework	12

VIII

Chapter Two: Literature Review	14
2.1 Impact of SBAR Communication Tool Use on The Satisfaction of Patients	15
2.2 Impact of SBAR Communication Tool Use on The Satisfaction of Nurses.....	18
2.3 Conclusion	22
Chapter Three: Methods	23
3.1 Study Design	23
3.2 Site and Setting.....	23
3.3 Study Population and Sample.....	24
3.4 Eligibility Criteria.....	25
3.4.1 Inclusion Criteria:	25
3.4.2 Exclusion criteria:.....	25
3.5 Study Variables	25
3.6 Data Collection Tool and Implementation.....	25
3.7 Guidelines of Structured Education.....	26
3.8 Period of the Study	27
3.9 Piloting	27
3.10 Validity and Reliability	28
3.11 Data Analysis	28
3.12 Ethical Considerations.....	29
Chapter Four: Results	31
4.1 Part 1: Demographic Data of the Nurses and Patients.....	31
4.2 Part 2: SBAR Tool Satisfaction Scale	37
4.3 Part 3: Analytical Results	44
4.4 Conclusion.....	50

Chapter Five	51
Discussion.....	51
Recommendations	58
Limitations.....	60
References	61
Appendices	71
الملخص.....	80

List of Tables

Table 1.1: Distribution of Nurses' Numbers and Respected Samples from the Targeted Hospitals	24
Table 4.1: Distribution of Nurses' and Patients' Demographic Data.....	32
Table 4.2: Comparison between Pretest and Posttest SBAR Satisfaction Responses Among Nurses	39
Table 4.3: Comparison between Pretest and Posttest SBAR Satisfaction Responses Among Patients	42
Table 4.4: Differences in Mean Satisfaction Scores Among Nurses between Pretest and Posttest Phases.....	44
Table 4.5: Differences in Mean Satisfaction Scores Among Patients between Pretest and Posttest Phases.....	45
Table 4.6: Differences in Mean Satisfaction Scores in Pretest and Posttest Phases Among Nurses	47
Table 4.7: Differences in Mean Satisfaction Scores in Pretest and Posttest Phases Among Patients	49

List of Figures

Figure 1.1: Conceptual Framework of the Study	13
Figure 4.1: Distribution of Nurses' and Patients' Gender	33
Figure 4.2: Distribution of Nurses' Educational Level	34
Figure 4.3: Distribution of Patients' Educational Level	34
Figure 4.4: Distribution of Department Type	35
Figure 4.5: Distribution of Hospitals	35
Figure 4.6: Distribution of Nurses' and Patients' Social Status	36
Figure 4.7: Distribution of Nurses' and Patients' Residenc.....	36
Figure 4.8: Differences in Mean Scores of Satisfaction Domains Among Nurses.....	45
Figure 4.9: Differences in Mean Scores of Satisfaction Domains Among Patients	46

List of Appendices

Appendix (1) Study Questionnaire (for Nurses).....	71
Appendix (2) Study Questionnaire (for Patients)	76
Appendix (3): Approval Letter from the Ministry of Health.....	79

List of Abbreviations

Abbreviation	Meaning
SBAR	Situation-Background-Assessment-Recommendation tool
JCI	Joint Commission International Accreditation
IOM	Institute of Medicine
IPSGs	International Patient Safety Goals
RRT	Rapid Response Team
QUAPACS	Quality of Patient Care Scale
EMR	Electronic Medical Record
AHRQ	Agency of Health Research and Quality
WHO	World Health Organization
CINAHL	Cumulative Index to Nursing and Allied Health Literature
ICU	Intensive Care Unit
CAUTI	Catheter-Associated Urinary Tract Infection
RCT	Randomized Controlled Trial
QI	Quality Improvement
LOS	Length of stay
SD	Standard Deviation
IQR	Interquartile Range
SPSS	Statistical Package for Social Sciences
IRB	Institutional Review Board
AAUP	Arab American University – Palestine
6Cs	Care, Compassion, Competence, Communication, Courage and Commitment
PI	Primary Investigator

Chapter One

Introduction

1.1 Background

The famous report “To Err is Human” that was published by the Institute of Medicine (IOM) in 2000 was the landmark for focusing on the medical errors that frequently occur in health settings, and focusing on the root causes of such errors in order to solve them, enhancing the patient’s safety and the provided quality of care (Institute of Medicine Committee on Quality of Health Care in, 2000). The communication process during shift rotation, ward rounds and meetings of the healthcare team is an essential part to focus on during the continuity of patient’s care, because communication is one of the 6Cs (Care, Compassion, Competence, Communication, Courage and Commitment), recognized as a fundamental nursing practice aspect, as well as a skill that should be shared on the interprofessional level, influencing the patient safety (Herawati et al., 2018; Park et al., 2019). The process of nursing bedside handover is composed of information sharing during the changing and rotation of shifts, which at least occurs twice during the daily 24-hour cycle, and involves three main stakeholders: the incoming nurse, the outgoing nurse and the patient (Mardis et al., 2016). The second aim of the International Patient Safety Goals (IPSGs) that are established by the Joint Commission International Accreditation (JCI) is improving the effective communication, which comes right after the first goal of correct patient identification, and therefore there is a high focus on the communication process that either involves or happen in front of the patient, especially during the shift changes, where integrity and completeness of information shared from the outgoing nurses to the incoming nurses are the base for patient safety and continuity (Joint Commission International, 2024).

The handover period is known for its main source of errors in healthcare, where, for example, an annual survey that was conducted by the Health Care Research Quality in 2014, and included 653 hospitals and 405,281 responses, stated that “important patient care information is often lost during shift changes” in 51% of the responses (Agency for Healthcare Research and Quality, 2014). The process of handover also contains several aspects to look at, including the time spent by the nurses in information sharing for each patient, in which a study found that it ranged from 20 to 331 seconds (mean = 72.8 ± 58.4), which indicates a wide range of time, mainly related to the differences in patients’ conditions, cases and the changes that occurred during the shift, in addition to specific types of information that are varying in their coverage during the handover process, including patient’s name (96.6%), pain assessment (80%), followed by admission reason (76.6%), as well as the nurse introduction who is allocated to the care of patient (Forde et al., 2020).

Using a standardized handover tool is the best way to ensure the continuity and practicality of handover as the main communication process that happens between nurses, and the most commonly used tool in this aspect is SBAR, which is the abbreviation of Situation-Background-Assessment-Recommendation, and is used in several healthcare, military and aviation services (van der Wulp et al., 2019), and was first introduced by the US navy, and then adapted for the healthcare sector by a rapid-response team (RRT) in USA called Kaiser Permanente (Achrekar et al., 2016). Another standardized communication tool that is widely used inside the medical units is PCAE, which is the abbreviation of Present, Ask, Check/Clarify and Express, which was based on the training tool that was successfully used to enhance medical team communications during consults, which was first introduced in the book of Bostrom (1984) about competence in

communication (Streeter & Harrington, 2017). SBAR criteria are a basic and a good way to guide nursing effectively to escalate a clinical problem which may require immediate nursing action or to facilitate effective and safe handover between health care workers between shifts (Felipe et al., 2022).

As a nurse, the use of SBAR tool includes focusing on several points during each of the sections, and this should be preceded by practicing its use, and using it in order without jumping between the sections, giving yourself enough time, as well as documenting the information needed to be included, checking the appropriateness of the environment, and not being afraid to ask for any unclear information. In the “Situation” section, the nurse should clearly state his/her full name and profession, to avoid mixing of similar names, as well as the location of you, especially when handing off a patient to another ward, followed by the patient’s details. Second, in the “Background” section, the nurse should focus on the most important and relevant current information about the patient that are needed to be shared, while in the third section related to “Assessment”, patient’s current and normal health condition should be clarified, with a brief suggestion about what the current problem could be. Lastly, the “Recommendation” section focuses on being clear of what the next healthcare provider is needed to do, which is supported by asking him/her to repeat the provided information, as well as taking notes if needed (Park et al., 2019). The introduction of standardized communication tools should be initiated during the academic period for nurses, as studies have found that introducing SBAR tool throughout a simulation-based training was associated with significant enhancements in the nursing students’ communication clarity, which leads to positive results regarding their attitudes about patient safety, as well as in the areas of communication ability, learning self-efficacy, confidence and critical thinking, which will

all lead to high preparedness level among those students for the actual professional life later (Yun et al., 2023).

The main focus of the enhanced communication process among nurses during shift changing is the quality of care, and patient satisfaction is one of its cardinal parts. This appears in the attention and perception of nurses about the meaning of handover process, and acknowledging the aim of inefficacy avoidance during handover, which may lead to incorrect communication process. On the opposite side, some limitations appeared in such a process, like the less participation of nursing technicians in the communication during handover, as well as other environment-related compromises, like attention lack, side talks and the provision of incomplete information during handover (Santos et al., 2020). This area of quality of care can be measured from the patient's point of view, by which a study, for example, utilized a pre-post design to assess the efficacy of using a standardized communication tool, which was SBAR in this case, on the quality of care that is provided to the patients, using a valid tool called the Quality of Patient Care Scale (QUAPACS), which found that all main dimensions of healthcare has significantly improved when the nurses were trained on SBAR communication tool, which were the psychosocial, physical and communication dimensions (Abbaszade et al., 2021).

Another experimental study focused on the changes in patient satisfaction and nurses' compliance to the mentioned areas of attention when implementing SBAR tool, which emphasizes the importance of continuous nursing education and training on effective, standardized and structured communication tools, in the enhancement of patient satisfaction as an important indicator of the overall quality of care. The study found that nurses' compliance to the structures of SBAR tool significantly improved from a range of 32.5%-54.6% to a range of 86.1%-88.6% across the SBARA steps. This has been

reflected in the other components of time, duration, physical appearance, information of the patient and reading back, which improved from 20.3%-77.9% to 84.0%-100%. On the patient's side, the median scores of patient satisfaction significantly increased from 11 to 12 (S. Ghosh et al., 2021). An integrative review (which is a type of reviews that nurses excel in their conduction) found that organized and systematic provision of training and simulation about the proper interprofessional standardized communication tools helps in addressing the wider components of patient's health, mainly related to patient safety, as the main part of quality of care, in addition to diversity valuation, cultural humility and team sciences, or else known as team norms (Burgener, 2017; Foronda et al., 2016). Another integrative review by Hada and Coyer (2021) found that clinical metrics significantly improves when a standardized shift-to-shift handover tools are implemented, where the falls rate reduced by 9.3% to 80%, in addition to a reduction by 45% to 75% in the pressure injuries, and 11.1% to over 50% reduction in the incidence of medication errors.

In the area related to bedside handover, the effectiveness of the communication process should be evaluated from the staff and patient's perspectives. While several advantages are seen in bedside handover, others stated several disadvantages. Main advantages were focused on introducing the incoming nurse, asking patients how they are and feel, the visual checks of the patients and their files, as well as increased opportunities to ask questions, providing a high quality of care, characterized by information and safety continuity, as well as the patient's opportunity to ask questions and correct misinformation, if needed. On the other hand, main disadvantages from the staff's perspective included breaching confidentiality, patient interruptions that slow down the handover process, as well as the patient hearing what is discussed, and these

disadvantages arise from the idea that nurses still see the presence of the patient as passive (Bruton et al., 2016). Several metrics can be used to evaluate the effectiveness of implementing nursing bedside handover using SBAR tool, which includes looking at the clinical metrics from the staff's side, like the evidence-based project that found a 100% increase in the use of standardized handover process and tools, with an increase in the documentation of antibiotics on electronic medical records (EMRs) by 43%. Additionally, the project found that implementing a standardized handover tool resulted in exceeded quality of care benchmarks, as evaluated by the use of Hospital Survey on Patient Safety Culture tool that is developed by the well-known Agency of Healthcare Research and Quality (AHRQ), manifested by increased overall patient safety culture and team work (Bonds, 2018). Therefore, the current study is conducted to investigate the impact of SBAR tool, as the standardized communication tool, on the satisfaction of both nurses and patients during the daily shift rotation in the Palestinian Governmental hospitals in West Bank – Palestine. Also, the study determined the most common sociodemographic factors of nurses and patients that may relate to the changes in satisfaction levels before and after implementing the SBAR tool.

1.2 Problem Statement

From the own experience of the researcher, it was noticed that communication process, especially during nursing handover, faces several challenges among nurses and between nurses and other HCPs. Also, several negative consequences were reported and documented that could have been overcome if the communication process was properly conducted.

Nursing communication during handover is seen as a complex and dynamic interaction, and as a risk point, in addition to that it includes diversity of practices, especially when considering the individual nurse's competence, preferences and confidence (Bruton et al., 2016). Several barriers are known for their impact on effective communication among nurses and between the nurses and the patients, which directly and indirectly affect the patient's satisfaction with the provided care, and these barriers include the use of medical jargon as the most commonly language barrier, background noise, different styles of communication, distractions, time limitations, absence of structured approach, in addition to lack of confidence and hierarchy issues (Park et al., 2019). Ineffective communication process leads to increased clinical errors, as well as diagnosis delays, resulting in patient dissatisfaction (Shitu et al., 2018).

There is a lack in the coverage of the effectiveness of different handover styles among nurses in terms of ensuring information continuity, as stated by Smeulders et al. (2014), which is caused by the lack of trials specifically designed for this aim, and therefore rigorous reviews cannot be established. Another point of interest is related to the fact that nurses who work at any specific unit inside hospitals are trained and educated differently, resulting in different communication styles that are used and adopted by healthcare providers inside the units (Foronda et al., 2016).

The lack of studies in this field, especially combining the perspectives of nurses and patients regarding the results of SBAR tool implementation, also extends to the Palestinian literature, where little is covered about the use of standardized handover communication tools and their impact on satisfaction levels.

1.3 Significance of the Study

The use of SBAR tool as a standardized communication tool between nurses during handover was found to have several positive impacts on the quality of healthcare that is provided in secondary and tertiary healthcare settings, including the increase in healthcare professionals' confidence and the patient's satisfaction (van der Wulp et al., 2019). Also, providing standardized tools through training programs and simulation were found to be effective in the improvement of interprofessional communication, resulting in better shared information, which increases the level of quality of care (Foronda et al., 2016). Studies have found that nurses who are equipped with the suitable communication strategies will understand the expectations required from them, leading to better preparedness to face complex nursing challenges (Streeter & Harrington, 2017).

Studies have found that, looking from both patient's and staff's perspectives, patients value the effective bedside handover process as chance to share and being involved to discuss information about their condition, with the need for training of a unified handover style, which helps in developing confidence, competence and consistency, in terms of handover model, style and content (Bruton et al., 2016). The use of standardized communication tools like SBAR was found to be associated with several quality of care-related benefits, like the financial side, which comes from the decrease in the rates of medication errors, patient falls and nursing overtime hours, as well as patient's and family's satisfaction levels, as well as decreasing adverse events and promoting patient's safety, mainly related to the live checks of the patients by the incoming nurses, and quick identification of changes in health status (Novak & Fairchild, 2012).

The current study will help in identifying the patient's and nurse's perspectives of satisfaction when SBAR tool, as a standardized handover communication tool, inside the

governmental hospitals in West Bank – Palestine, which will also help determining the most commonly related sociodemographic factors. These factors can be focused on by the official stakeholders and Ministry of Health, in order to enhance the communication process among nurses during bedside handover, improving the quality of provided care and patient's outcomes, including their satisfaction. Also, the study will highlight the importance of nursing training and on-going education, as the key method to provide nurses with the updated evidence-based practices, that will help in improving the quality of care.

1.4 Study Aim and Objectives

The main aim of the current study is to determine the impact of using nursing bedside handover of SBAR tool on the satisfaction of nurses and patients during daily changes of shifts at the governmental hospitals of West Bank – Palestine.

1.5 Specific Objectives

- 1- To Determine the sociodemographic data of the nurses and patients who are participating in the study.
- 2- To assess the nurses' satisfaction between pre- and post-interventional phases of SBAR tool implementation during the daily change of shifts.
- 3- To assess the patient satisfaction, post-interventional phases of SBAR tool implementation during the daily change of shifts.
- 4- To investigate the sociodemographic factors that affect the satisfaction levels of nurses and patients from pre- to post-interventional phases of SBAR tool in the governmental hospitals of West Bank – Palestine

1.6 Study Questions

The study tried to answer the following questions:

- 1- What are the sociodemographic data of the nurses and patients who are participating in the study?
- 2- How much the nurses are satisfied during pre- and post-interventional phases of SBAR tool implementation during the daily change of shifts?
- 3- How much are the patients satisfied during pre- and post-interventional phases of SBAR tool implementation during the daily change of shifts?
- 4- What are the sociodemographic factors that affect the satisfaction levels of nurses and patients from pre- to post-interventional phases of SBAR tool in the governmental hospitals of West Bank – Palestine?

1.7 Study Hypotheses

The study tries to test the following hypotheses

H₀: There is no significant relationship between nurses' sociodemographic factors and their satisfaction before and after using SBAR tool as a standardized communication tool inside the governmental hospitals in West Bank – Palestine at a significance level of 0.05.

H₀: There is no significant relationship between patients' sociodemographic factors and their satisfaction before and after using SBAR tool as a standardized communication tool inside the governmental hospitals in West Bank – Palestine at a significance level of 0.05.

H₀: There is no significant relationship between nurses' sociodemographic factors and the change in satisfaction levels after using SBAR tool as a standardized communication tool inside the governmental hospitals in West Bank – Palestine at a significance level of 0.05.

H₀: There is no significant relationship between patients' sociodemographic factors and the change in satisfaction levels after using SBAR tool as a standardized communication tool inside the governmental hospitals in West Bank – Palestine at a significance level of 0.05.

1.8 Definition of Terms

1.8.1 Conceptual Definitions

Patient safety: is defined by the World Health Organization (WHO) as “the absence of preventable harm to a patient and reduction of risk of unnecessary harm associated with health care to an acceptable minimum.” (World Health Organization, 2023).

Shift-to-shift handoffs/handovers: Is defined as the process of transferring the patient's primary authority and responsibility from a caregiver to another, which in this study, involves transferring the care of the patient(s) from the outgoing nurse to the incoming nurse (Patterson & Wears, 2010).

SBAR (Situation-Background-Assessment-Recommendation) tool: was cited by Lee et al. (2016) as a “widely utilized structured framework first introduced in acute care settings to promote patient safety through collaborative communication within health care teams (Haig et al., 2006)”.

Patient satisfaction: is an individual's cognitive evaluation of, and emotional reaction to, his or her health-care experience (Shirley & Sanders, 2013).

Nursing satisfaction: is an affective reaction to a job that results from the incumbent's comparison of actual outcomes with those that are desired, expected, and deserved (Castaneda & Scanlan, 2014).

Communication: it was taken from the Latin root – *communicare* – which means “to share” or “to be in relation with.” It also relates to the words “common,” “commune,” and “community,” suggesting an act of “bringing together, as in the Indo-European etymological roots (Cobley, 2008).

1.8.2 Operational Definitions

Shift-to-shift handoffs/handovers: Procedures and practices involved in conducting bedside handover, assessed using structured observation and nurse and patient satisfaction surveys (McMurray et al., 2010).

SBAR (Situation-Background-Assessment-Recommendation): Implementation and use of the SBAR framework by nurses during bedside handover, including training and adherence to SBAR guidelines (Sayani Ghosh et al., 2021).

Patient satisfaction: Measured using patient satisfaction surveys or questionnaires, specifically evaluating their experiences during nurse bedside handover (Wagner & Bear, 2009), which was adopted and translated from a previous article.

Nursing satisfaction: Measured using standardized satisfaction surveys or questionnaires administered to nurses, focusing on aspects related to bedside handover and SBAR implementation (Manurung & Udani, 2019).

1.8.3 Conceptual Framework

Figure 1 provides a description of the conceptual framework, which provides a clear scientific map for research steps including input, intervention that was conducted during the research process, and the results of this intervention.

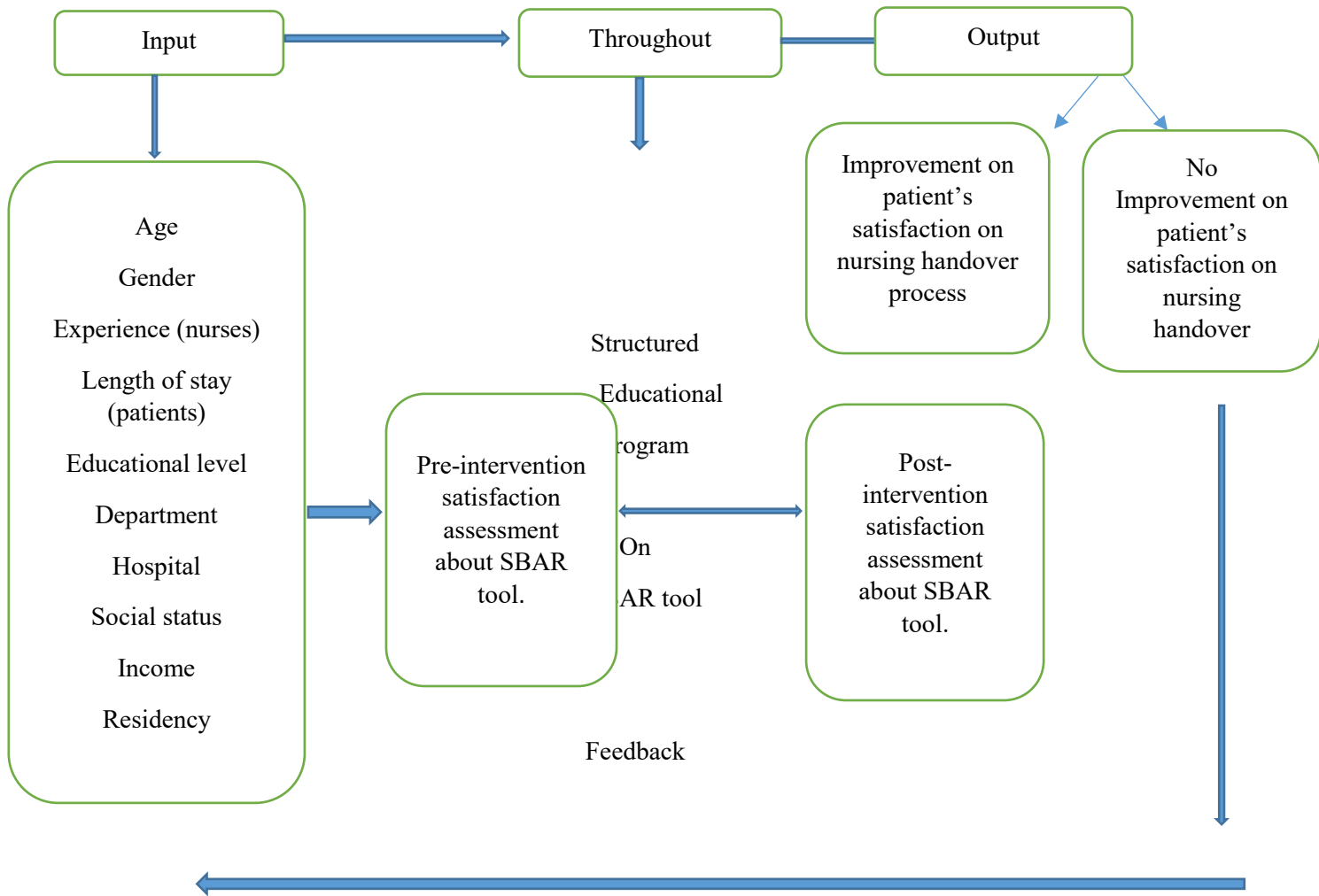


Figure 1.1: Conceptual Framework of the Study

Chapter Two

Literature Review

This chapter is focused on the review of previous literature related to the current study about the impact of using the SBAR tool as a standardized communication tool during nursing handovers on the nurses' and patients' satisfaction, with the focus on the satisfaction as a cardinal area of the quality of care that is provided to patients, as well as on the most common sociodemographic factors that are related to satisfaction levels, and, when conducted, the impact of SBAR implementation on these satisfaction areas. In this chapter, full-text, English articles that were published in the recent years in peer-reviewed journals were reviewed, using PubMed, Science Direct and CINAHL (Cumulative Index to Nursing and Allied Health Literature) scientific databases. The search of peer-reviewed articles was done using the following keywords: SBAR, Situation-Background-Assessment-Recommendation, patient satisfaction, nurse satisfaction, impact.

A systematic review was conducted to try to summarize the evidence related to the impact of SBAR tool implementation on patient safety as the main quality of care outcome, as evaluated by monitoring several patient outcomes, which was conducted by reviewing 13 studies, mostly heterogenous in characteristics of the samples and outcomes, which gives a broader look at the targeted impact. Of the reviewed studies, five studies found significant improvements in terms of incidence reporting (a main indicator of communication errors), unexpected deaths, ICU admission, INR values within the target range, patient falls, 30-day readmission, transfer to another hospitals and avoidable hospitalization, while four other studies reported insignificant improvements in terms of adverse patient and drug events, severity of falling down, near-miss reporting, inpatient

fall and restrained rates, catheter-associated urinary tract infections (CAUTI), hospital mortality, cardiac arrests and MRSA bacteremia. The review continued to review studies that found no changes after the implementation of SBAR communication tool in outcomes related to preventable warfarin-related adverse events, sentinel events, call of cardiac arrest team, overall number of patient transfers to other hospitals for acute care, as well as the transfers' type and results. Finally, the review found a single article that reported a worsening fall incidence outcome. The review concluded a moderate evidence on the impact of SBAR tool on patient outcomes and safety, while further high-quality research is much needed in this field (M. Müller et al., 2018).

2.1 Impact of SBAR Communication Tool Use on The Satisfaction of Patients

It was found that the use of standardized communication tools during bedside handover process between nurses is associated with decreased medical errors, as well as side effects and complications of certain issues and incidences. One of the major negative health consequences is related to infections. A randomized controlled trial (RCT) was conducted on a sample of 106 patients, and were equally divided across two groups, where the experimental group were exposed to the use of SBAR tool with detailed nursing interventions, while the control group did not, and were compared for several outcomes. Results found that the mean scores of several quality-of-care domains in nurses have significantly improved among experimental compared to control group, including cooperation awareness (90.4 ± 4.15 vs 83.47 ± 4.44 , respectively), communication skills (94.41 ± 3.56 vs 90.73 ± 3.42 , respectively), problem solving (95.30 ± 3.11 vs 91.67 ± 4.15 , respectively) and purification operation skills (98.77 ± 0.73 vs 94.16 ± 2.76 , respectively). The aspects of social status, career pathway, psychological health and skill recognition also witnessed significant improvements among the experimental group.

Among patients, several domains had significantly higher scores among experimental compared to control group, including psychological (81.24 ± 7.35 vs 74.48 ± 6.95 , respectively), emotional (86.57 ± 7.48 vs 76.98 ± 6.15 , respectively), physical (79.88 ± 7.44 vs 65.34 ± 6.15 , respectively) and social (82.45 ± 7.19 vs 70.51 ± 6.43 , respectively) domains of patient's health. In terms of patient satisfaction, the study found that there was a significantly higher percentage of patients who reported a satisfied experience of healthcare, where the mean satisfaction scores reached 94.34% in the experimental group of patients, compared to 81.13% among patients of control group. Lastly, the experimental group of patients significantly recorded less infection rates (7.55%) than who were in the control group (20.75%, $p\text{-value} = 0.001$), which was also reflected in shorter length of stay (around 4.6 days vs 6.3 days). The study concluded that there is an improved healthcare quality provided for patients, as measured by several metrics, among patients who are in the environment where nurses implement SBAR communication tool during handover (Ji et al., 2021).

The participation of patients is crucial when it comes to standardized communication process, and while several studies have investigated for the impact of using bedside handover on patients' outcomes, including their satisfaction, little have covered the patient's role in this communication. To achieve this, a systematic mixed-method review was undertaken on a total of 54 articles related to the topic, including 21 studies and 25 specific Quality Improvement (QI) projects. The research studies included two main categories related to the improvement of patient safety, involving patient-centered handover, which contained active listening, contributing to and not leading the handover, building up professional relationships, and the focus on handing over sensitive information, which are directly related to patient safety, as well as nurse-centered

handover, which focused on impeding patient's participation and that it is the nurse's responsibility. On the other hand, the QI projects focused on the involvement of patients in the handover process, and training the nurses on this type of involvement, in addition to barriers related to this process, including confidentiality breaches, sensitive information sharing and uncertainty about encouraging the patient to participate (Tobiano et al., 2018).

A Chinese study was conducted on a total of 10 nurses, 6 physicians and 1,215 cataract patients who underwent cataract surgeries between 2016 and 2018, and aimed to investigate the impact of using SBAR tool on healthcare workers' related outcomes, mainly the nurse-physician communication, as well as among patients, focusing on their satisfaction levels. The study included the implementation of SBAR training using 1-hour lectures weekly for 2 consecutive years, and the outcomes were assessed in three phases: pre-interventional and 1-year and 2-year post-interventional. Results showed a homogeneity in the characteristics of patients throughout the study phases, including age, gender, and the distribution of comorbidities ($p\text{-value} > 0.05$). The total nurse-physician communication satisfaction scores significantly increased across the three phases, from a mean of 78.97 ± 4.79 in the pre-interventional phase, to a 1-year score of 85.35 ± 6.31 and a 2-year score of 94.97 ± 5.32 ($p\text{-value} < 0.01$). In the patient satisfaction side, scores also significantly improved across the study phases, increasing from 79.03 ± 6.27 , to 85.55 ± 5.60 and 95.74 ± 4.75 , respectively ($p\text{-value} < 0.001$), and while the number of patients' complaints about complications and malpractices did not significantly decrease between the pre-interventional and 1-year post-interventional phases (2.2% and 1.4% to 1.2% and 0.5%, respectively), they significantly decreased to 0.2% and 0.0%, respectively, in the 2-year post-interventional phase. The study concluded that SBAR

communication tool is an effective tool for enhancing nurse-physician communication and patient's satisfaction in the cataract field (Chen et al., 2022).

2.2 Impact of SBAR Communication Tool Use on The Satisfaction of Nurses

Among nurses, the changes and enhancement in satisfaction towards the SBAR tool as a standardized communication tool is different than among patients. While both nurses and patients generally view the SBAR tool positively, their reasons for satisfaction differ where nurses appreciate SBAR for its ability to improve clarity, reduce errors, and streamline communication, which enhances their workflow and reduces stress (Kesten, 2011), while patients may notice improvements in the overall quality of care and feel more confident in their healthcare providers, but they may not be as directly aware of the tool itself (Ren et al., 2017). Several challenges and unique characteristics of the nurses are involved in such differences, including that nurses often work under significant time pressures and high workload conditions, in which the SBAR tool can help streamline communication, but if not properly integrated, it may initially add to their workload, causing dissatisfaction (Martin Müller et al., 2018).

On the nurses' side, several areas of clinical criteria have been identified and found to have significant improvements after implementing SBAR communication tool during handover, while other did not do so. A good example on such findings is the Jordanian study that was conducted on a sample of 69 intensive care unit (ICU) nurses, in order to investigate the impact of SBAR use on several domains of working inside the ICUs. The study was conducted on a two-phase pretest-posttest design, where the first phase involved the provision of training sessions related to standardized communication tools, especially SBAR, and the second phase included the actual implementation of SBAR inside the targeted ICUs. Results found a significant increase in the level of knowledge

about SBAR in the posttest phase (2.80 vs 5.75, $p\text{-value} < 0.001$), while, surprisingly, two domains showed significantly lower posttest scores, including the general relationships and communication (2.51 to 1.16, $p\text{-value} = 0.001$) and overall satisfaction (2.85 to 2.40, $p\text{-value} = 0.010$), while the rest of domains did not show significant differences, including nurse-to-nurse and nurse-to-physician relationship, and all of the teamwork and leadership subdomains, like nursing and physician leadership ($p\text{-value} > 0.05$). While the provided results are against the desired or expected outcomes, it is worth noting that several challenges and barriers affect the clinical metrics in the nursing work life, rather than just the implementation of standardized communication tools, especially in a challenging low-to-middle income country (LMIC) like Jordan (Dalky et al., 2020).

A Spanish pretest-posttest observational study was conducted to investigate the impact of using SBAR tool on different nursing-related variations, and included a sample of nurses and nursing technicians in an internal medical unit. Focusing on the nurses' satisfaction level, it was evaluated by the valid tool of the Overall Job Satisfaction Scale that was developed by Warr et al. (1979), that measures related intrinsic and extrinsic factors of satisfaction. The satisfaction scores among nurses did not significantly change between pretest and posttest phases ($p\text{-value} = 0.143$), and got slightly worse (66.39 ± 15.00 to 64.60 ± 13.97). This also reflects that the satisfaction scores when a new protocol is not always favorable. On the other hand, nurses' resilience scores significantly improved from a mean score of 28.03 ± 3.96 before using SBAR to 38.46 ± 4.62 after the implementation ($p\text{-value} < 0.001$), which was measured by the valid tool of Connor Davidson Resilience Scale (CD-RISC), which had a high validity scores in the Spanish population (Connor & Davidson, 2003). The study went on and found no significant improvement in the scores of nurses' engagement. The authors stated that insignificant

changes in satisfaction and engagement scores could be related to the already high and above-average scores in the pretest phase, when compared to other literature and the cut points of the scales. The study also concluded the need for nursing training on such an important quality of care topic, as well as measuring other potential barriers during the implementation of SBAR program, which took a year in this study (Martínez-Fernández et al., 2022).

In the emergency department (ED), the process of communication must focus on prioritized aspects of healthcare, as fluent and standardized communication is associated with rapid responses that save lives. In an American study, 32 nursing practitioners and registered nurses in an ED were included in a pretest-posttest study that aimed to evaluate the impact of huddles and SBAR tool use on several outcomes related to nurses, including the compliance with SBAR-guided huddles, treatment plan visualization, teamwork, communication effectiveness and nurse satisfaction. Focusing on the satisfaction outcome, the mean scores of satisfaction and collaboration aspects significantly increased from 5.17 ± 1.09 to 6.45 ± 0.72 after the implementation, as well as a high satisfaction scores related to sentences about the SBAR-guided huddles (86%) and joint evaluation of patients (83%), with a registered nurse stating that the direct work with nursing practitioners was appreciated and allowed for decision making participation. Other areas of nursing care have also significantly improved, leading the researchers to conclude that the use of structured and standardized communication tool, including what was implemented in the study, which was the use of joint patient evaluation followed by SBAR-guided huddles, helped in improving several quality of care metrics, mainly the ones related to nurses' workflow (Martin & Ciurzynski, 2015).

The use of SBAR tools has several advantages, and this is related to the fact that the tool is a standardized tool that highlighted the main areas to focus on when handing over critical and sensitive information between the outgoing and incoming nurses, and therefore, there is no specific and unified form for it, and can be edited to suite the variety of departments. One example is the Taiwanese study that implemented a novel form of SBAR that suited their sample inside the obstetric department, which focused on the variables related to gestational age, cervical dilation, presence of heart decelerations, and the recommendations to be provided to incoming nurses. This allowed for a more specific assessment of outcomes after the implementation of SBAR tool. The participants in this study were homogeneous in terms of age and years of experience distribution. The main outcome was measured included Safety Attitude Questionnaire, that reflected several domains, which mostly showed significant improvements across the pre- and 2 post-interventional surveys. Mean scores have significantly improved in domains of teamwork climate (58.6 ± 11.2 , to 67.3 ± 12.5 and 70.8 ± 15.1 , respectively, $p\text{-value} = 0.002$), safety climate (61.1 ± 10.9 , to 67.7 ± 12.6 and 71.0 ± 15.5 , respectively, $p\text{-value} = 0.010$), job satisfaction (52.5 ± 18.7 , to 61.8 ± 17.4 and 70.2 ± 21.0 , respectively, $p\text{-value} = 0.002$), and working conditions (61.4 ± 13.7 , to 65.8 ± 14.1 and 72.5 ± 17.0 , respectively, $p\text{-value} = 0.020$), while domains of stress recognition and perception of management showed insignificant improvements ($p\text{-value} = 0.260$ and 0.120 , respectively). The study also stated that the main patient outcomes in this study (which were the Apgar scores for babies and preterm deliveries) did not significantly differ across the study phases ($p\text{-value} > 0.05$). The researchers concluded that SBAR tool is an effective method to enhance nurse-obstetrician communication, as well as enhancing most of the safety attitude dimensions (Ting et al., 2017).

2.3 Conclusion

The primary investigator (PI) of the current thesis reviewed several articles that are related to multiple outcomes of SBAR tool implementation. It was noticed that most of the studies focus on the patient side of the outcomes, including the focus on patient safety metrics, like satisfaction. On the other hand, less were found when it comes to nurse-related satisfaction. Also, the changes in satisfaction levels is not consistent, and while most of the study showed significant improvements in satisfaction on the patient and nurse sides, some did not and may have found a decrease in satisfaction. This concludes the importance of more research to be conducted in this field, especially inside a politically and economically challenging country like Palestine. Also, this calls for the including of other variables that may affect the satisfaction of nurses and patients after implementing such tools.

Chapter Three

Methods

3.1 Study Design

The current study was conducted using a pretest-posttest, quasi-experimental, quantitative design, in which the researcher compared the satisfaction levels among patients and nurses before and after implementing an educational session and application of SBAR communication tool in the selected hospitals.

The used design was suitable for the current study, as it is used in the educational field, as well as its feasibility and practicality, where true randomization is not available for the study, because it is very complex and hard to chase randomly selected nurses in their duties. Also, it allowed for the utilization of an experiment (educational session, training and application of SBAR tool), which gives the study a higher level of external validity and generalizability to real-world situations (Babbie, 2020; Shadish et al., 2002; Trochim, 2007).

3.2 Site and Setting

The study was conducted in medical and surgical wards of the governmental hospitals in Nablus, Ramallah and Jericho cities in West Bank – Palestine, which included Al-Watani Governmental Hospital and Rafidia Surgical Hospital in Nablus city, Palestine Medical Complex in Ramallah city and Jericho Hospital in Jericho city.

The selected sites are suitable for the conduction of the study, as they represent the majority of healthcare that is provided in these cities, and they contain the most variety in complexity of patient cases, so they are suitable settings to conduct the experiment of SBAR communication tool.

3.3 Study Population and Sample

The population of the study contained all nurses who were currently working in the targeted hospitals during the conduction of the study, as well as the patients (on average) who were admitted to the targeted settings during the study period. The following table (Table 1) distributes the number of nurses and respected samples that were collected from each hospital.

The sample size was calculated using the Sample Size Calculator (Raosoft Inc., 2024), where the total number of nurses in the study population was 683 nurses, and using a 5% margin of error and 95% confidence interval, the sample size was recommended to be 247 nurses, which was proportionally recruited from each hospital according to its participation in the overall population size, as distributed in the following table. For patients, an estimated number of admitted patients was 700 patients in the targeted hospitals, which required a recommended sample size of 249 patients. The samples were recruited using a convenient sampling technique, where the researcher recruited the available nurses and patients who were presented during the study period.

Table 1.1: Distribution of Nurses' Numbers and Respected Samples from the Targeted Hospitals

Hospital	Department	Nurses No.	Percentage
Palestine Medical Complex	Medical ward	42	17.0%
	Surgical ward	58	23.5%
Rafidia Surgical Hospital	Surgical ward	74	30.0%
Jericho Hospital	Medical ward	20	8.1%
	Surgical ward	19	7.7%
Al-Watani Hospital	Medical ward	34	13.7%
Total		247	100%

3.4 Eligibility Criteria

3.4.1 Inclusion Criteria:

- 1- All nurses who were currently working at the targeted settings during the data collection and educational sessions periods.
- 2- Non-critical patients who were admitted to the targeted settings during the data collection for at least three days.
- 3- Nurses and patients agreed to participate in the current study.

3.4.2 Exclusion criteria:

- 1- Nurses who were in their annual, sick or maternity leaves.
- 2- Patients with any kind of psychiatric or neurological disorders that may impact their comprehension of questionnaires' items.

3.5 Study Variables

Independent variables: consisted of the demographic factors of the patients and nurses.

Factors that are shared between nurses and patients include: age, gender, educational level, marital status, residency, monthly income and the hospital and department that the data collection happened at. For nurses, years of experience was added, while length of stay at hospital was added to patients' demographic factors.

Dependent variable: satisfaction level of nurses and patients.

3.6 Data Collection Tool and Implementation

The researcher used a self-administered questionnaire that was developed based on previous literature and adopted satisfaction tools to collect data from patients and

nurses (Appendix 1 and 2). The questionnaire had two forms: patient's and nurse's forms, which were used for the pretest and posttest phases.

Both forms started with an informed consent that explained the aims of the study, as well as ensuring the commitment to ethical considerations of anonymity and confidentiality, followed by the first section related to the demographic data for each of the patients and nurses, including age, gender, educational level, department and hospital names, marital status, monthly income and residency, with length of stay added to patients' form and experience years to nurses' form.

Both forms included the satisfaction scale regarding SBAR that was adopted from Geok et al. (2021), which consisted of 14 questions related to three domains: quality of information (6 items), interaction and support (5 items), and efficiency (3 items), and were rated on a three-point Likert scale (disagree, neutral and agree).

Training of nurses was conducted in the form of classrooms after two hours of starting shift, including morning (A) and evening (B) shifts. Each educational session included 4 – 7 nurses from medical and surgical departments, and lasted for one hour, and followed by a training for one month and finished by the post-test assessment of satisfaction after another one month.

3.7 Guidelines of Structured Education

First, the content of the presentation was recruited from extensive previous literature review, where the researcher aimed to include as much informative material as possible, which was then translated to Arabic language to suit the population of Palestinian patients. Then, the validity and reliability of the presentation was tested, by piloting the opinion of three PhD nurses, two surgical nurses, two medical nurses, ten patients, and one physician, were taken into consideration, who provided constructive

criticism that enriched the presentation content and presenting skills. The presentation was provided in a suitable way for nurses and patients, where it was supported by role play and videos to assist in information delivery.

The educational sessions mainly involved face-to-face presentation in each of the targeted hospitals, with annex tools and case scenarios were used. The educational program aimed to provide nurses with the information needed to enhance their knowledge and ability to implement an effective communication process during handover using a standardized communication tool. The presentation, provided for patients also in simple Arabic, includes an introduction to the definitions of specific terms related to communication, whether it is among nurses or between nurses and patients, as well as the importance and advantages of implementing a standardized communication process, and the consequences of positively using them. It also contains pictures to illustrate the steps of standardized communication process, and each patient and nurse has received a copy. The program also included practical training on a standardized communication using SBAR tool for each nurse. Each group attended an approximately 40-minute educational session.

3.8 Period of the Study

The pretest-posttest data collection took place between 15/4/2024 and 15/5/2024. This period was enough to collect the calculated sample size from nurses and patients.

3.9 Piloting

Before the official data collection, a pilot sample was collected, and consisted of 10% of the calculated sample size (26 nurses and 25 patients), who were asked to answer

the study questionnaire, and give a feedback about the building of the questions, and how much time they took to complete the questionnaire. Most of the piloting sample reported positive feedback, which included easy to comprehend questions, and not taking too long to answer. The piloting sample was also used to measure the reliability of the satisfaction scales as explained later.

3.10 Validity and Reliability

For the validity part, the researcher used content validity, where the questionnaire was reviewed by 5 experts in the field of quality management, 2 of them a faculty doctors, 2 are experienced head nurses and 1 is a quality moderator in the Ministry of Health. They provided constructive comments regarding the use of closed-ended questions to facilitate data analysis. Also, the tool that was used to evaluate satisfaction level was adopted from a previous article after contacting the corresponding author, with no changes in the constructs or order of items, while the Arabic version that was used for patients was translated and back-translated prior to data collection.

3.11 Data Analysis

For the purpose of data analysis, IBM's Statistical Package for Social Sciences (SPSS) version 25 was used. Data analysis included the descriptive and analytical sides, where the descriptive results included the distribution of patients' and nurses' answers to questions related to demographic data and responses to satisfaction scale items in frequencies and percentages. Also, it included the description of satisfaction scale and subscales means and standard deviations.

For the analytical part, the suitable inferential statistics were used to compare the differences in scales and subscales mean scores across patients' and nurses' demographic factors in both pretest and posttest phases, where independent samples t-test was used to compare the means according to gender (as the dichotomous variable), and one-way ANOVA was used to compare the means according to educational level, department, marital status and residency. Pearson correlation test was used to investigate the correlation between scale demographic factors (age, income, experience years for nurses, and length of stay for patients) and the satisfaction scale scores, while paired-samples t-test was used to test the significance of the pretest-posttest mean scores of satisfaction scale and subscales. For all inferential tests, a cut point of 0.05 was considered for the significance (p-value).

3.12 Ethical Considerations

The ethical approval was granted from the Institutional Review Board (IRB) of Arab American University of Palestine (AAUP), which was followed by granting the approval to start data collection from the scientific research department at the Palestinian Ministry of Health (Appendix 3) which allowed to start data collection from the targeted governmental hospitals.

For patients and nurses, data collection started with providing a written informed consent that was printed on the first page of the questionnaire, and consisted of the explanation of study aims, as well as the components of the questionnaire, expected time to answer it, and the part related to ensuring the anonymity and confidentiality of the collected data, where no names or contact information were collected, and the data were kept confidential in closed envelopes until the start of data analysis. The researcher and

his supervisor were the only persons who reviewed the data, while data analysis was blindly done by a data analyst. The informed consent also included a statement telling the patient and the nurse that he/she can withdraw from the study at any time without the need to declare any reason.

Chapter Four

Results

The following chapter is dedicated to showing the descriptive and analytical results of the current thesis, in commitment with the data analysis plan, starting with the descriptive results related to the frequencies and percentages of nurses' and patients' demographic data and their responses to the satisfaction scales, as well as the description of scale variables and satisfaction scores, followed by investigating the relationship between nurses' and patients' demographic factors (as independent variables) and their satisfaction scores in the pre- and post-test phases, as well as the significance of the differences between pre- and post-test phases, in which the study hypotheses are tested.

4.1 Part 1: Demographic Data of the Nurses and Patients

The demographic data of the nurses ($N = 259$) and patients ($N = 287$) who participated in the current study were distributed in Table 1 in frequencies and percentages for the categorical variables, and in median (interquartile range [IQR]) for the scale variables, as the distribution of the data was not normal, according to Shapiro-Wilk and Kolmogorov-Smirnov normality tests.

The table shows that the median age of the participated nurses was 31 years old (IQR = 10 years), ranging from 22 to 42 years old, compared to a median age for patients of 47 years old (IQR = 20 years), ranging from 12 to 80 years old. For nurses, the median experience was 5 years (IQR = 9.5 years), ranging from 1 to 22 years of experience, while the median length of stay (LOS) among the patients was 3 days (IQR = 3), ranging from 1 to 8 days.

For nurses, around two thirds of them (65.3%) were females, and having bachelor's degree in nursing (68.0%), and 38.9% were working in medical departments. In accordance with the size of the targeted hospitals, the largest percentage (40.5%) were working at Palestine Medical Complex (PMC), and were mostly married (62.5%). The nurses reported a median monthly income of 3500 New Israeli Shekel (NIS), ranging from 2500 to 5250 NIS, and the percentage of nurses who were living in cities was approximate to who live in villages/towns (49.0% and 47.9%, respectively).

For patients, there were more male participants (56.8%), with 40.4% having a university degree. More than half of the patients (52.8%) were from the surgical departments, with around half of them were from the PMC (49.5%), and were mostly married (75.65), with a median income of 3000 NIS, ranging from 2000 to 8000 NIS, and more than half of them (54.4%) were living in villages/towns.

Table 4.1: Distribution of Nurses' and Patients' Demographic Data

Variables	Values	Nurses		Patients	
		N	%	N	%
Age	Median (IQR), min – max	31 (10), 22 – 42		47 (20), 12 – 80	
Experience	Median (IQR), min – max	5 (9.5), 1 – 22			
Length of stay	Median (IQR), min – max			3 (3), 1 – 8	
Gender	Male	90	34.7%	163	56.8%
	Female	169	65.3%	124	43.2%
Nurse's education	Diploma degree	31	12.0%		
	Bachelor's degree	176	68.0%		
	Higher educations	52	20.1%		
Patient's education	Up to elementary school			76	26.5%
	High school			95	33.1%
	University degree			116	40.4%

Department	Medical	96	38.9%	135	47.2%
	Surgical	151	61.1%	152	52.8%
Hospital	PMC	100	40.5%	142	49.5%
	Rafidia	74	29.9%	59	20.5%
	Al-Watani	34	13.8%	45	15.7%
	Jericho	39	15.8%	41	14.3%
Social status	Married	162	62.5%	217	75.6%
	Single	90	34.7%	62	21.6%
	Widowed or separated	7	2.7%	8	2.8%
Income (1000 NIS)	Median (IQR), min – max	3.5 (1), 2.5 – 5.25		3 (1.2), 2 – 8	
Residency	City	127	49.0%	84	29.3%
	Village/town	124	47.9%	156	54.4%
	Camp	8	3.1%	47	16.4%

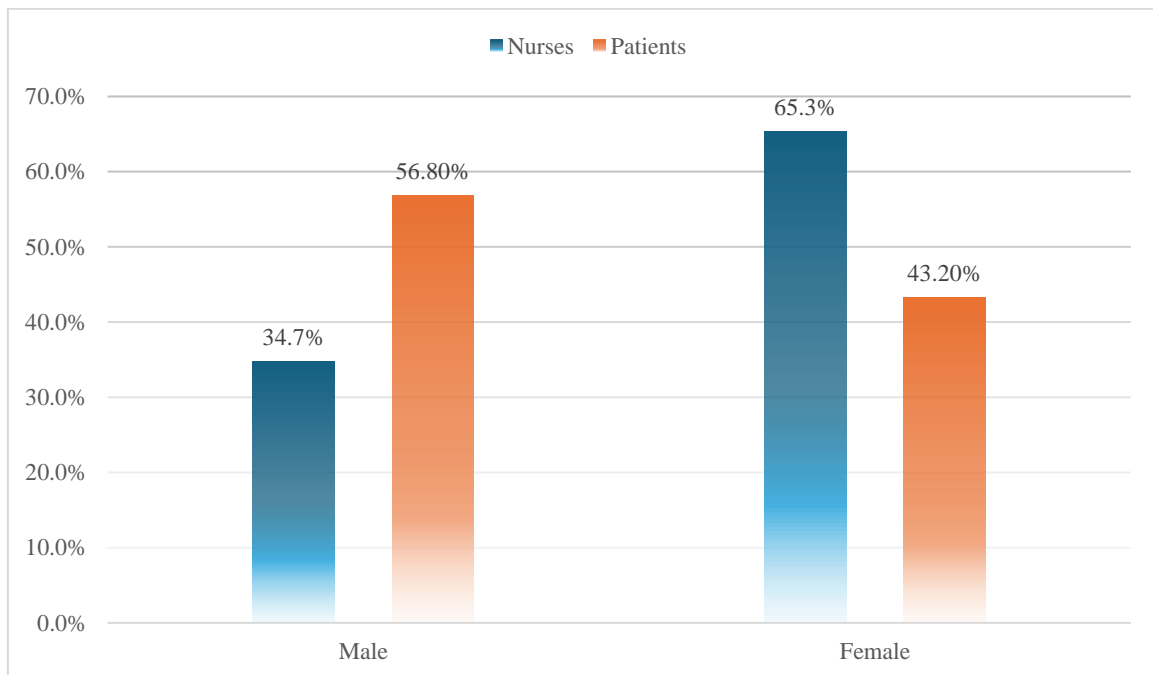


Figure 4.1: Distribution of Nurses' and Patients' Gender

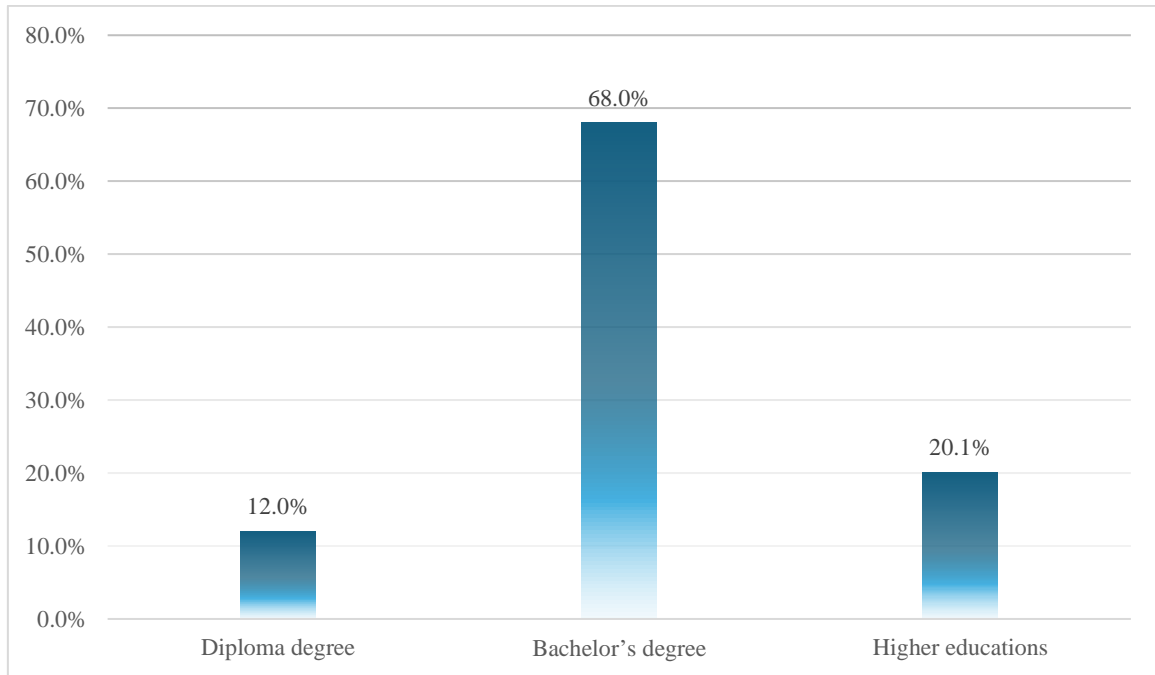


Figure 4.2: Distribution of Nurses' Educational Level

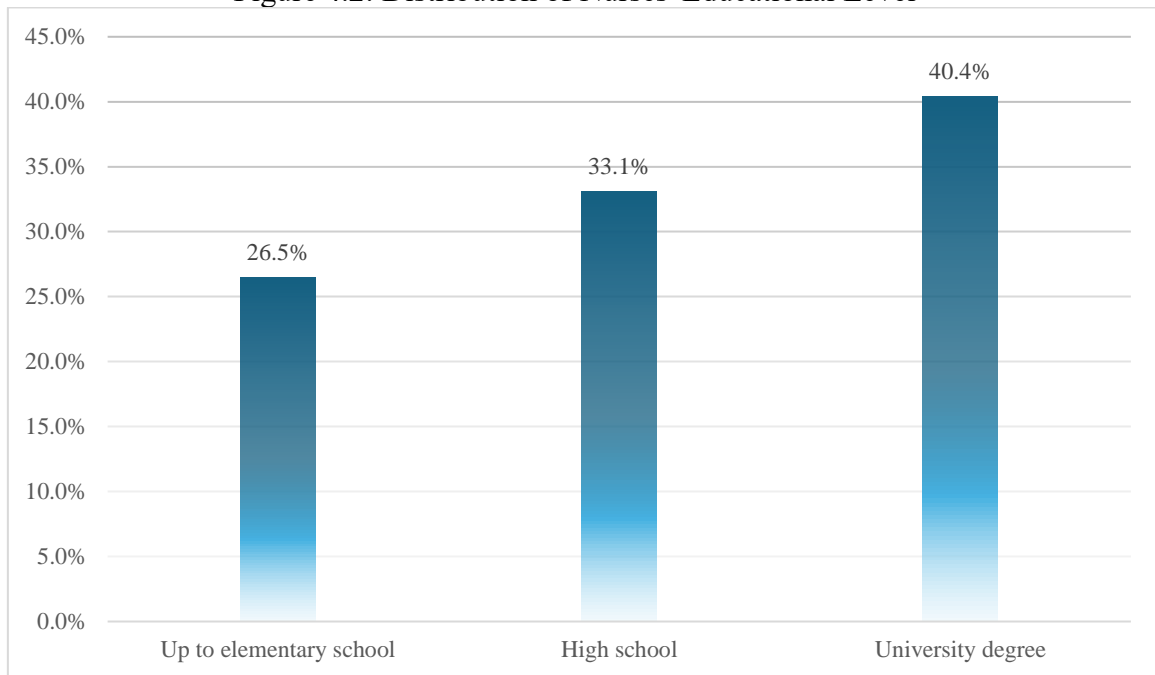


Figure 4.3: Distribution of Patients' Educational Level

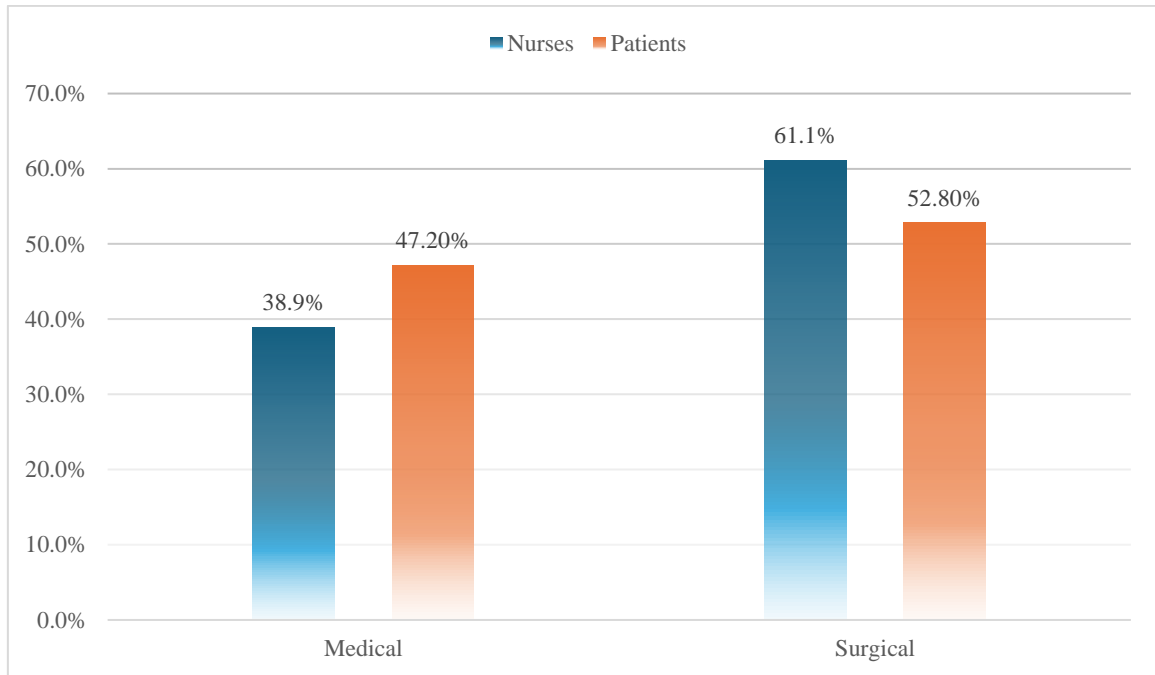


Figure 4.4: Distribution of Department Type

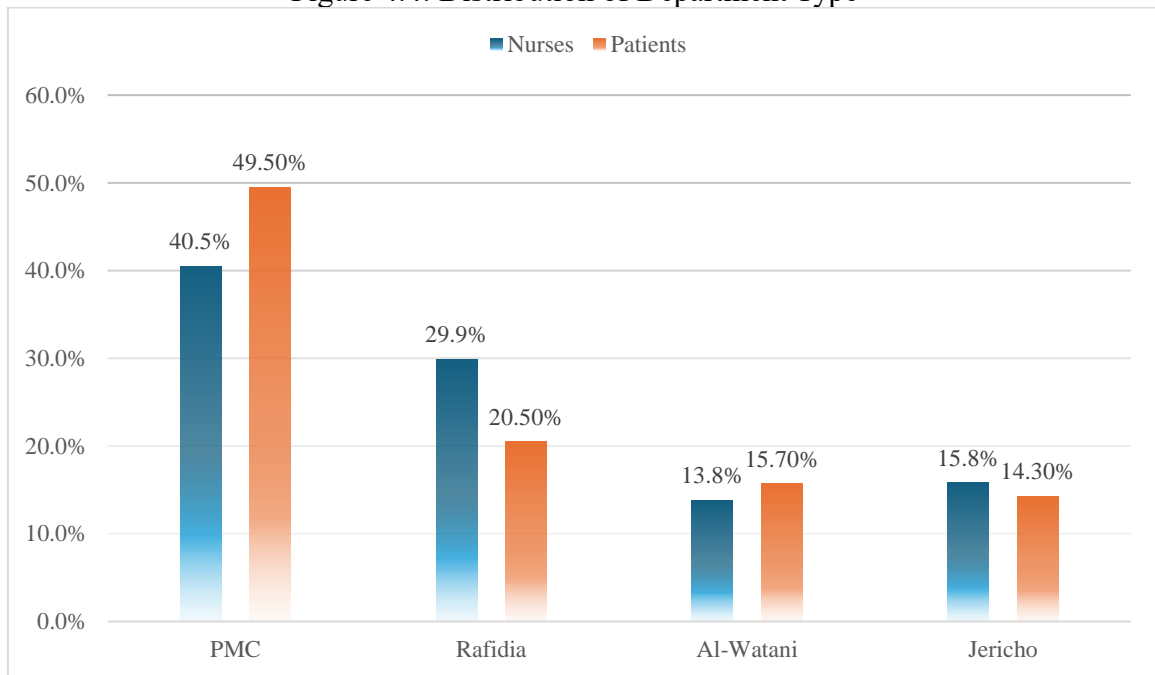


Figure 4.5: Distribution of Hospitals

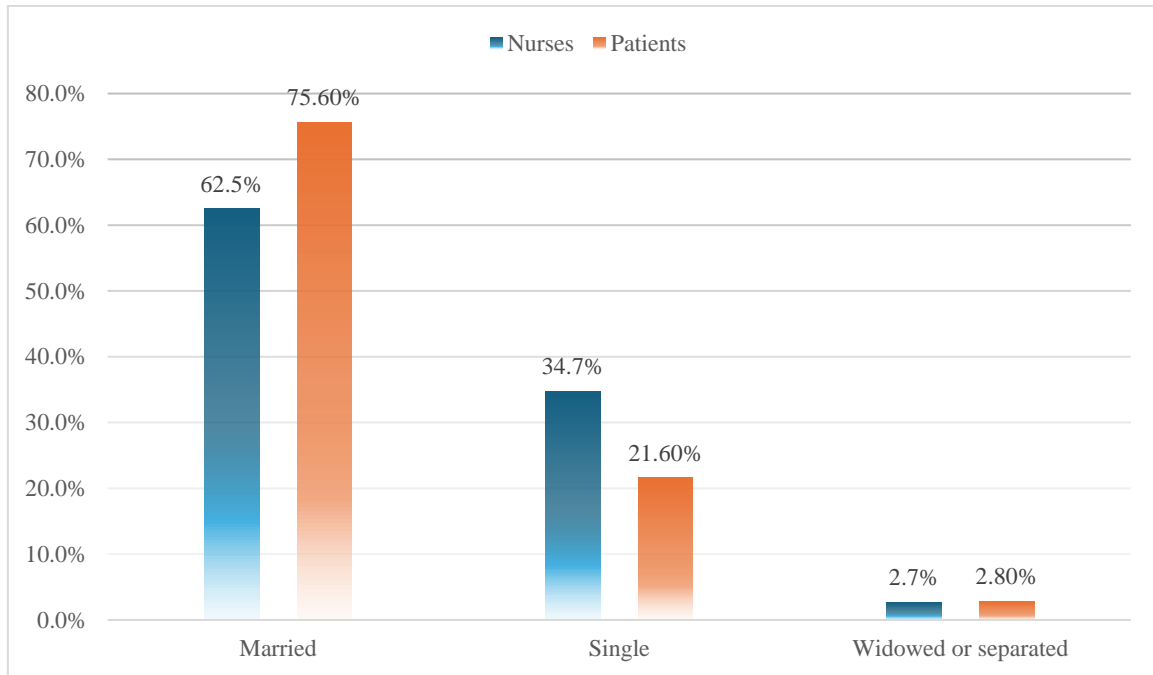


Figure 4.6: Distribution of Nurses' and Patients' Social Status

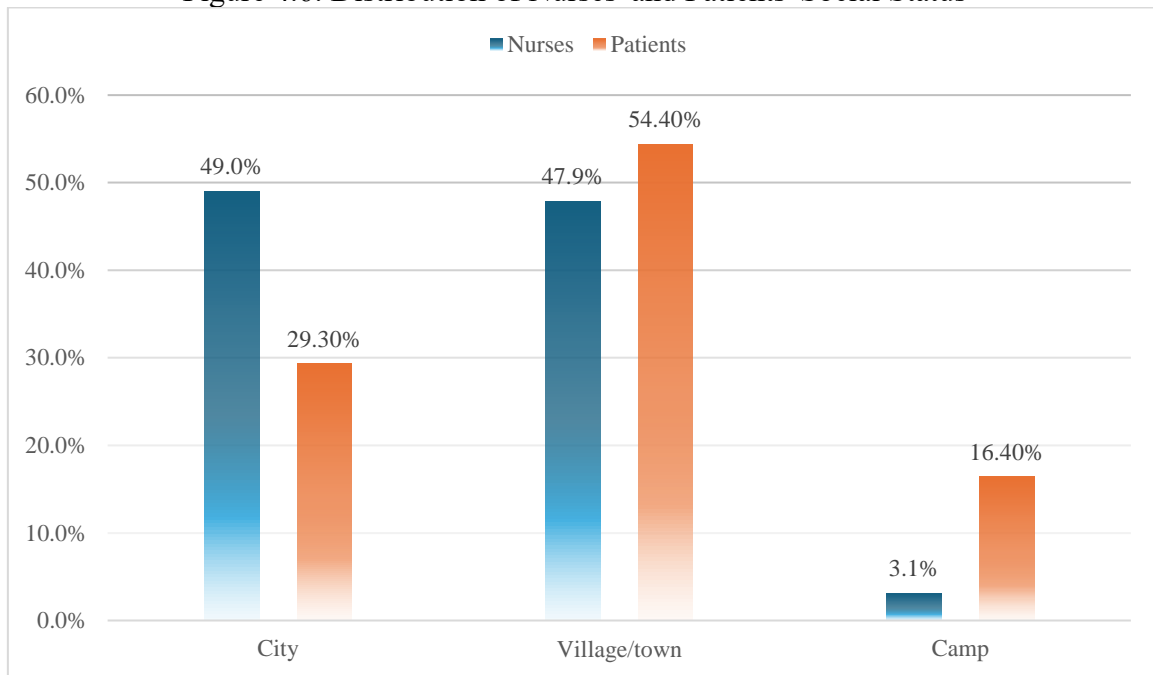


Figure 4.7: Distribution of Nurses' and Patients' Residence

4.2 Part 2: SBAR Tool Satisfaction Scale

In this part, the frequencies and percentages of nurses' and patients' responses to the statements of satisfaction scale regarding SBAR tool were viewed, as well as the significance of the differences in these percentages from the pretest to the posttest phase of the study. The significance of the differences between pretest and posttest percentages was tested using Chi-square (X^2) test.

Table 3 shows that the agreement level regarding the satisfaction statements was high in almost all of them. For example, in the domain of quality of information, around half of the nurses agreed that the information they receive are up to date (46.7%), and that they are provided with sufficient information about the patients (54.8%), and both of these statements had shown significantly higher agreement in the posttest phase (67.2% and 83.4%, respectively, p -value < 0.001). On the other hand, the agreement on the statement related to the ability to clarify the information that have been provided to the nurse insignificantly increased from 76.4% to 95.0% (p -value = 0.338). The percentages of agreement also significantly increased in terms of the ease of the information received (52.9% to 73.4%, p -value = 0.008), while the increase in the agreement on the ability to keep focused on the information provided was not significant (60.2% to 67.6%, p -value = 0.314).

In the domain of interaction and support, all statements witnessed significant improvements in terms of the agreement levels. For example, having the ability to debrief what the colleague have provided increased from 51.4% to 58.3% (p -value < 0.001), and also included the opportunity to discuss workload issues (50.2% to 71.8%, p -value < 0.001), and to discuss the difficulties in clinical situations they have experienced (41.3% to 71.8%, p -value < 0.001). In addition, the agreement on the perception of being educated

about different aspects of nursing care increased from 50.6% to 87.6% (p-value = 0.017), in parallel with the increase in the opportunity to ask questions about things they do not understand (45.9% to 84.6%, p-value = 0.012).

Lastly, the domain of efficiency had witnessed significant increases in the agreement on that the provided information are timely (43.6% to 74.9%, p-value < 0.001), while the agreement on receiving information that are not relevant to the patients insignificantly changed (p-value 0.861).

Table 4.2: Comparison between Pretest and Posttest SBAR Satisfaction Responses
Among Nurses

Statement	Pretest						Posttest						X ²	p-value
	Disagree		Neutral		Agree		Disagree		Neutral		Agree			
	N	%	N	%	N	%	N	%	N	%	N	%		
Subscale 1: Quality of Information														
1. The information that I receive is up to date	31	12.0%	107	41.3%	121	46.7%	2	0.8%	83	32.0%	174	67.2%	52.456	<0.001
2. I am provided with sufficient information about patients	5	1.9%	112	43.2%	142	54.8%	3	1.2%	40	15.4%	216	83.4%	72.319	<0.001
3. I am able to clarify information that has been provided to me	17	6.6%	44	17.0%	198	76.4%	2	0.8%	11	4.2%	246	95.0%	4.132	0.338
4. The way in which information is provided to me is easy to follow	16	6.2%	106	40.9%	137	52.9%	4	1.5%	65	25.1%	190	73.4%	13.749	0.008
5. I feel that important information is not always given to me	123	47.5%	84	32.4%	52	20.1%	75	29.0%	105	40.5%	79	30.5%	30.611	<0.001
6. I am able to keep my mind focused on the information being given to me	7	2.7%	96	37.1%	156	60.2%	2	0.8%	82	31.7%	175	67.6%	4.746	0.314
Subscale 2: Interaction and Support														
7. I have the opportunity to debrief with other	19	7.3%	107	41.3%	133	51.4%	0	0.0%	108	41.7%	151	58.3%	24.179	<0.001

colleagues when I have had a difficult shift														
8. I have the opportunity to discuss workload issues	54	20.8%	75	29.0%	130	50.2%	33	12.7%	40	15.4%	186	71.8%	35.135	<0.001
9. I have the opportunity to discuss difficult clinical situations I have experienced	24	9.3%	128	49.4%	107	41.3%	22	8.5%	41	15.8%	196	75.7%	172.087	<0.001
10. I am educated about different aspects of nursing care	48	18.5%	80	30.9%	131	50.6%	4	1.5%	28	10.8%	227	87.6%	12.016	0.017
11. I have the opportunity to ask questions about things I do not understand	35	13.5%	105	40.5%	119	45.9%	1	0.4%	39	15.1%	219	84.6%	12.890	0.012
Subscale 3: Efficiency														
12. I find handover takes too much time	95	36.7%	95	36.7%	69	26.6%	104	40.2%	95	36.7%	60	23.2%	68.387	<0.001
13. I am often given information during handover that is not relevant to patient care	118	45.6%	76	29.3%	65	25.1%	116	44.8%	76	29.3%	67	25.9%	1.299	0.861
14. Patient information is provided in a timely fashion	41	15.8%	105	40.5%	113	43.6%	15	5.8%	50	19.3%	194	74.9%	38.014	<0.001

The second table in this part is related to distribution of frequencies and percentages of the responses to statements of SBAR tool satisfaction among the patients,

as well as using Chi-square test to test the significance in the changes of the distributions between the pretest and posttest phases. In conclusion, all of the statements witnessed significant changes ($p\text{-value} < 0.05$). For example, in the domain of quality of information, the percentages of patients who agreed on all statements significantly increased in a positive way, including the information being up to date (62.7% to 89.2%, $p\text{-value} < 0.001$), the ability to clarify the provided information (64.8% to 78.4%, $p\text{-value} < 0.001$), the ease of the provided information to be followed (54.0% to 70.4%, $p\text{-value} < 0.001$) and keeping focused on the provided information (62.0% to 86.8%, $p\text{-value} < 0.001$).

In the domain of interaction and support, the statements had witnessed significant increases in the agreement levels, like in terms of having the opportunity to debrief the provided information (69.7% to 87.1%, $p\text{-value} < 0.001$), and to discuss the health issues (64.8% to 67.2%, $p\text{-value} < 0.001$) and difficulties of the clinical situation of the patient (59.6% to 70.0%, $p\text{-value} < 0.001$). The statements related to being educated about different nursing care aspects (59.2% to 81.5%, $p\text{-value} < 0.001$) and having the opportunity to ask about things they did not understand (73.2% to 84.0%, $p\text{-value} < 0.001$) also had significant improvements.

Lastly, in the domain of efficiency, the percentages also improved, including in terms of the increase in disagreement that the handover process takes too much time (35.5% to 46.0%, $p\text{-value} < 0.001$) and that they are given information that are not relevant to their health condition (41.1% to 48.4%, $p\text{-value} < 0.001$), while the agreement on that the information are timely provided significantly increased from 57.1% to 62.0%, $p\text{-value} < 0.001$).

Table 4.3: Comparison between Pretest and Posttest SBAR Satisfaction Responses Among Patients

Statement	Pretest						Posttest						X ²	p-value	
	Disagree		Neutral		Agree		Disagree		Neutral		Agree				
	N	%	N	%	N	%	N	%	N	%	N	%			
Subscale 1: Quality of Information															
1. The information that I receive about my health condition is up to date	53	18.5%	54	18.8%	180	62.7%	16	5.6%	15	5.2%	256	89.2%	28.414	<0.001	
2. I am provided with sufficient information about my health condition	70	24.4%	69	24.0%	148	51.6%	8	2.8%	32	11.1%	247	86.1%	46.207	<0.001	
3. I am able to clarify information that has been provided to me	38	13.2%	63	22.0%	186	64.8%	31	10.8%	31	10.8%	225	78.4%	125.053	<0.001	
4. The way in which information about my health is provided to me is easy to follow	60	20.9%	72	25.1%	155	54.0%	15	5.2%	70	24.4%	202	70.4%	78.539	<0.001	
5. I feel that important information about my health condition is not always given to me	61	21.3%	80	27.9%	146	50.9%	45	15.7%	84	29.3%	158	55.1%	71.214	<0.001	
6. I am able to keep my mind focused on the information being given to me in Arabic	39	13.6%	70	24.4%	178	62.0%	8	2.8%	30	10.5%	249	86.8%	64.969	<0.001	
Subscale 2: Interaction and Support															
7. I have the opportunity to debrief information	23	8.0%	64	22.3%	200	69.7%	7	2.4%	30	10.5%	250	87.1%	36.723	<0.001	

related to my health condition														
8. I have the opportunity to discuss my health issues	31	10.8%	70	24.4%	186	64.8%	23	8.0%	71	24.7%	193	67.2%	109.435	<0.001
9. I have the opportunity to discuss difficult clinical situations I have experienced	31	10.8%	85	29.6%	171	59.6%	23	8.0%	63	22.0%	201	70.0%	62.493	<0.001
10. I am educated about different aspects of nursing care	32	11.1%	85	29.6%	170	59.2%	15	5.2%	38	13.2%	234	81.5%	114.109	<0.001
11. I have the opportunity to ask questions about things I do not understand	31	10.8%	46	16.0%	210	73.2%	15	5.2%	31	10.8%	241	84.0%	91.704	<0.001
Subscale 3: Efficiency														
12. I find handover takes too much time	102	35.5%	40	13.9%	145	50.5%	132	46.0%	32	11.1%	123	42.9%	52.132	<0.001
13. I am often given information during handover that is not relevant to my health condition	118	41.1%	77	26.8%	92	32.1%	139	48.4%	39	13.6%	109	38.0%	80.979	<0.001
14. 14. My health information is provided in a timely fashion to me	53	18.5%	70	24.4%	164	57.1%	55	19.2%	54	18.8%	178	62.0%	51.295	<0.001

4.3 Part 3: Analytical Results

This part is dedicated to investigate analytical results of the study, in which the differences in mean scores of satisfaction domains and overall scores between pretest and posttest phases among nurses and patients have been tested using Paired samples t-test, while the mean differences across the different demographic factors of nurses and patients have been tested using Mann-Whitney U test for dichotomous factors and Kruskal-Wallis for non-dichotomous variables, and the correlations between scale factors and domains scores were tested using Spearman Correlation test.

In Table 4.4, it is shown that the mean scores of all satisfaction domains among the nurses regarding SBAR tool have significantly increased, which indicates a general improvement in their satisfaction from the pretest to posttest phases. The mean scores have significantly increased from 2.482 to 2.633 (p-value < 0.001) for the quality of information domain, from 2.340 to 2.710 (p-value < 0.001) for the interaction and support, and from 1.991 to 2.110 (p-value = 0.001) in terms of efficiency, with an overall increase in mean scores of SBAR tool satisfaction from 2.326 to 2.549 (p-value < 0.001).

Table 4.4: Differences in Mean Satisfaction Scores Among Nurses between Pretest and Posttest Phases

Domain	Pretest mean	Pretest SD	Posttest mean	Posttest SD	Mean difference	Difference SD	p-value
Quality of information	2.482	0.360	2.633	0.238	-0.151	0.417	<0.001
Interaction and support	2.340	0.596	2.710	0.337	-0.369	0.549	<0.001
Efficiency	1.991	0.386	2.110	0.355	-0.119	0.589	0.001
Overall satisfaction	2.326	0.315	2.549	0.200	-0.222	0.354	<0.001

Mean scores are out of 3, higher mean indicates higher related satisfaction

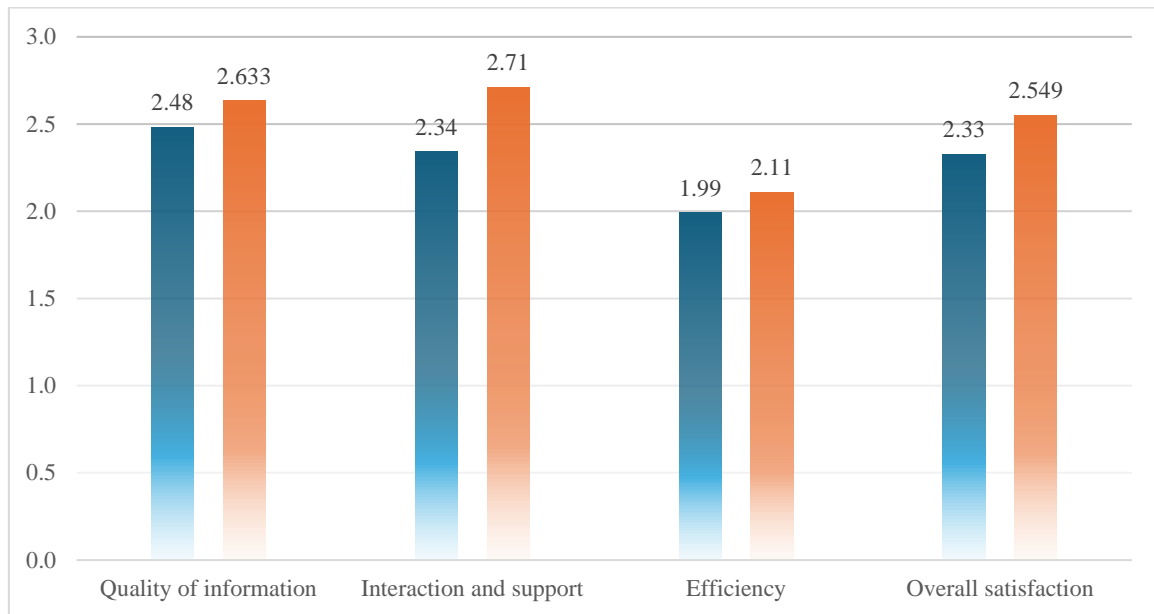


Figure 4.8: Differences in Mean Scores of Satisfaction Domains Among Nurses

For patients, only one domain showed insignificant decrease in the overall satisfaction, which was related to efficiency (2.209 to 2.167, p -value = 0.177), while the rest of domains showed significant improvements, including quality of information (2.292 to 2.573, p -value < 0.001), interaction and support (2.550 to 2.772, p -value < 0.001) and the overall satisfaction scores (2.366 to 2.540, p -value < 0.001).

Table 4.5: Differences in Mean Satisfaction Scores Among Patients between Pretest and Posttest Phases

Domain	Pretest mean	Pretest SD	Posttest mean	Posttest SD	Mean difference	Difference SD	p-value
Quality of information	2.292	0.421	2.573	0.294	-0.282	0.418	<0.001
Interaction and support	2.550	0.509	2.722	0.435	-0.172	0.537	<0.001

Efficiency	2.209	0.340	2.167	0.334	0.041	0.522	0.177
Overall satisfaction	2.366	0.348	2.540	0.258	-0.173	0.317	<0.001

Mean scores are out of 3, higher mean indicates higher related satisfaction

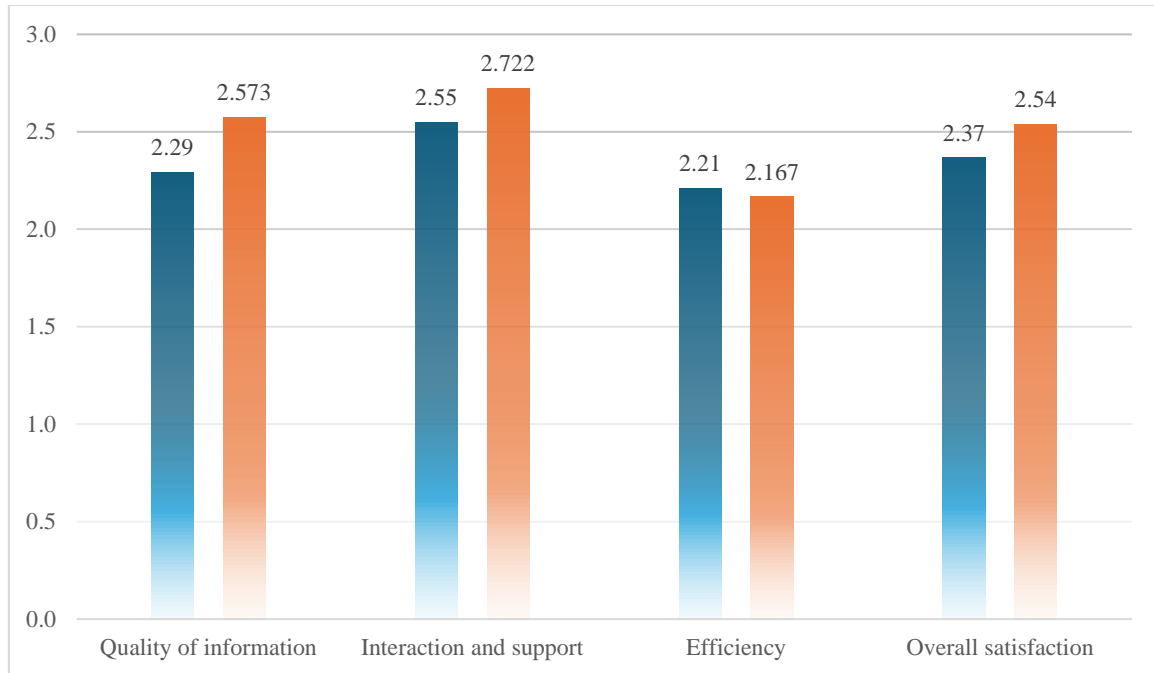


Figure 4.9: Differences in Mean Scores of Satisfaction Domains Among Patients

Table 4.5 investigated the differences in overall mean satisfaction scores among nurses across their demographic factors in both pretest and posttest phases. In general, there was a similarity in the differences across the demographic factors in both phases, except for some of them. For example, in both phases, nurses with bachelor's degree of nursing significantly showed the highest satisfaction means (2.40 and 2.60, p -value < 0.001), as well as among nurses who work in the surgical units (2.44 and 2.60, p -value < 0.001). Also, the negative correlations between age and satisfaction scores (-0.564 and -0.378, p -value < 0.001) and between experience and satisfaction scores (-0.504 and -

0.330, p -value < 0.001) were consistent, indicating that satisfaction scores among nurses are lower when the nurses have older age and higher experience levels.

On the other hand, the differences in mean scores according to gender was not significant in the pretest phase (p -value = 0.194), but turned to be significantly higher among female nurses (2.57) in the posttest phase (p -value = 0.022). Single nurses significantly had higher satisfaction scores in pretest (2.48) and posttest phases (2.62, p -value < 0.001), while there was no significant correlation between the income and satisfaction with SBAR tool in both pretest (p -value = 0.900) and posttest phases (p -value = 0.298). Lastly, in both phases, nurses living in villages/towns showed the least SBAR tool satisfaction scores (2.29, p -value = 0.003 and 2.52, p -value = 0.048).

Table 4.6: Differences in Mean Satisfaction Scores in Pretest and Posttest Phases Among Nurses

Variables	Values	Pretest satisfaction			Posttest satisfaction		
		Mean	SD	p-value	Mean	SD	p-value
Age	Correlation	-0.564		<0.001	-0.378		<0.001
Experience	Correlation	-0.504		<0.001	-0.330		<0.001
Gender	Male	2.31	0.28	0.194	2.50	0.23	0.022
	Female	2.34	0.33		2.57	0.18	
Nurse's education	Diploma degree	1.91	0.33	<0.001	2.59	0.11	<0.001
	Bachelor's degree	2.40	0.27		2.60	0.17	
	Higher educations	2.33	0.25		2.35	0.23	
Department	Medical	2.36	0.30	<0.001	2.57	0.17	<0.001

	Surgical	2.44	0.16		2.60	0.23	
Social status	Married	2.25	0.33	<0.001	2.51	0.21	<0.001
	Single	2.48	0.24		2.62	0.16	
	Other	2.21	0.00		2.64	0.00	
Income	Correlation	-0.009		0.900	-0.076		0.298
Residency	City	2.34	0.32	0.003	2.57	0.19	0.048
	Village/town	2.29	0.31		2.52	0.20	
	Camp	2.61	0.10		2.61	0.30	

In the patients' side, Table 8 shows that the significance of mean differences were almost identical in both pretest and posttest phases across the demographic factors. In both phases, the correlation between satisfaction scores and both patient's age (0.185, p-value = 0.002 and 0.204, p-value = 0.001, respectively) remained significant, indicating higher satisfaction with older patient's age, while the correlation between LOS and satisfaction remained insignificant in pretest (p-value = 0.268) and posttest (p-value = 0.058) phases.

In both phases, male patients showed significantly higher satisfaction scores with SBAR tool handover (2.47 in pretest and 2.58 in posttest phases), while the differences in patient's satisfaction with SBAR tool remained insignificant in both phases according to the department (p-value > 0.05).

Married patients in the pretest phase had the highest satisfaction of SBAR tool handover (2.42, p-value < 0.001), which remained the same in the posttest phase (2.55, p-value < 0.001). On the opposite, the correlation between income and satisfaction showed that patients with higher income had higher satisfaction in a significant way ($r =$

0.209, p -value = 0.005), which was not shown in the posttest phase, where the significance of such correlation disappeared ($r = 0.019$, p -value = 0.799). Lastly, patients' satisfaction according to their residency was not significant in the pretest phase (p -value = 0.081), while in the posttest phase, patients living in cities showed the lowest satisfaction scores (2.46, p -value = 0.001).

Table 4.7: Differences in Mean Satisfaction Scores in Pretest and Posttest Phases
Among Patients

Variables	Values	Pretest satisfaction			Posttest satisfaction		
		Mean	SD	p-value	Mean	SD	p-value
Age	Correlation	0.185		0.002	0.204		0.001
LOS	Correlation	0.066		0.268	0.112		0.058
Gender	Male	2.47	0.25	<0.001	2.58	0.20	0.027
	Female	2.23	0.41		2.49	0.31	
Patient's education	Up to elementary school	2.52	0.21	<0.001	2.66	0.13	<0.001
	High school	2.18	0.41		2.43	0.32	
	University degree	2.42	0.30		2.55	0.23	
Department	Medical	2.43	0.27	0.201	2.60	0.19	0.098
	Surgical	2.31	0.39		2.50	0.31	
Social status	Married	2.42	0.31	<0.001	2.55	0.28	<0.001
	Single	2.21	0.43		2.50	0.19	
	Other	2.29	0.00		2.43	0.00	
Income	Correlation	0.209		0.005	0.019		0.799

Residency	City	2.39	0.40	0.081	2.46	0.38	0.001
	Village/town	2.35	0.33		2.55	0.18	
	Camp	2.36	0.33		2.65	0.11	

4.4 Conclusion

Nurses who participated in the current study had a median age of 31 years old, with a median experience of 5 years, and were mostly females (65.3%), holding bachelor's degree (68.0%), in surgical departments (61.1%), married (62.5%), with a median income of 3500 NIS and living in cities (49.0%) and villages (47.9%). Patients had a median age of 47 years old, with a median LOS of 3 days, and had more males (56.8%), mostly having a university degree (40.4%), married (75.6%), with a median income of 3000 NIS and living in villages (54.4%).

All domains of SBAR tool satisfaction witnessed significant increases in their mean scores from the pretest to the posttest phases among nurses ($p\text{-value} < 0.05$), while among patients, the efficiency domain witnessed insignificant decrease in the mean scores between the two phases.

The significance of the relationships between demographic factors and the satisfaction scores among nurses and patients almost remained the same in the pretest and posttest phases, including younger age, less experience, bachelor's education, surgical department, single status and living outside villages among nurses, and older age, male gender, not having a high school education, and being married among patients.

Chapter Five

Discussion

The following is a discussion of the current study results, in which the principal investigator criticizes the provided results and compare them with the findings of previous studies that were reviewed earlier. The focus on the comparison between the studies is based on the differences in methodological approaches, which justify the majority of the noticed differences.

The demographic characteristics of the nurses showed that they represent the overall nursing community in the targeted hospitals, with a wide range of age and experience, while more female nurses participated in the study, representing more cooperation from the female nurses. Also, more than two thirds of the nurses (68.0%) hold the bachelor's degree, with relatively higher percentages of nurses who hold the higher educational levels. When compared to patients, a wide range of ages was also witnessed (12 – 80 years old), with approximate percentages of male and female patients, and a median length of stay of 3 days, ranging from 1 to 8 days, and therefore they represent the patients with few to moderate admission period, with little noticed complications, and no inclusion of intensive care unit (ICU) patients.

The median income of nurses and patients also represented a convenient result, taking into account that the percentage of patients who did not explicitly declare their income is higher than nurses, and taking into account that many patients reported having no income as they are retired or dependent on their sons, or due to the income limitations related to the current political situation.

Among nurses, majority of the statements related to the satisfaction about SBAR tool as a standardized handoff tool showed significant improvements from the pretest to

the posttest phase. This highlights that the educational and training sessions on nursing professional protocols and up-to-date and standardized tools is effective in increasing the perception of their necessity and the comprehension of their use. In the posttest phase, most of the statements showed significant increases in their agreement in a way that they have more than 50% of agreement, which quantitatively explains the importance of continuous education and training to nurses on this important area of quality improvement, which is related to the communication process and multidisciplinary teamwork.

The statement related to the agreement on the ability to clarify provided information did not show significant increase in the posttest phase ($p\text{-value} = 0.338$), which is related to the finding that the pretest agreement level is already high (76.4%), and therefore, the study tells that nurses are generally receiving a clear information during handoff, and other aspects of communication are worth focusing on. Although having less agreement level, the statement related to keeping mind focused during the handover process did not show a significant increase in the agreement level (60.2% to 67.6%, $p\text{-value} = 0.314$), which highlights the need to train nurses on situation control and self-control during information trading and is a critical point because decreased focus during handover may lead to losing important notes afterwards. The less agreement on the focus statement can be related to the increased workload and the amount of provided information during hand over, and therefore, it is important to remind nurses with taking notes and using documentation forms during handover process to eliminate information losses.

Moreover, nearly half of the nurses disagreed that they receive irrelevant information during the handover process on some occasions (45.6% in the pretest phase and 44.8% in the posttest phase), but the percentages did not significantly change ($p\text{-value}$

= 0.861). This finding highlights that nurses are aware that some provided information are not directly related to the case, which can be related to presence of side talks, which should be decreased in order to enhance the communication process and increase the quality of information that are exchanged during handover process.

Among patients, there were significant increases in agreement levels of all the statements from the pretest to the posttest phases, which also highlights the positive impact of educational sessions and awareness on the satisfaction of patients. This is directly related to the Lean Healthcare QI methodology, in which patient's participation and engagement play a major role in enhancing their satisfaction of the provided healthcare services, which is related to the fact that patients become more aware of the communication process inside the hospitals between nurses and patients, and between patients and other HCPs.

Although a different study design was used in the current study (pretest-posttest design) than what has been utilized in the study of Ji et al. (2021), in which RCT was implemented, similar findings were found. The previous study showed significantly higher satisfaction rates among the experimental (94.34%) than control (81.13%) groups, and the current study showed a significant increase in their satisfaction scores (overall) from a mean of 2.366 to 2.540 ($p\text{-value} < 0.001$). Both studies share the finding that satisfaction rates are already high in both stages. On the other hand, the findings of both studies emphasize on the importance of continuously trying to enhance the quality of care provided to the patients to the maximum available level. This idea is related to what is known as the "Pursuing Perfection" initiative, found in QI methodologies like Lean/Six Sigma and the principles of the Malcolm Baldrige National Quality Award, which represent approaches that strive for perfection in healthcare services by promoting

continuous and comprehensive QI, which encourage healthcare organizations to improve patient outcomes by eliminating mediocrity and achieving superior performance in all care processes (Coughlin & Posencheg, 2019; Mj, 2004). The previous study has the advantage over the current study in that the researchers also prospectively observed for several outcomes among the patients, like infection rates and LOS, which were improved among the experimental group of patients, as the main quality of care outcomes. This calls for the need to conduct RCTs in the Palestinian context, as they provide higher evidence to enhance the quality of care that is provided to Palestinian patients, and encourage to take the unique political and socioeconomic situation of the occupied Palestinian territories.

The emphasis on the importance of patient engagement also appears in the agreement between the current study and the previous study of Tobiano et al. (2018), who concluded all of the QI aspects that should be focused on and found to significantly improve when patients are involved in the communication and handover process. In the current study, this appears in the findings related to the significant increase in all of the statements' agreement levels across all satisfaction domains between the pretest and posttest phases. The studies are different in their designs, where the previous study utilized a systematic mixed-method review of 21 studies and 25 QI projects. Both studies emphasized the positive results related to QI initiatives that involve patients in terms of handing over sensitive information, building a trust and professional relationship between the nurses and the patients, as well as focusing on this process to be patient centered.

In relation to the previously mentioned QI theme, it is also important to highlight the need for training interventions for healthcare providers about the patient-centered care, which can significantly enhance patient-centered communication, and improve the

therapeutic relationship, patient participation, and the treatment process (Maatouk-Bürmann et al., 2016). Studies have also found that such interventions are also beneficial for nurses themselves, where implementing communication enhancement interventions in nursing can lead to higher levels of job satisfaction among nursing staff and improved nurse-patient relationships (McGilton et al., 2006).

The Chinese study of Chen et al. (2022) implemented a three-phase interventional study to assess the impact of using SBAR tool for communication, and found an overall similar results to the findings of the current study, where patient satisfaction levels significantly improved across the study phases. On the other hand, it is also noticed that the overall satisfaction levels in the pre-interventional phase were already in the moderate-to-high level (78.97), which reached to an almost-perfect score after two years (94.97). This also aligns with the findings of the current study, where the percentages of agreement and mean scores of satisfactions of SBAR tool communication were already moderate-to-high in the pretest phase. The significant increase in patient satisfaction can be justified by improved clarity and consistency in communication, patients feeling more understood and involved in their care, and enhanced trust and confidence in the healthcare team due to structured and effective communication (Kesten, 2011; Wang et al., 2015). It is also worth mentioning that the overall agreement in the findings of both studies is present despite several differences, starting from the use of three-phase compared to two-phase comparison, which is related to the limited time and efforts due to academic and professional restrains, as well as the two-year follow up in the previous study compared to immediate posttest comparison in the current study. Also, the previous study recruited a much larger sample size (1215 patients) compared to the current study (287), as well as the differences in the patients characteristics, where the previous study included cataract

patients, which are mostly day case patients and have much lower LOS than the patients who were included in the current study. The agreement in such findings despite the methodological differences emphasizes that educational interventions (which is a shared methodology between both studies) is an effective way to increase patients' satisfaction with the communication process.

Among nurses, the Jordanian study was of the studies that showed that the satisfaction of SBAR tool for communication among nurses may not always be favorable or as desired (Dalky et al., 2020). This appears in that some satisfaction domains showed insignificant changes in scores, while others showed significantly lower scores in the pretest phase. It is worth mentioning that the differences may be related to several factors, like the inclusion of ICU nurses only in the Jordanian study, which is known for its association of much higher workload and information intensity to be exchanged during handover, leading to higher possibility of errors and information missing, mainly due to presence of more interruptions during handover (Spooner et al., 2015), leading to higher dissatisfaction among nurses about the healthcare services they provide (Khanade & Sasangohar, 2017).

The Spanish study of Martínez-Fernández et al. (2022) found insignificantly worse findings in satisfaction levels regarding SBAR tool for communication, which was justified by the researchers in the idea of challenges of implementing new tools. In the current study, all domains of satisfaction among nurses showed significant improvements ($p\text{-value} < 0.05$), which can be related to the differences in workplaces between the Palestinian and the Spanish settings, as well as the justification of already-high satisfaction scores among the Spanish nurses and nursing technicians. Additional interpretations may include the inclusion of medical department nurses only in the

Spanish study, and the use of different satisfaction assessment tool than what was used in the current study. On the other hand, the previous study had the advantage of focusing on the aspect of resilience, which showed significant improvements, therefore, satisfaction is not the only outcome that should be studied when new communication tools are implemented and is recommended to be studied in future studies among Palestinian nurses.

The use of standardized tools in communication is agreed to be beneficial in terms of nursing satisfaction in spite the use of several tools to assess this theme, including the subscale of satisfaction in the Safety Attitude Questionnaire that was used in the study of Ting et al. (2017). The mentioned study focused on a specific area of communication, which was between the nurses and the obstetricians, which is a specific case of sensitive information sharing, which is in contrast with the current study, where different departments are involved. This helps in explaining the importance of using a standardized communication tool, regardless of the department, and that such tools like SBAR tool can be adjusted and used in accordance with the department.

Recommendations

Based on the discussion of the current study results, the researcher recommends the following:

Recommendations for Nurses:

1. Regular training sessions should be conducted to keep nurses updated on standardized communication tools like SBAR, which will support their knowledge and skills, ensuring effective handoffs.
2. Develop training programs to help nurses maintain focus and control during handovers, using techniques such as mindfulness, stress management, and effective note-taking.
3. Encourage the use of structured documentation forms during handovers to minimize information loss and enhance clarity.
4. Implement strategies to minimize side talks and irrelevant information during handovers, ensuring that only critical and relevant information is communicated.

Recommendations for Patients:

1. Provide educational sessions to patients about the importance of clear communication and their role in the SBAR process, which can increase their engagement and satisfaction.
2. Establish feedback systems where patients can share their experiences and suggestions about the communication process, helping to identify areas for improvement.
3. Encourage patients to be actively involved in their care by understanding and participating in the communication process with healthcare providers.

Recommendations for Policy-Makers:

1. Develop and implement policies that mandate the use of standardized communication tools like SBAR in all healthcare settings to ensure consistency and quality.
2. Distribute resources and funding for the continuous education and training of healthcare providers on effective communication tools.
3. Establish systems for regular monitoring and evaluation of communication practices in healthcare settings to ensure adherence to standards and identify areas for improvement.

Recommendations for Future Research:

1. Conduct longitudinal studies to assess the long-term impact of educational interventions on communication practices and satisfaction levels among nurses and patients.
2. Implement RCTs in diverse healthcare settings to provide stronger evidence on the effectiveness of SBAR and similar communication tools.
3. Include larger and more diverse sample sizes to generalize findings across different populations and settings, such as nurses and patients from the ICUs and emergency departments.
4. Explore other important outcomes such as resilience, workplace stress, and patient outcomes (e.g., mortality, infection rates, length of stay) to provide a comprehensive understanding of the impact of communication tools.
5. Conduct comparative studies between different communication tools and methodologies to identify the most effective practices in various healthcare settings.

Limitations

The current study was limited by the following limitations:

1. The use of convenient sampling method, where randomization was not applied, and therefore the results have less ability to be generalized on the community of nurses and patients.
2. The current political and socioeconomic situation that affected transportation and the inclusion of more hospitals.
3. The inclusion of a sample of governmental hospitals, rather than the inclusion of non-governmental hospitals in addition.

References

- Abbaszade, A., Assarroudi, A., Armat, M. R., Stewart, J. J., Rakhshani, M. H., Sefidi, N., & Sahebkar, M. (2021). Evaluation of the Impact of Handoff Based on the SBAR Technique on Quality of Nursing Care. *J Nurs Care Qual*, 36(3), E38-e43. <https://doi.org/10.1097/ncq.0000000000000498>
- Achrekar, M. S., Murthy, V., Kanan, S., Shetty, R., Nair, M., & Khattry, N. (2016). Introduction of Situation, Background, Assessment, Recommendation into Nursing Practice: A Prospective Study. *Asia-Pacific Journal of Oncology Nursing*, 3(1), 45-50. <https://doi.org/10.4103/2347-5625.178171>
- Agency for Healthcare Research and Quality. (2014). Hospital survey on patient safety culture: 2014 User Comparative Database Report.
- Babbie, R. (2020). *The Practice of Social Research*. Cengage Learning. <https://books.google.ps/books?id=IFvjDwAAQBAJ>
- Bonds, R. L. (2018). SBAR Tool Implementation to Advance Communication, Teamwork, and the Perception of Patient Safety Culture. *Creat Nurs*, 24(2), 116-123. <https://doi.org/10.1891/1078-4535.24.2.116>
- Bostrom, R. N. (1984). *Competence in communication : a multidisciplinary approach*. Sage Publications.

- Bruton, J., Norton, C., Smyth, N., Ward, H., & Day, S. (2016). Nurse handover: patient and staff experiences. *Br J Nurs*, 25(7), 386-390, 392-383. <https://doi.org/10.12968/bjon.2016.25.7.386>
- Burgener, A. M. (2017). Enhancing Communication to Improve Patient Safety and to Increase Patient Satisfaction. *Health Care Manag (Frederick)*, 36(3), 238-243. <https://doi.org/10.1097/hcm.0000000000000165>
- Castaneda, G. A., & Scanlan, J. M. (2014). Job satisfaction in nursing: a concept analysis. *Nursing forum*, 49 2, 130-138.
- Chen, Y., Chen, H. Y., & Jong, G. P. (2022). Situation-Background-Assessment-Recommendation Technique Improves Nurse-Physician Communication and Patient Satisfaction in Cataract Surgeries. *Saudi J Med Med Sci*, 10(2), 146-150. https://doi.org/10.4103/sjmms.sjmms_602_21
- Cobley, P. (2008). Communication: Definitions and Concepts. In *The International Encyclopedia of Communication*. <https://doi.org/https://doi.org/10.1002/9781405186407.wbiecc071>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76-82. <https://doi.org/https://doi.org/10.1002/da.10113>
- Coughlin, K., & Posencheg, M. A. (2019). Quality improvement methods – Part II. *Journal of Perinatology*, 1-8.

- Dalky, H. F., Al-Jaradeen, R. S., & AbuAlRrub, R. F. (2020). Evaluation of the Situation, Background, Assessment, and Recommendation Handover Tool in Improving Communication and Satisfaction Among Jordanian Nurses Working in Intensive Care Units. *Dimens Crit Care Nurs*, 39(6), 339-347. <https://doi.org/10.1097/dcc.0000000000000441>
- Felipe, T. R. L., Spiri, W. C., Juliani, C., & Mutro, M. E. G. (2022). Nursing staff's instrument for change-of-shift reporting - SBAR (Situation-Background-Assessment-Recommendation): validation and application. *Rev Bras Enferm*, 75(6), e20210608. <https://doi.org/10.1590/0034-7167-2021-0608>
- Forde, M. F., Coffey, A., & Hegarty, J. (2020). Bedside handover at the change of nursing shift: A mixed-methods study. *J Clin Nurs*, 29(19-20), 3731-3742. <https://doi.org/10.1111/jocn.15403>
- Foronda, C., MacWilliams, B., & McArthur, E. (2016). Interprofessional communication in healthcare: An integrative review. *Nurse Educ Pract*, 19, 36-40. <https://doi.org/10.1016/j.nepr.2016.04.005>
- Geok, L. S., Jou, C. Z., & Imm, C. (2021). NURSES' SATISFACTION TOWARDS THE USAGE OF SBAR AS A COMMUNICATION TOOL FOR HANDOFF IN A PRIVATE HOSPITAL PENANG. *The Malaysian Journal of Nursing*.
- Ghosh, S., Ramamoorthy, L., & Pottakat, B. (2021). Impact of Structured Clinical Handover Protocol on Communication and Patient Satisfaction. *J Patient Exp*, 8, 2374373521997733. <https://doi.org/10.1177/2374373521997733>

Ghosh, S., Ramamoorthy, L., & Pottakat, B. (2021). Impact of Structured Clinical Handover Protocol on Communication and Patient Satisfaction. *Journal of Patient Experience*, 8.

Hada, A., & Coyer, F. (2021). Shift-to-shift nursing handover interventions associated with improved inpatient outcomes-Falls, pressure injuries and medication administration errors: An integrative review. *Nurs Health Sci*, 23(2), 337-351. <https://doi.org/10.1111/nhs.12825>

Haig, K. M., Sutton, S., & Whittington, J. (2006). SBAR: a shared mental model for improving communication between clinicians. *Jt Comm J Qual Patient Saf*, 32(3), 167-175. [https://doi.org/10.1016/s1553-7250\(06\)32022-3](https://doi.org/10.1016/s1553-7250(06)32022-3)

Herawati, V., Nurmalia, D., Hartiti, T., & Dwiantoro, L. (2018). THE EFFECTIVENESS OF COACHING USING SBAR (SITUATION, BACKGROUND, ASSESSMENT, RECOMMENDATION) COMMUNICATION TOOL ON NURSING SHIFT HANDOVERS. *Belitung Nursing Journal*, 4, 177-185. <https://doi.org/10.33546/bnj.464>

Institute of Medicine Committee on Quality of Health Care in, A. (2000). *To Err is Human: Building a Safer Health System*. In L. T. Kohn, J. M. Corrigan, & M. S. Donaldson (Eds.), *To Err is Human: Building a Safer Health System*. National Academies Press (US)

Copyright 2000 by the National Academy of Sciences. All rights reserved. <https://doi.org/10.17226/9728>

- Ji, Y., Han, S., & Wang, B. (2021). Effects of situation-background-assessment-recommendation handover combined with detail nursing intervention on patients with infections. *Am J Transl Res*, 13(8), 9056-9062.
- Joint Commission International. (2024). International Patient Safety Goals <https://www.jointcommissioninternational.org/standards/international-patient-safety-goals/>
- Kesten, K. (2011). Role-play using SBAR technique to improve observed communication skills in senior nursing students. *The Journal of nursing education*, 50 2, 79-87.
- Khanade, K., & Sasangohar, F. (2017). Stress and Fatigue in ICU Nursing. *Proceedings of the International Symposium of Human Factors and Ergonomics in Healthcare*, 6, 209 - 210.
- Lee, S. Y., Dong, L., Lim, Y. H., Poh, C. L., & Lim, W. S. (2016). SBAR: towards a common interprofessional team-based communication tool. *Medical Education*, 50(11), 1167-1168. <https://doi.org/https://doi.org/10.1111/medu.13171>
- Maatouk-Bürmann, B., Ringel, N., Spang, J., Weiss, C., Möltner, A., Riemann, U., Langewitz, W. A., Schultz, J.-H., & Jünger, J. (2016). Improving patient-centered communication: Results of a randomized controlled trial. *Patient education and counseling*, 99 1, 117-124.
- Manurung, I., & Udani, G. (2019). Kepuasan Perawat Setelah Melakukan Overan Sisi Pasien dengan Komunikasi SBAR. *Jurnal Kesehatan*, 10, 473-479.

- Mardis, T., Mardis, M., Davis, J., Justice, E. M., Riley Holdinsky, S., Donnelly, J., Ragozine-Bush, H., & Riesenberg, L. A. (2016). Bedside Shift-to-Shift Handoffs: A Systematic Review of the Literature. *Journal of Nursing Care Quality*, 31(1), 54-60. <https://doi.org/10.1097/ncq.0000000000000142>
- Martin, H. A., & Ciurzynski, S. M. (2015). Situation, Background, Assessment, and Recommendation-Guided Huddles Improve Communication and Teamwork in the Emergency Department. *J Emerg Nurs*, 41(6), 484-488. <https://doi.org/10.1016/j.jen.2015.05.017>
- Martínez-Fernández, M. C., Castiñeiras-Martín, S., Liébana-Presa, C., Fernández-Martínez, E., Gomes, L., & Marques-Sanchez, P. (2022). SBAR Method for Improving Well-Being in the Internal Medicine Unit: Quasi-Experimental Research. *Int J Environ Res Public Health*, 19(24). <https://doi.org/10.3390/ijerph192416813>
- McGilton, K. S., Irwin-Robinson, H., Boscart, V. M., & Spanjevic, L. (2006). Communication enhancement: nurse and patient satisfaction outcomes in a complex continuing care facility. *Journal of advanced nursing*, 54 1, 35-44.
- McMurray, A., Chaboyer, W., Wallis, M. C., & Fetherston, C. (2010). Implementing bedside handover: strategies for change management. *Journal of Clinical Nursing*, 19 17-18, 2580-2589.
- Mj, R. (2004). Achieving and Sustaining Quality in Healthcare. *Frontiers of health services management*, 20, 3-11.

- Müller, M., Jürgens, J., Redaelli, M., Klingberg, K., Hautz, W. E., & Stock, S. (2018). Impact of the communication and patient hand-off tool SBAR on patient safety: a systematic review. *BMJ Open*, 8.
- Müller, M., Jürgens, J., Redaelli, M., Klingberg, K., Hautz, W. E., & Stock, S. (2018). Impact of the communication and patient hand-off tool SBAR on patient safety: a systematic review. *BMJ Open*, 8(8), e022202. <https://doi.org/10.1136/bmjopen-2018-022202>
- Novak, K., & Fairchild, R. (2012). Bedside reporting and SBAR: improving patient communication and satisfaction. *J Pediatr Nurs*, 27(6), 760-762. <https://doi.org/10.1016/j.pedn.2012.09.001>
- Park, L., Allan, J., & Hill, B. (2019). Data gathering and patient monitoring. In *Learning to care: the nursing associate* (pp. 223-236). Elsevier.
- Patterson, E. S., & Wears, R. L. (2010). Patient handoffs: standardized and reliable measurement tools remain elusive. *Jt Comm J Qual Patient Saf*, 36(2), 52-61. [https://doi.org/10.1016/s1553-7250\(10\)36011-9](https://doi.org/10.1016/s1553-7250(10)36011-9)
- Raosoft Inc. (2024). Sample Size Calculator. <http://www.raosoft.com/samplesize.html>
- Ren, G., Yi, L.-h., Zhang, Y., & Liu, H. (2017). Impacts of SBAR communication mode on satisfaction among physicians, nurses and patients. *Chinese Journal of Modern Nursing*, 23, 3453-3456.

- Santos, G., Barros, F. M., & Silva, R. C. D. (2020). Handover communication in intensive therapy: nursing team meanings and practices. *Rev Gaucha Enferm*, 41, e20180436. <https://doi.org/10.1590/1983-1447.2020.20180436>
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton, Mifflin and Company.
- Shirley, E. D., & Sanders, J. O. (2013). Patient satisfaction: Implications and predictors of success. *The Journal of bone and joint surgery. American volume*, 95 10, e69.
- Shitu, Z., Hassan, I., Aung, M. M. T., Kamaruzaman, T. H. T., & Musa, R. M. (2018). Avoiding Medication Errors Through Effective Communication in A Healthcare Environment. *Malaysian Journal of Movement, Health & Exercise*.
- Smeulders, M., Lucas, C., & Vermeulen, H. (2014). Effectiveness of different nursing handover styles for ensuring continuity of information in hospitalised patients. *Cochrane Database Syst Rev*, 2014(6), Cd009979. <https://doi.org/10.1002/14651858.CD009979.pub2>
- Spooner, A., Corley, A., Chaboyer, W., Hammond, N. E., & Fraser, J. F. (2015). Measurement of the frequency and source of interruptions occurring during bedside nursing handover in the intensive care unit: An observational study. *Australian critical care : official journal of the Confederation of Australian Critical Care Nurses*, 28 1, 19-23.

- Streeter, A. R., & Harrington, N. G. (2017). Nurse Handoff Communication. *Semin Oncol Nurs*, 33(5), 536-543. <https://doi.org/10.1016/j.soncn.2017.10.002>
- Ting, W. H., Peng, F. S., Lin, H. H., & Hsiao, S. M. (2017). The impact of situation-background-assessment-recommendation (SBAR) on safety attitudes in the obstetrics department. *Taiwan J Obstet Gynecol*, 56(2), 171-174. <https://doi.org/10.1016/j.tjog.2016.06.021>
- Tobiano, G., Bucknall, T., Sladdin, I., Whitty, J. A., & Chaboyer, W. (2018). Patient participation in nursing bedside handover: A systematic mixed-methods review. *Int J Nurs Stud*, 77, 243-258. <https://doi.org/10.1016/j.ijnurstu.2017.10.014>
- Trochim, W. (2007). *The Research Methods Knowledge Base*.
- van der Wulp, I., Poot, E. P., Nanayakkara, P. W. B., Loer, S. A., & Wagner, C. (2019). Handover Structure and Quality in the Acute Medical Assessment Unit: A Prospective Observational Study. *J Patient Saf*, 15(3), 224-229. <https://doi.org/10.1097/pts.0000000000000221>
- Wagner, D. L., & Bear, M. (2009). Patient satisfaction with nursing care: a concept analysis within a nursing framework. *Journal of advanced nursing*, 65 3, 692-701.
- Wang, W., Liang, Z., Blazeck, A. M., & Greene, B. (2015). Improving Chinese nursing students' communication skills by utilizing video-stimulated recall and role-play case scenarios to introduce them to the SBAR technique. *Nurse education today*, 35 7, 881-887.

Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52(2), 129-148. <https://doi.org/https://doi.org/10.1111/j.2044-8325.1979.tb00448.x>

World Health Organization. (2023, 11 September 2023). Patient safety. Retrieved April from <https://www.who.int/news-room/fact-sheets/detail/patient-safety>

Yun, J., Lee, Y. J., Kang, K., & Park, J. (2023). Effectiveness of SBAR-based simulation programs for nursing students: a systematic review. *BMC Med Educ*, 23(1), 507. <https://doi.org/10.1186/s12909-023-04495-8>

Appendices

Appendix (1) Study Questionnaire (for Nurses)

استبيان التمريض: أثر استلام وتسليم التمريض للحالة المرضية بجانب المريض باستخدام
(الحالة - الخلفية - التقييم - التوصية) SBAR على رضى فئة التمريض و المرضى أثناء تغيير
الوردية اليومية في المستشفيات الحكومية في الضفة الغربية
الزميل/ة المحترم/ة، تحية طيبة وبعد،،،

أطلب من حضرتك الموافقة على المشاركة في الإجابة على الاستبانة التالية الخاصة بطاقم
التمريض والتي تعتبر جزءا من دراستي لرسالة الماجستير في تخصص إدارة الجودة في الجامعة
العربية الأمريكية، وتهدف هذه الدراسة أثر استخدام أداة SBAR في الاستلام والتسليم على
مستوى الرضى لدى الممرضين والمرضى ضمن عينة من المشاركين في المستشفيات الحكومية
في الضفة الغربية.

تعتبر مشاركتكم في الإجابة على الأسئلة المطروحة موافقة للمشاركة في البحث، مع العلم
انه سيتم التعامل مع جميع البيانات بموضوعية وبسرية تامة، بحيث لن يتم ذكر اسماء المشاركين
في الدراسة، كما وان المعلومات لن يتم استخدامها الا في البحث العلمي فقط، ولأغراض خاصة
بالدراسة، وستكون المشاركة اختيارية في الدراسة، في حال قبولك المشاركة في الدراسة نرجو
منك الإجابة على الأسئلة المطروحة في الاستبانة بشكل كامل، كما ويحق للمشارك الانسحاب من
الدراسة في أي وقت وبحرية تامة.

تتضمن الاستبانة قسمين رئيسين :

القسم الأول: يحتوي على أسئلة ديموغرافية (شخصية).

القسم الثاني: أداة قياس مدى الرضى عند طاقم التمريض، والتي تحتوي على ثلاثة فروع وهي:

جودة المعلومات، التفاعل والدعم، والفعالية

ستستغرق منك الإجابة على جميع الأسئلة مدة تتراوح ما بين 5 – 10 دقائق.

الباحث الرئيسي: الأستاذ طلال عبد السلام قدادحة

تحت إشراف: الدكتور عاطف الريماوي

التوقيع: _____ التاريخ: _____

القسم الأول: المعلومات الشخصية (Demographic Data)

Questions	Options
Age (years)	
Years of Experience	
Gender	Male Female
Highest Qualification	1. Diploma degree 2. Bachelor's degree 3. Higher educations
Current Ward Placement أقترح تركه فارغا للممرض ليعبئه	1. Medical 2. Surgical
Hospitals	1. Palestine Medical Complex 2. Rafidia Surgical Hospital 3. Al-Watani Medical Hospital 4. Jericho Governmental Hospital
Marital status	1. Married 2. Single 3. Divorced 4. Widowed
Income (in shekels)	
Residency	1. City 2. Town/village 3. Camp

القسم الثاني: استبانة الرضى الرضا عن استخدام الموقف والخلفية والتقييم والتوصية (SBAR)
كأداة اتصال للتسليم

Items	Disagreed	Neutral	Agreed
Subscale 1: Quality of Information جودة المعلومات			
1. The information that I receive is up to date المعلومات التي أتلقاها محدثة			
2. I am provided with sufficient information about patients تم تزويدي بمعلومات كافية عن المرضى			
3. I am able to clarify information that has been provided to me أنا قادر على توضيح المعلومات التي تم توفيرها لي			
4. The way in which information is provided to me is easy to follow من السهل متابعة الطريقة التي يتم بها توفير المعلومات لي			
5. I feel that important information is not always given to me أشعر أن المعلومات المهمة لا يتم إعطاؤها لي دائماً			
6. I am able to keep my mind focused on the information being given to me أنا قادر على تركيز ذهني على المعلومات التي يتم إعطاؤها لي			

Subscale 2: Interaction and Support			
التفاعل والدعم			
7. I have the opportunity to debrief with other colleagues when I have had a difficult shift لدي الفرصة لاستخلاص المعلومات مع زملائي الآخرين عندما مررت بتحول صعب			
8. I have the opportunity to discuss workload issues لدي الفرصة لمناقشة قضايا عبء العمل			
9. I have the opportunity to discuss difficult clinical situations I have experienced لدي الفرصة لمناقشة المواقف السريرية الصعبة التي مررت بها			
10. I am educated about different aspects of nursing care. أنا متعلمة حول مختلف جوانب الرعاية التمريضية .			
11. I have the opportunity to ask questions about things I do not understand لدي الفرصة لطرح أسئلة حول أشياء لا أفهمها			
Subscale 3: Efficiency			
12. I find handover takes too much time أجد أن التسليم يستغرق الكثير من الوقت			

<p>13. I am often given information during handover that is not relevant to patient care</p> <p>كثيراً ما أتلقي معلومات أثناء التسليم لا تتعلق برعاية المرضى</p>			
<p>14. Patient information is provided in a timely fashion</p> <p>تم تقديم معلومات المريض في الوقت المناسب</p>			

Appendix (2) Study Questionnaire (for Patients)

استبيان المريض: أثر استلام وتسليم التمريض للحالة المرضية بجانب المريض باستخدام
(الحالة - الخلفية - التقييم - التوصية) SBAR على رضى فئة التمريض و المرضى أثناء تغيير
الوردية اليومية في المستشفيات الحكومية في الضفة الغربية

عزيزي/عزيزتي المريض/ة، تحية طيبة وبعد،،،

أطلب من حضرتك الموافقة على المشاركة في الإجابة على الاستبانة التالية الخاصة
بالمريض والتي تعتبر جزءاً من دراستي لرسالة الماجستير في تخصص إدارة الجودة في الجامعة
العربية الأمريكية، وتهدف هذه الدراسة أثر استخدام أداة SBAR في الاستلام والتسليم على مستوى
الرضى لدى الممرضين والمرضى ضمن عينة من المشاركين في المستشفيات الحكومية في
الضفة الغربية.

تعتبر مشاركتكم في الإجابة على الأسئلة المطروحة موافقة للمشاركة في البحث، مع العلم
انه سيتم التعامل مع جميع البيانات بموضوعية وبسرية تامة، بحيث لن يتم ذكر اسماء المشاركين
في الدراسة، كما وان المعلومات لن يتم استخدامها الا في البحث العلمي فقط، ولأغراض خاصة
بالدراسة، وستكون المشاركة اختيارية في الدراسة، في حال قبولك المشاركة في الدراسة نرجو
منك الإجابة على الأسئلة المطروحة في الاستبانة بشكل كامل، كما ويحق للمشارك الانسحاب من
الدراسة في أي وقت وبحرية تامة.

تتضمن الاستبانة قسمين رئيسيين :

القسم الأول: يحتوي على أسئلة ديموغرافية (شخصية).

القسم الثاني: أداة قياس مدى الرضى عند المرضى، والتي تحتوي على ثلاثة فروع وهي:

جودة المعلومات، التفاعل والدعم، والفعالية

ستستغرق منك الإجابة على جميع الأسئلة مدة تتراوح ما بين 5 – 10 دقائق.

الباحث الرئيسي: الأستاذ طلال عبد السلام قدادحة

تحت إشراف: الدكتور عاطف الريماوي

التوقيع: _____ التاريخ: _____

القسم الأول: المعلومات الشخصية

الأسئلة	الخيارات
العمر بالسنوات	
فترة المكوث بالمستشفى	
الجنس	ذكر أنثى
المؤهل العلمي	تعليم أساسي أو أقل تعليم ثانوي تعليم جامعي (دبلوم أو أعلى)
القسم	باطني جراحة
المستشفى	مجمع فلسطين الطبي مستشفى رفيديا الجراحي مستشفى الوطني مستشفى أريحا
الحالة الاجتماعية	متزوج/ة أعزب/عزباء منفصل/ة أو أرمل/ة
الدخل بالشيقل	
العنوان	مدينة قرية / بلدة مخيم

القسم الثاني: استبانة الرضى الرضا عن استخدام الموقف والخلفية والتقييم والتوصية (SBAR)
كأداة اتصال للتسليم

غير موافق	محايد	موافق	الفقرة
جودة المعلومات			
			المعلومات التي أتلّفها عن حالتي الصحية محدّثة
			تم تزويدي بمعلومات كافية عن الحالة المرضية الخاصة بي
			أنا قادر على فهم المعلومات التي تم توفيرها لي
			أصبح من السهل لدي متابعة الحالة الصحية الخاصة بي من خلال تحديث المعلومات
			أشعر أن المعلومات المهمة لا يتم إعطاؤها لي دائماً أثناء التسليم
			لدي وعي ذهني على لفهم المعلومات التي يتم إعطاؤها لي باللغة العربية
التفاعل والدعم			
			لدي الفرصة لاستخلاص المعلومات الخاصة بي ونقلها للالسرة
			لدي الفرصة لمناقشة قضايا الحالة الصحية مع التمريض
			لدي الفرصة لمناقشة الحالة السريرية الصعبة التي مررت بها
			لدي معرفة حول مختلف جوانب الرعاية التمريضية .
			لدي الفرصة لطرح أسئلة حول أشياء لا أفهمها
الفعالية			
			أجد أن التسليم يستغرق الكثير من الوقت مما أشعر بالملل
			كثيراً ما أتلقي معلومات أثناء التسليم لا تتعلق بحالتي الصحية
			يتم تقديم معلومات عن الحالة المرضية في الوقت المناسب

Appendix (3): Approval Letter from the Ministry of Health

State of Palestine
Ministry of Health
Education in Health and Scientific
Research Unit

دولة فلسطين
وزارة الصحة
وحدة التعليم الصحي
والبحث العلمي

Ref.:
Date:

اللائحة والإجراءات
المرفقة في
تحت إشراف
المستشفى الوطني

دولة فلسطين
وزارة الصحة
وحدة التعليم الصحي
والبحث العلمي

الرقم: ٢٠٢٤/١٧١٠
التاريخ: ٢٠٢٤/١١/٢٥

عطوفة الوكيل المساعد لشؤون المستشفيات والطوارئ المحترم،
عطوفة الوكيل المساعد المدير التنفيذي لمجمع فلسطين الطبي المحترم،
تحية واحترام،

الموضوع: تسهيل مهمة بحث

يرجى تسهيل مهمة الطالب: طلال فراج محمود عبد السلام - ماجستير إدارة الجودة في المؤسسات الصحية/الجامعة العربية الأمريكية - رام الله بعنوان:

" The Impact of nursing besides hand over using (Situation- Background- Assessment-Recommendation)SBAR on nurses and patient satisfaction during daily change shift at Governmental hospitals in West Bank"

حيث سيقوم الباحث بجمع معلومات عن طريق تعبئة استبانة من المرضى و الكادر التمريضي في وزارة الصحة (بعد اخذ موافقتهم)، وذلك في:

مجمع فلسطين الطبي - مستشفى رفيديا الحكومي - مستشفى اريحا - مستشفى الوطني الحكومي.

تحت اشراف الدكتور: عاطف الريماوي

على ان يتم الالتزام بالمحافظة على اخلاقيات البحث العلمي وسرية المعلومات، وعد التعرض للمعلومات التعريفية للمرضى.

على ان يتم تزويد الوزارة بنسخة PDF من نتائج البحث، التعهد بعدم النشر لحين الحصول على موافقة وزارة الصحة.

مع الاحترام،

د. عبد الله القواسمي
رئيس وحدة التعليم الصحي والبحث العلمي

نسخة: عميد كلية الدراسات العليا المحترمة/ الجامعة العربية الأمريكية

Tel: 00 2223001 scientificresearch.dan@gmail.com 09-2333901 • تلفاكس

الملخص

المقدمة: يُعدُّ تحسين الجودة (QI) في بيئات الرعاية الصحية جزءًا أساسيًا من السعي المستمر لتحقيق أفضل النتائج الصحية ورضا المرضى. يُعدُّ التواصل بين فرق الرعاية الصحية من المجالات الرئيسية في تحسين الجودة، حيث أثبتت أداة "الوضع-الخلفية-التقييم-التوصية" (SBAR) فعاليتها وكفاءتها في نقل المعلومات بين الممرضين وبين الممرضين والمرضى. كان الهدف من هذه الدراسة تقييم التغير في مستويات الرضا بين الممرضين والمرضى بعد تنفيذ جلسة تعليمية متعلقة بتطبيق أداة SBAR في مستشفيات حكومية مستهدفة في الضفة الغربية - فلسطين.

المنهجية: تم إجراء تصميم قبل-بعد الاختبار في الفترة بين 2024/4/15 و 2024/5/15 على عينة متاحة من 259 ممرضًا و 287 مريضًا، حيث طُلب منهم الإجابة على استبيان ذاتي التعبئة يتكون من عوامل ديموغرافية ومقياس للرضا يتعلق بعملية التواصل، بما في ذلك جودة المعلومات، والتفاعل والدعم، والكفاءة. تم جمع البيانات مع الالتزام بالاعتبارات الأخلاقية المتعلقة بالخصوصية والسرية، وتم تحليلها باستخدام برنامج SPSS.

النتائج: كان العمر الوسيط 31 عامًا للممرضين و 47 عامًا للمرضى، وكانت الأغلبية متزوجون وتحمل درجات جامعية ويعيشون أكثر في القرى والمدن. لوحظت درجات رضا متوسطة إلى عالية في مرحلة ما قبل الاختبار بين الممرضين والمرضى، والتي زادت بشكل كبير في جميع المجالات بين الممرضين، وباستثناء مجال الكفاءة بين المرضى. كانت هناك عوامل ديموغرافية متعددة مرتبطة بفروقات ذات دلالة إحصائية في متوسط درجات الرضا في كلتا المرحلتين.

الخلاصة: زاد الرضا بين الممرضين والمرضى تجاه عملية التواصل بشكل كبير عندما تم تعليمهم عن أداة SBAR. يُوصى بإجراء المزيد من الدراسات مع شمول أكبر للأقسام وأنواع المستشفيات وأدوات القياس. يجب على الممرضين التركيز أكثر على تقليل الانقطاعات، ويجب على صانعي السياسات تمويل الجلسات التعليمية والتدريبية حول مثل هذه المواضيع. الكلمات المفتاحية: SBAR، الوضع-الخلفية-التقييم-التوصية، رضا المرضى، رضا الممرضات، التأثير.