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The Relationship between Clinical Judgement Skills and Performance of Academic Nurses at Al-Hillah Teaching Hospitals

A Dissertation Submitted to the
Council of the College of Nursing University of Babylon
in Partial Fulfillment of the Requirements for the Degree of
Doctorate of Philosophy in Nursing Sciences

By

Ahmed Mohammed Jasim Shlash

Supervised by

Professor Dr. Shatha Saadi Mohammed

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بسمِ اللهِ الرحمنِ
الرحيمِ

((قَالُواْ سبحَانكَ لَا
علمَ لَناَ إِلَّا مَا
عَلَّمتَنَا إِنَكَ أَنتَ
العَلِيمُ الحَكِيمُ))

صَدقَ اللهُ العليُ العظيمُ
سُورةُ البقرة
الآية (32)

Dedication

To the grandson of the Holy Prophet and our guide and leader

Al-Imam Al-Mahdi

Bless upon him

To the pure soul who gave me her blood, soul and love ……my lovely Mother

To my modal in life, who I carry his name proudly…… Dear Father

To my magnificent wife, who supported me and with her I face the challenges, with my endless love
To my lovely children (Yousef, Mohammed, and Rayan) who have brought the joy to my life

To my brothers, sisters and friends with my love and respect.

Academic supervisor certification

I certify that the dissertation entitled " **The Relationship between Clinical Judgement Skills and Performance of Academic Nurses at Al-Hillah Teaching Hospitals** " submitted by **Ahmed Mohammed Jasim** and prepared under my supervision at the College of Nursing, University of Babylon in partial fulfillment of the requirement of the Degree of Doctorate of Philosophy in Nursing Science.

Professor. Dr. Shatha Saadi Mohammed

Signature:

College of Nursing / University of Babylon

Date: / /2022

Professor. Dr. Shatha Saadi Mohammed

Signature:

Head of Adults Health Nursing Department

Date: / /2022

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ABSTRACT

Background: Clinical judgement is the foundation of nursing practices and serves as the foundation for nurses' activities and the provision of safe patient care. Nurses must use critical thinking and clinical judgement in order to deliver high-quality care and manage the role growth associated with the complexity of today's health care systems. Clinical judgement is recognized as essential skill for all nurses and serves as a distinguishing factor between professional nurses and those in strictly technical roles.

Objectives: The objectives of this study are to assess clinical judgement and performance of academic nurses at the point of care. In addition to, finding the association between clinical judgement, with certain variables.

Methodology: Descriptive cross-sectional quantitative design is used to conduct this study. A non-probability purposive sampling technique was adopted and recruited (91) critical-care nurses from three teaching hospitals. The data were collected through the using of the questionnaire format and top up by the researcher and analyzed data were analyzed electronically through using the called statistic package social science (SPSS -version 25).

Results: The majority of the study sample (56.0%) were within the second age group (25-29) years old, (61.5%) were female, single, have a Baccalaureate degree in nursing, within (1-5) years graduate from nursing, with (1-5 years) experience in nursing, and most of them were living in urban areas. The results indicated that the majority of participants had average clinical judgement abilities and good performance. There was a significant association between the nurses' clinical judgement and performance. There is a significant relationship between the nurses' clinical

judgement and their (age, nursing enrolling program, and years of experience) at p-value <0.01.

Conclusions: The study found entry clinical judgement scores significantly correlate to academic performance of critical care nurses. Moreover, academic nurses had acceptable clinical judgement skills and good performance.

Recommendation: Based on the findings of this study, the study strongly recommends encouraging the nurses to use the clinical judgement abilities in their critical care units to provide safe and optimal care for patients. Continuous nursing education department in each hospital must act to encourage nurses to developed clinical judgement and performance abilities through a periodic educational sessions and make it as a mandatory for job promotion. Moreover, providing training program for novice nurses before recruiting them in the critical care units.

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List of Abbreviations

NO.	Items	Meaning
1.	ANA	American Nursing Association
2.	BNP	Brain Natriuretic Peptide
3.	BSN	Bachelor's Science Nursing
4.	CDC	Center of Disease Control
5.	CJ	Clinical Judgement
6.	CJM	Clinical Judgement Model
7.	COPD	Chronic Obstructive Pulmonary Disease
8.	CPD	Continuing Professional Development
9.	CT	Computed Tomography
10.	EBP	Evidence Base Practice
11.	KSA	Kingdom Saudi Arabia
12.	LPN	Licensed Practical Nurse
13.	LVN	Licensed Vocational Nurse
14.	M.S.	Mean of Scores
15.	NCSBN	National Council of State Boards of Nursing
16.	NEI	Nursing education institutes
17.	NGN	New Graduated Nurses
18.	NP	Nursing Practitioner
19.	NP	Nursing Programers
20.	PET	Positron Imaging Tomography
21.	PS	Patients Safety
22.	PT	Physical Therapy
23.	SP	Simulator Patient
24.	SPSS	Statistical Package for the Social Sciences
25.	WHO	World Health Organization

List of Symbols

Symbols	Meaning
%	Percentage
D.F	Degree of freedom
F	Frequency
N	Number of sample
NO.	Number
R	Pearson Correlation Coefficient
S	Scores
Sig.	Significance
T	T-test
X^2	Chi-square
Max	Maximum
Min	Minimum

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D.	Questionnaire (Arabic)
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CHAPTER ONE

INTRODUCTION

1.1. Introduction:

The clinical judgement is one of the most essential aspects of professional performance. It is a requirement for generating professional identity and is mainly based on nurses' knowledge and expertise, as well as their clinical thinking, reasoning, intuition and evidence-based practice abilities. Nurses utilize these abilities to evaluate patients and their environments, as well as to process and analyze patient information in order to identify and meet patients' needs (Kelly et al., 2014; Glick, 2011; Patricia Benner et al., 2009; Tanner, 2008).

Clinical judgement refers to the nurse's making decisions based on various types of information, such as recognizing important questions, anticipating and developing an adequate plan, analyzing changes in a clinical situation, reflecting on its effectiveness, and implementing a thoughtful intervention. Additionally, it relates to the cognitive processes associated with decision-making, such as making sense of data and cues, and is described as an analysis of patients' health issues and needs followed by a decided course of action (Cappelletti et al., 2014; Tanner, 2006). Clinical judgement is critical to ensuring patient safety and providing high-quality nursing care. Furthermore, it allows health care workers to predict occurrences and properly react to practical settings, which may signify the difference between life and dead when patients' conditions decompensating (or deteriorate) (Alfaro-LeFevre, 2016; Gerdeman et al., 2013).

Clinical judgment is defined as a nurse's (or nursing student's) capacity to collect patient data, interpret that data, offer appropriate care based on the data, and then assess both the patient's and one's own actions. Self-reflection

has been identified as a critical component in the development of clinical judgment, and it should be incorporated into all aspects of the curriculum, including clinical settings, classroom, and clinical labs (NLN., 2017; Tanner, 2006).

Although the meanings of judgment and decision are distinct, there is a link between both. The decision is the choice between options; the judgment is the assessment of the choice to be made (Carl Thompson & Stapley, 2011). Clinical judgment requires the nurse to take a holistic approach that considers the environment, relationships between patient and family, and the ability to recognize both visible and subtle assessment outcomes (Letcher et al., 2017).

The National Council of State Boards of Nursing (NCSBN) has been defined clinical judgment as a minimum ability for nurses to practice safely and ethically. Clinical judgment, described by the as the application of a nurse's knowledge and experience in making decisions about client care, is a key and crucial ability that allows nurses to decide a suitable nursing actions while arranging care for a patient. In order to provide effective and safe patient care, nurses must be able to make correct clinical judgments. More importantly, nurse educators must be able to develop a sufficient level of clinical judgement in new graduates in order to achieve a positive patient outcome (NCSBN, 2012; Pongmarutai, 2010). According to the National League for Nursing, the nursing judgement is an essential skill for graduates of all nursing programs (NLN, 2017). Clinical judgment is complicated, and every situation in clinical setting is unique, necessitating carefull consideration. Furthermore, in clinical setting competing demands necessitate nurses multitasking, prioritizing, delegating, and decisions making that impact on outcomes of patient. Clinical judgment is a

complicating factor that develops over time with expertise, which it is lack in novice nurses. Faculty of nursing must both teaching and validating students' clinical judgment in order to practice safely. The fundamentals of baccalaureate education for professional nursing, according to practice, necessitates strong clinical judgment and critical thinking abilities (Manetti, 2018).

In health care institutions, clinical judgement is a crucial part of nursing practice (McCartney, 2017). The clinical judgement of nurses may have a significant impact on patient outcomes, necessitating careful consideration and decision-making (Manetti, 2018). However, studies indicate that owing to a lack of information and experience in the ever-changing healthcare environment, nursing students are not acquiring the sophisticated reasoning skills and clinical judgement abilities required to operate successfully after graduation (Van Graan et al., 2016). A novice nurse may become an expert with more inductive, analytic, and critical thinking contextual patterns with knowledge improvement and repeated practice (Pouralizadeh et al., 2017).

Tanner defined nurses' clinical judgement as the result of an interpretation of a patient's concerns, requirements, and health issues, particularly when the patient's condition is complex or ambiguous. It is necessary to make judgements regarding the modify approaches standard or action to be taken, or create those deemed suitable for the patient's state, based on these observations and interpretations (Tanner, 2006). Clinical judgement, regarding to this framework, must be maintained along four dimensions; effective observation of patient problems, effective interpretation of what is observed, an appropriate response to learn from the situation, and effective reflection; at other phrases, knowledge, skills, and

experience are required to made proper judgments in clinical situation (Martínez-Castillo & Matus-Miranda, 2015).

Making a clinical decision is a difficult task for health workers. It necessitates intellectual as well as professional maturity. In order to achieve logical deduction, it is necessary to be able to pay attention, reason, and summarize. Clinical judgement is challenging for nurses, because they must have previous training in order to get a good understanding of this topic. It is contingent upon his capacity for observation, for identifying pertinent information, for identifying connections between provided components, and for reasoning. Clinical judgement is a cycle of sensory processes that starts with perceptions and continues with cognitive functions involved with the intellectual processing of information through mental activities such as reasoning and judgement. Along with observation, clinical judgement allows the nurse to correlate bits of information, evaluate them, create connections with known facts, and critically and rationally interpret and analyze the data at hand. Clinical judgment enables the nurse to recognize, associate, and interpretation of a given condition signs and symptoms. For instance, when a senior's lips and skin are chapped, he or she consumes little proteins, is immobile, and little moves, a nurse would notice that the senior in a danger of bedsore. Following that, the nurse will take the necessary preventative measures. If the nurse considers and evaluates each piece of information separately, she or he will come to this conclusion. The components must be seen, recognized, and logically organized. Their combined impacts must be evaluated holistically and in a meaningful way. This viewpoint enables the nurse to make judgments and provide appropriate treatment (Phaneuf, 2008).

It is a challenging matter to articulate and evaluate clinical judgement in nursing, despite the significant of it, in order to educate and assessing clinical

judgement in students', it is necessary to evaluate qualities which may or may not be clearly apparent to the learner. Clinical judgement may involve a first impression of students' about clinical situation, which may be difficult to detect and contextually observe during treatment plan. Additionally, circumstances requirement for clinical judgement are often fraught with ambiguity and uncertainty, compounding the difficulties of application, evaluation, and conceptualization (Tanner, 2006).

Clinical judgment is frequently developed in nursing education through the use of simulated patient scenarios. Other venues and instructional techniques for evaluating and developing clinical judgement involve direct clinical experiences, grand rounds, didactic concept-based learning exercises, , and traditional laboratory settings (Bussard, 2015; Victor-Chmil & Larew, 2013; Kantar & Alexander, 2012; Meyer, 2012).

(Gerdeman et al., 2013) It has been stated that the skillfulness of nurses is one of the most essential aspects of nursing professional performance. Nurses' skillfulness refers to the abilities to use skills in a variety of situations. In other aspects, nurses' clinical judgement capacity is reflected in their ability to utilize information, evidence, and experience, as well as abilities of critical thinking in everyday practice. Autonomy is another characteristic of professional nursing practice (Traynor et al 2010). Professional autonomy refers to the ability of a nurse to establish connections, engage with people, and use knowledge and insight in everyday clinical practice (Gillet et al., 2013; Skår, 2010). According to a survey of five-hundred French nurses, procedural justice and supervisor autonomy support had a significant impact on nurses' satisfaction and perceived organizational support. Another feature of professional nursing practice is the implementation of educational programs to improve nurses' clinical judgment.

Kantar and Alexander incorporated clinical judgment into nursing curricula and found that education improves nurses' clinical judgment skills (Kantar & Alexander, 2012; Thompson et al., 2012). Other educational interventions, such as conceptualizing, simulation, and teaching critical thinking skills, can help nurses improve their clinical judgment (Victor-Chmil & Larew, 2013; Jerak-Zuiderent, 2012; Fero et al., 2010) .

Interdisciplinary collaboration is another feature of professional nursing practice. According to Lockwood (2010), collaboration between nurses and other healthcare professionals is essential to their professionalization. Furthermore, it has been shown that interdisciplinary cooperation between nurse educators and clinical nurses improves clinical judgement nurses' skills (Kantar & Alexander, 2012; Thompson et al., 2013).

Performance evaluation is one of the most important responsibilities of any health organization in order to ensure the quality of performance and services provided (Emamzade et al., 2007).

According to a study of Lusia (2017) on the factors that impede the academic performance of first-year nursing students revealed that the academic performance of student nurses is influenced by both internal and external factors. External factors include teaching and learning, insufficient resources, a lack of university housing, curriculum-related factors, and socioeconomic factors. The use of a single teaching methods, students' attitude, language barriers, students labeling by lecturers and inadequate support, and a lacking of self-discipline among some students were all factors in teaching and learning.

Critical thinking ability, on the other hand, has gained less consideration in relationship to nursing programme success and performance.

Skills of critical thinking are essential for a nurse's ability to make decisions, solve problems and process information. On the other hand, with a less than a year of experience nurse's graduates, are regularly unable to perform this. The lack of a new graduates critical thinking abilities has been attributed to nursing curricula that emphasize knowledge accumulation rather than knowledge application to real-world situations (Levett-Jones et al., 2010; Fesler-Birch, 2005; Del Bueno, 2005). Recent nursing studies focus on the pre and post evaluation of development critical thinking in nursing students in relation to learning approaches and specific teaching, and measuring graduate skills of critical thinking rather than the academic achievement, clinical performance, and development of students with entrance critical thinking skills (MORE, 2012; Thompson & Stapley, 2011), (Del Bueno, 2005; Wangensteen et al., 2011).

Quality nursing care is built on sound clinical judgment. Every day in clinical practice, nurses make a plethora of decisions that necessitate careful consideration because the decisions they make effect on the outcomes of patient. Nurses' capacity to multitask and make important choices while delivering care is required by the demands of the complicated clinical practice environment. To avoid detected and problems complications as soon as possible, bedside nurses must be aware of changes in a patient's health and minor clues (Ebright, 2010).

Following the Bologna Process, Europe's convergence to European Higher Education has resulted in a large attempt scale to standardize nations education, supported via pillars that emphasize on skills-oriented education, quality , and mobility (Collins & Hewer, 2014).

Over the last decade, the field of nursing has seen an increase in the number of skills that nurses must possess in order to perform competently

and safely. Clinical judgment is the most important skill required, as it applies and makes use of fundamental professional knowledge. Clinical judgement is a higher-level cognitive concept that includes medical knowledge, ability, decision-making, and critical thinking (Betts et al., 2019; Dickison et al., 2016). Clinical judgment is a combination of critical thinking and decision-making skills that is founded on a solid foundation of basic professional health care knowledge. In this case nursing knowledge is critical to the general nursing process (Kuiper et al., 2017; Standing, 2014; Wilkinson, 2011; Rubenfeld & Scheffer, 2010; Thompson & Dowding, 2009).

It is a difficult situation to get a better grasp of how nurses making clinical judgements and decisions. On the other hand, there is an overemphasis on issue resolution, as if problems were fixed, which is contradicted the essence of complicated clinical situations (Cristancho et al., 2017). However, in complex situations, judgement is focused on issue definition rather than problem solution. The complexities of issue definition have not been the focus of medical education research initiatives. The present knowledge on clinical judgement has been mostly gained through investigating how the problem is addressed. The severity judgement instructs the practitioner of health care to include key cues pertinent to the condition of patient's (Dwyer et al., 2018). In order to find suitable interventions, it is necessary to comprehend the issues, characteristics of the given situation, and their consequences. Many clinical decision mistakes are not the result of ineptitude or a lack of knowledge, but rather the fragility of human judgement under the constraints of uncertainty (Scott, 2009).

As a result, the purpose of this research is to evaluate the clinical judgement abilities of nurses participating as part of their bachelor's degree

in adult health nursing courses, particularly issue identified in terms of categorization error, risk severity, and contributing reason to mistakes. The researchers also aimed to explore the academic nurses' performance and see whether there was a link between clinical judgement abilities and how well they performed.

1.2 Importance of the Study:

Clinical judgment is an essential component of healthcare disciplines and is required for safe patient care. A new nurse is involved in 50% of healthcare errors, and a clinical judgment lapse is involved in 65% of errors. Only 23% of newly graduated nurses have entry-level competencies and are ready to practice (Brenton, 2018; Kavanagh & Szweda, 2017; Hooper, 2014; Kienle & Kiene, 2011).

Nurses who are inexperienced or new to the profession and lack judgment skills can endanger patients' safety. Nurses who are inexperienced or novice are more likely to overlook major changes in a patient's health, even more so in today's clinical environment changing, when both nurse ratios and patient acuity: are rising. Undergraduate nursing programs should aim to improve nursing graduates' clinical judgment skills and cognitive abilities (Lavoie et al., 2013; Levett-Jones et al., 2010; Simmons, 2010).

Today's health care environment, in addition to superior clinical skills nurses must have good clinical judgement skills. Clinical judgement is a necessary ability for nurses and a critical component of nursing practice to provide safety, efficient, and effective patient care in a health care system complicated today's. Furthermore, new nurses entering the health-care system with a good clinical judgement and excellent practice knowledge are needed to assist patients' complicated care requirements and contribute to the

best possible decisions about patients care (Lasater, 2011; Samuels & Leveille, 2010).

Despite the high demand for nursing graduates, there are concerns about nursing students' clinical performance qualifications. Various studies have concluded that current educational programs fail to prepare nursing students for real-world practical performance, and that most nurses begin as novice after graduation (Jervis & Tilki, 2011; Marshburn et al., 2009).

According to recent researches, the expectations for entry-level clinical judgment are not meted by the majority of newly qualified nurses. Following the procedure, computer data analyses, and using the recommended methods will not guarantee sound clinical judgement and the resolution of the patient's concerns (Pongmarutai, 2010). Clinical judgement has been recognized as a critical skills that allows nurses to plan appropriate nursing actions while planning patient care, especially the capacity to manage patients who are quickly deteriorating (Lindsey & Jenkins, 2013). The clinical environment in nursing are more complicated than ever today. Nursing, as a rapidly evolving profession, necessitates a nurses with a high cognitive skill. Creative and critical thinking, as well as clinical judgment, are regarded as basic skills for all health professionals (Potgieter, 2012).

It is important for patient outcomes to detect signs of deterioration early and respond appropriately, it is critical to respond to patients who exhibit warning signs of physiologic abnormality as soon as possible. Failure to detect and respond to these physiologic abnormalities on time can result in prolonged hospitalization, disability, or death (Churpek et al., 2016; Chen et al., 2015; De Meester et al., 2013). Delays in response have also been found to be linked to an increase in unexpected ICU admissions and deaths. This interval of unobserved physiological deterioration represents a chance for

intervention that could help hospitalized patients be safer. If bouts of acute deterioration are discovered and remedied as soon as feasible, patient safety and outcomes may improve. While not all severe adverse events can be avoided, it is obvious that early detection of patients at risk for severe adverse events must improve as well as the increased nurse response in these instances (Chen et al., 2015; Boniatti et al., 2014).

Failure to engage to the first indication of physiologic change is a failure to save and may result in a severe adverse event in patients with proven physiologic abnormalities. Additionally, nurse educators must show the value of the graduates providing patient care and the broader health care system. According to NCSBN (2009), around 150,000 new graduate's nurses join United States healthcare system annually. Nurse educators recognize their critical role in educating nursing students about the need of good clinical judgement in providing safe patient care. However, in order to encourage nursing students to acquire an appropriate degree of clinical judgement, it is critical to assess their competence and progress. It is essential to have a legitimate and trustworthy instrument. This tool may be used to assess nursing students' clinical judgement and identify areas for improvement, additional development, or remediation, which would eventually result in the avoidance of patient problems and help keep healthcare costs down (Churpek et al., 2016).

In 2019, 15.9% of nurses in the United States left their works, and this trend is visible around the world. The problem of nurse shortages is aggravated by the fact that about greater than twenty percent of a new graduated nurses (NGN) abandon their jobs in a year. In the United States, for example, 27.6% of NGNs left their positions in 2019 (NSI Nursing Solutions, 2020; Marć et al., 2019). Numerous studies have discovered that a

variety of factors, including level of support, their clinical competence and, the presence of effective leadership, the working environment of NGNs, job satisfaction, coping self-efficacy, work stress and team cohesion, recognition and rewards, and opportunities professional development all contribute to NGNs' job satisfaction and turnover intention (Fallatah et al., 2017; Boamah & Laschinger, 2016; Yu & Kang, 2016; Flinkman & Salanterä, 2015; Nei et al., 2015; Cheng et al., 2014). Among these variables, researchers discovered that poor competence is one of the primary causes for NGNs' desire to leave and actual turnover (Cheng et al., 2014; Beecroft et al., 2008).

In Iran 2015, a study was conducted on twenty-four participants to investigate the process of Iranian nurses' clinical judgment development. The primary concern expressed by research participants was becoming unprofessional in clinical judgement. To address this issue, they were battling for professional autonomy, attempting to integrate clinical judgement skills, rushing to implement initiatives and effective educational, and attempting to inter-professional cooperation and foster professional in clinical judgement. The primary category was struggling to become a professional in clinical judgement development. Nurses were able to improve their professional clinical judgement when they were professionally supported (Seidi et al., 2015).

A study was conducted on fifty-five participants in Saudi Arabia 2020 to “assess clinical judgment skills to rate the severity and perceived risk, as well as identify factors leading to errors”. There was clear agreement on the risk of error (the higher range rating from 36 percent to 53.6 percent). The mostly frequent identified contributing factors were a lack of experience and clinical knowledge, as well as an excessive workload. The most of the junior nurse’s students in the study had critical thinking skills and the capacity to

classify errors, hazards, and other variables. The students' general agreement was modest based on the present research findings on mistake categorization, related risk, and possible causes. As a result, there is a greater need to enhance efforts to instill better clinical judgement abilities in nursing students, which necessitates frequent longitudinal assessment (Bayoumy & Albeladi, 2020).

The majority of the sample (152 of one-hundred fifty-seven responding countries; 97 percent) stated that a three-year program is the minimum duration for nurse education. The vast majority of nations reported educational content and length requirements (ninety-one percent), accrediting procedures (eighty-nine percent), national standards for faculty qualifications (seventy-seven percent), and interprofessional education standards (sixty-seven percent). However, the efficacy of these policy and standards unknown. Furthermore, there are significant variation stilling in the training levels and minimum education of nurses, as well as capacity limitations like as shortages in faculty, infrastructural limits, and clinical placement site availability (WHO, 2020).

Globally, there are 19.3 million professional nurses of overall 27.9 million nurses. In the entire stock from 2013 to 2018, represents an increase of 4.7 million, this confirming that the nursing is the biggest professional category in the sector of health, represented about fifty-five percent of health professions. All nursing staff (27.9 million) comprise 6.0 million (22%) associate professional nurses, 19.3 million (69%) professional nurses, and 2.6 million (9%) who are not classified. The majority of sample (86 percent) have a regulatory agency for nursing. Around (forty-six percent) two-thirds of nurses, before to beginning practice they required to undergo an initial competence assessment, and nearly (seventy-three percent) three-quarters

need nurses to maintain their professional development in order to maintain practicing. However, with the exception of a few subregional mutual recognition agreements, nursing education and practice are not regulary uniformity. In an increasingly team-based, mobile, and digital environment, regulatory agencies have significant challenges in maintaining up-to-date education and practice standards, as well as nursing workforce registries (WHO, 2020).

1.3 Statement of the Problem

Research works related to measuring the clinical judgment of nurses who actively work as academic nurses, are rare, especially in Arab countries, and most of the research on this subject has been studied in academic setting, as well as in clinical setting. The importance of providing clinical judgment skills education for nursing students is undeniable. But at the same time, it is important to provide the same opportunities for nurses working in the clinical field whose education did not include acquiring clinical judgment skills through education.

Currently, classroom and clinical nursing education in Iraq is largely based on rote learning. Little time is spent promoting independent thinking that negates the development of critical thinking and thus clinical judgment. Therefore, the education system in Iraq did not allow the development of critical thinking, and the development of clinical judgment skills for nurses, therefore, it seems that the inclusion of clinical judgment skills in many fields of nursing in Iraq is somewhat absent. To ensure the provision of safe care to patients, as the nursing profession continues to develop in Iraq, it has become clear and necessary to address clinical judgment skills in formal education programs for nurses working in hospitals as well as nursing students.

1.4 Objectives of this Study

The present study aims to achieving the following objectives:

1. Assess clinical judgement of academic nurses at the point of care.
2. Assess performance of academic nurses at the point of care.
3. Find-out relationship between the nurses' clinical judgment and their demographical characteristics (age, gender, marital status, nursing program enrolling, number of years graduate from nursing, years of experience in nursing and residency).
4. Explore the relationship between clinical judgment and performance of academic nurses.

1.5 Research Questions and Hypotheses

Research Questions:

The study's research questions were:

1. Do the academic nurses have a clinical judgment making abilities?
2. What are the level of clinical judgment skills among academic nurses?
3. What are the level of performance of academic nurses?
4. Is there a relationship between clinical judgment skills and performance of academic nurses?

Research Hypotheses:

The null and alternative hypotheses for the study based on research questions were as follows:

H_0^1: There is a non-statistically significant relationship between clinical judgment skills, as measure by the Clinical Judgment Assessment Tool, and the performance of academic nurses, as measured by Clinical Nurse Performance Tool, among academic nurses at Al-Hillah Teaching Hospitals.

H_a^1: There is a statistically significant relationship between clinical judgment skills, as measure by the Clinical Judgment Assessment Tool, and the performance of academic nurses, as measured by Clinical Nurse Performance Tool, among academic nurses at Al-Hillah Teaching Hospitals.

1.6 Definition of Basic Terms

1.6.1 Clinical Judgment skills:

- **Theoretical definition:**

Clinical judgement refers to the nurse's making decisions based on various types of information, such as recognizing important questions, anticipating and developing an adequate plan, analyzing changes in a clinical situation, reflecting on its effectiveness, and implementing a thoughtful intervention (Cappelletti, 2014).

- **Operational definition:**

Is a processes utilized by nursing to plan a care for patient, which include using previous experience and knowledge, identifying various cues, gathering new information, combining and interpreting that data, and setting priorities. To arrive at a clinical judgement,

nurses utilize a combination of knowledge, observational skill, interpretation, prioritizing, and intuition.

1.6.2 Performance:

- **Theoretical definition:**

  A supervisor's annual performance evaluation of a subordinate is called performance evaluation. It is intended to help employees understand their roles, objectives, and expectations, as well as how to achieve success in their jobs. (Marura, 2018).

- **Operational definition:**

  A set of nursing activities or behaviors performed by nurses and directed toward the recovery and well-being of the patients assigned to their care has been defined as performance. The major goal of this group of actions is to meet the patients' requirements and expectations.

1.6.3 Academic Nurses:

- **Theoretical definition:**

  An academic nurse is defined as “an individual who fulfills a nursing faculty role in an academic setting” (Fitzgerald, 2017).

- **Operational definition:**

  Academic nurses are those who had earned a bachelor's or higher degree in nursing, such as a BSN.

CHAPTER TWO

LITERATURE REVIEW

2.1 Historical Background.

The model of clinical judgment in nursing is formalize and conceptualize in 2006, by Tanner. This approach is made up of four components: “noticing, interpreting, responding, and reflecting. Tanner described clinical judgment as the interpretation or conclusion regarding a patient's wants, worries, or health issues, and/or the choice to act (or not), utilize or alter established techniques, or invent new ones as considered suitable by the patient's reaction”. Clinical judgment model of Tanner's now serves as foundation for instructional interventions and a guiding framework to support clinical judgment. Tanner stated in the first element that nurses' comprehension of conditions and expectations include noticing. For instance, a nurse whose first assessment of a patient's condition identifies laborious breathing, wheezing in inhalation and exhalation, and hypoxemia after gaining an early understanding of a patient condition displays noticing. Then, the nurses develop an interpretation and acting based on analytic, narrative, or intuitive thinking processes. This is shown in action when a nurse develops hypotheses for a condition of patient, such as an inefficient pattern of breathing or aggravation of (COPD) Chronic Obstructive Pulmonary Disease. When a COPD exacerbation occurs, a reaction might include moving the patient to aid in breathing or acquiring and giving a bronchodilator. The last and most important element of the clinical judgment paradigm is reflection. Whenever a nurse analyzes a patient's response to therapy, such as un-labored breath following a bronchodilator administration, and confirms or criticizes the measures performed, this reflecting on-action

and inactivity is obvious. This model of Tanner's served as the theoretical base of this research. (Tanner, 2006).

In sixteen of January, 2009, “United states Airways Airbus A320, flight 1549 crashed into the Hudson River and all 155 passengers and flight crew members on board were saved. Captain Chesley B. Sullenberger III”, the pilot, has been recognized as a flying hero. Instructor’s nurses interested in developing nursing students' clinical judgement capacity, can adopt this flying success story to address two issues: What a contributing factors of the pilot's better judgement taking under stress, which enabled him to take the decision at the exact time? Is sound judgement something that can be taught or does it come with expertise? parallel to a nursing programmer, “the Federal Aviation Administration (FAA) requires pilots to be trained to respond methodically to a given set of circumstances, utilizing the 3Ps (perceive, process, and perform)” to decide the appropriate course of action. More critical to the study's objective is the widespread assumption that sound judgement can be taught. Similarly, nursing educators seek ways for embedding in nursing students sound clinical judgement (Pongmarutai, 2010).

2.1.1. Theoretical Framework

Tanner (2006) provided a theoretical framework to address a process of clinical judgment that nurses use in circumstances of quickly changes clinical situations. In 2006 Tanner started building this frame-work after conducting a thorough assessment of nursing literature about clinical judgment in nursing, which leads to developed this model in a Clinical Judgment. Clinical judgment described by Tanner under this paradigm as the “interpretation or conclusion regarding a patient's wants, worries, or health issues, and/or the choice to take action (or not), utilize or alter traditional

techniques, or invent new ones as considered suitable by the patient's response. A model of Tanner Clinical Judgment created based on this concept, which includes four components: noticing, interpreting, responding, and reflecting". The four components, taken together, reflect the process of clinical judgment of nurses from a range of specialities and serve as the conceptual framework for our research.

The approach of Tanner's clearly specifies a four components of clinical judgment in nurses. Data gathered from patient, which includes noticing, contributes to nurses' general expectations and early understanding of a condition. Once noticing has occurred, the interpreting process begins. Nurses create interpretations and decide on a plan of action using analytic, narrative, or intuitive thinking patterns. Tanner said during his response that a suitable plan of action is finished depending on the results from the preceding two components (Tanner, 2006) p. 208. Finally, the Clinical Judgment Model concludes with a substantial part of reflection on action and inactivity. During Reflection, nurses evaluate the success of the completed activity and make modifications depending on the situation's predicted consequences (Tanner, 2006).

Tanner (2006)'s theoretical framework places a strong emphasis on nurses' completed activities in a process of clinical judgment. In particular, Tanner emphasized on the importance of interpreting and noticing in the choosing of an appropriate action. Furthermore, the execution of a appropriate action is a significant component of responding in order to guarantee that the predicted outcomes of patient are realized through the completing of a recommended nursing practice (Tanner, 2006). In addition, the element of reflecting has only taken place after action, or inaction. Researchers and Faculty can assess whether the predicted outcomes of

patient were reached by reflecting on the action, or inaction, that occurred, and this contributes to developed a clinical judgment in students'. Researchers and nursing teachers can then guarantee that students observe, understand, and respond to patient circumstances in a consistent and effective manner (Tanner, 2006).

A literature search yielded two different concepts analyses that defined the features or particular components of clinical judgement. Often, the concept analysis is used to determine the fundamental element or character of a concept. Delineating the notion of clinical judgement into its features would enable of clinical judgement objective observation in action to evaluate students' achievement in these skills and discover areas for future improvement (Jacobs, Wilkes, Taylor, & Dixon, 2016; Van Graan et al., 2016; Thompson, 2016).

The South African researchers Van Graan (2016) used a Walker and Avant framework to conduct a concept analysis in order to develop a theoretical definition of clinical judgment. So after a review of the literature (involving nursing and medical dictionaries), the experts define clinical judgement as both a particular event “Clinical judgement is the conclusion reached by a nurse as a result of her ability to gather significant pieces of information” and a process, with eighteen attributes (or characteristics) of the clinical judgement concept (p. 39). Another concept analysis performed by researchers of Australian (Jacobs et al., 2016) found 13 features in an integrative review.

Both studies' characteristics are centered on data collection and interpretation, care planning, and data evaluation. This is compatible with Tanner's previous clinical judgment definition. Attributes of both sets also emphasized the nurse's theoretical, experiential knowledge, and practical, as

well as the context in which the clinical judgment occurs, which Tanner considers to be important aspects of clinical judgment (Tanner, 2006). In the van Graan paper, however, the attributes are not exclusive mutually; for example, manage uncertainty is both a synonymous for the characteristic nuanced/ distinct ability and a separated characteristic. (Van Graan et al., 2016) examined the antecedents and effects of clinical judgement action, indicating that clinical judgement is different from the features, and therefore the essence of clinical judgement remained ambiguous. Clearly, there is still much ambiguity about the features of clinical judgement, and more study is necessary to help researchers and educators to investigate and use the notion of clinical judgement. To advance this field of study, the authors performed a study to explicit the features identified in our earlier paper's idea analysis (Jacobs et al., 2016).

One of the difficulties with existing clinical education methods, according to Tanner, is the wasteful use of time in clinical teaching. Routine duties, verifying preparing /conducting assessments, and ensuring safety in the clinical environment for students. There is a limited amount of time for more active interaction to discuss students' observations of the underlying pathophysiology (Randall, 2007; Tanner, 2006).

Base on the clinical reasoning and judgment, students must be encouraged to identify patient requirements, create appropriate answers, and change treatment plans. In order to provide safe patient care that is not purely protocol driven, the students of nursing must be able to think outside of the box of protocols, standards, and formal regulation’s (SmithBattle & Diekemper, 2001). When they have the chance to integrating a scientific information, expertise, and clinical judgment in a particular context, a clinical decision making is facilitated (Patricia Benner et al., 2009). Nurses then learn to depend on previous personal experiences as the foundation for

clinical decision making and to identify distinctive elements that represent their knowledge of salience as well as the effect of the clinical setting. Such chances lead nursing students to a better grasp of the clinical situation, allowing them to advance from dependence on abstract information and context-free formal regulations for nursing care to deep knowledge (Potgieter, 2012; Tanner, 2006; Benner, 2001), in addition to the preceding that while didactic lectures, simulation, memorization of demonstrations may lead to mastery, they do not promote the development of critical thinking skills and ethical ideals for caring. (Frith, 2013) and (Maskey, 2008) state that the student's ethics and value system can only be judged based on observable behaviors, because there is a fact that a student's success is dependent on the information, abilities, and attitudes acquired during their training.

According to (Chisari, 2009) and (South African Nursing Council (SANC) Nursing Act, 2013), collaborative discourse serving as role models during nurse-patient interactions between clinical mentors, students, and instructors, is a valuable learning tool for enhancing clinical judgment. The aforementioned activity can assist students in transitioning from dependent to self-direction. (Bruce & Klopper, 2018), inside the clinical setting as an optimal setting for active student learning (Chan, 2004; Quinn, 2009). Nurses must think critically, self-critics, synthesizers of information, linkers of subjects, and introspective, self-directed, life-long learners (Facione, 2011; Potgieter, 2012). As a result, nursing education curriculum must shift from a base-content to a base-concept approach.

The clinical nursing environment today is more complicated than ever. Nursing, as a fast evolving profession, necessitates greater cognitive skills from nurses. Every health practitioner is expected to have critical creative

thinking and clinical judgment (Potgieter, 2012). Described observations and their interpretation as differentiating characteristics of competent nursing practice (Lin, 2003; Nightingale, 1992). Clinical judgment in nursing has become associated in recent years with the nursing process model of practice, which is regarded as a problem-solving activity. Since the 1960s, the nursing process has dominated nursing education as theorists attempted to connect their ideas to the clinical judgment process and a theory of nursing to practical setting. According to Higuchi and Donald (2002) and Tanner (2006), demonstrate that teaching just one kind of issue resolution, like as the nursing process, falls to effectively define the process required for nursing judgment and for accounting the variety of elements impacting on a clinical judgment.

Nurse educators are aware of the rising need for competent nurses in today's health-care system, and they are finding it increasingly difficult to meet it. They must be able to locate appropriate clinical experiences in order to prepare students for a more intense clinical environment and every-changes (Tanner, 2006). Due to a lack of interact during the training and education with a real-life patient, the clinical role-playing practice is restricted. The newly authorized nursing curriculum, which will be implemented in overall (NEI) Nursing Education Institute at SA, starting in 2016, decreases a required nursing clinical practice hours from four-thousand to three-thousand. (Department of Health, 2011).

The previously noted requirement for thinking abilities in nursing has been emphasized, in response to the continuously and rapidly changing health care contexts. The length of hospital stays increases as the hospitalized patient’s acuity and a chronic diseases prevalence rises. The increasing ratio of patient to nurse, restricted clinical facilities, and a scarcity

of educators nurses are all typical contributors to the aforementioned outcomes (Potgieter, 2012).

According to recent research, the entry-level requirements for a clinical judgment do not satisfy for a majority of a newly certified nurses (Pongmarutai, 2010:1). Professional nurses entering the field are expected to be highly skilled and prepared to operate in a technologically advanced and more complicated health care environment. According to (Hall, 2002; Nursing A & Council M, 2005), the shifting demands of practice are characterized by ambiguity, and nurses must still make clinical decisions and clinical judgments despite this uncertainty. Merely following the procedure, analyzing the data like a program, and using the techniques provided will not ensure sound clinical judgment and treat the client's problems (Pongmarutai, 2010). Clinical judgement when planning patient care allows nurses to choose the most suitable nursing interventions and also has been identified as a critical skill, particularly the capacity to manage rapidly failing patients (Lindsey & Jenkins, 2013). That was created an environment in which the nurse is expected to made solid, precise clinical judgments that support patient requirements and complicated health-care, then also contributing to the best possible patient results (Clark, 2004).

The 2006 (South African Nursing Council (SANC) Nursing Act, 2013) reimbursed community service year for newly certified SA nurses resulted in the provision of comprehensive health care services. Professional nurses and clinical educators, on the other hand, have recognized the necessary knowledge and capacity to making a good clinical judgments are often lack in newly graduates nurses (Tanner, 2006:207). Because they not have fully prepared (educationally or clinically) for the greater accountability and

increasing demand of health care (Department of Health, 2013; Geyer, Naude, & Sithole, 2002).

2.2 Overview about the study.

Tanner's five main conclusions were used to extract and analyze fifteen studies. The systematic review results largely corroborate the original Tanner's concept, but the function of experience in clinical judgement and reasoning is not completely confirmed or understood. Although no more effective approach has been found, researchers have improved their understanding in recent literature by using strategies to develop these abilities in nursing students and working nurses. This is inclusion reflection of a six clinical judgement and reasoning conclusion in nursing clinical judgement improvement and education methods, which it might influence on what a nurses brings to this condition. (Cappelletti et al., 2014). Nurses' cognitive abilities will need to improve as they grow more complicated (owing to increased nurse – patient ratios, shortage of nursing educator, and limited clinical facilities) (Van Graan et al., 2016). Many successful health outcomes are based on good clinical judgments by nurses; however, their absence raises the probability of unfavorable outcomes (Aiken et al., 2014; Faisy et al., 2016; Thompson et al., 2013). As a consequence, it is essential to begin cultivating these characteristics as soon as possible, ideally throughout academic studies. Although educational treatments with the goal for enhancement clinical judgement have been created, the data to far is equivocal on the techniques that are most effective for this purpose (Thompson & Stapley, 2011).

The distinctions between clinical judgment, critical thinking, and clinical reasoning and how they influence clinical decision making are confused of several nurses; they are linked but not similar. The final

initiative goals are to guide and assist the nurses in understanding the differences between these elements that is important in the nursing care process and how to use them properly depending on the different circumstances they face in their everyday job in various clinical areas and abilities. According to the findings of the survey, the majority of nurses believe that clinical reasoning is only used during evaluation. (Guerrero, 2018). The study's findings were utilized to create an approach to help and ensuring that every nurse in nursing care process had a legitimate justification for every action, and it is rationalizing, significant, and beneficial to the receiver of care. Nurses should be educated throughout the nursing process on the importance of incorporating and using clinical judgment, clinical decision making, and clinical reasoning. Clinical reasoning is thought-provoking and fascinating to study; it necessitates the use of many approaches in learning nursing processes, which is critical in providing safe patient care. This is a crucial consideration while making a productive clinical decision. A professional nurse must comprehend and execute reasoning skill in order to provide safe care in nursing. The reasoning skill is not a skill that is gained by chance; rather, it is learned via experience. A professional nurse understands that the interacting in caring with patients is based on in-depth analysis and reasoning regarding the patient's situation rather than just what they see on the surface. Nursing students are the subject of the majority of studies on critical thinking and clinical reasoning competence. Nevertheless, the goal of this investigation is to learn about and comprehend the attitudes of clinical staff nurses regarding their competencies in clinical reasoning at various degrees of responsibilities. The clinical reasoning phases and process, it is imperative to appreciate and recognized. The nursing process, which includes assessment, nursing diagnosis, planning, implementation, and evaluation, is a critical

thinking paradigm used to enhance competent nursing care, according to the American Nurses Association. Critical thinking is a process of uncovering hidden issues, establishing objectives, analyzing assumptions, deciding suitable practices, and assessing evidence proofs. It emphasizes the importance of identifying questions, difficulties, and concerns, as well as finding a solution and taking appropriate action. These includes inside and outside reasoning on both of the clinical setting. Nurses and midwives account for about half of all healthcare professionals, with 20.7 million out of 43.5 million worldwide. By 2030, 9 million extra nurses and midwives will be required to meet the sustainable development goals. (Organization World Health, 2018).

According to the World Health Organization (WHO) health report, nurses are health care professionals who emphasize on the care for communities, people and families, and in order to maintain, attain, or regain optimum quality of life and health from configuration to death (WHO, 2011).

There are several types of health care systems worldwide; according to a World Health Organization study (2011), the aim of health care systems is to enhance performance and responsiveness to the population's expectations. Health care systems are institutions established to address the health requirements of particular populations; they are responsible for the treatment, diagnosis, and prevention of injury, sickness, disease, and other mental and physical impairments in people. Health care is deliver by clinicians in nursing, medicine, pharmacist, healthcare professions, and other care settings. It encompasses all aspects of basic, secondary, and tertiary care, as well as public health (WHO report, 2011).

Nursing cares are more important among all provided cares in clinics and hospitals. Nurses play a variety of roles in the delivery of nursing

services. Because one of the primary goals of nursing is disease prevention, they care for people who have physical, mental, social, and emotional domains, as well as special needs in each domain (Neyshaboori et al., 2010) (Becker, 2013; Nieminen et al., 2011). Nurse are expected to support patients' rights in a supportive role, and in an instructional role, the nurse can assist patients in making treatment and care decisions. If health services are delivered well in accordance with their various roles, patients will be satisfied (Becker, 2013; Lamont et al., 2013).

2.2.1 Nursing as a Science and Art:

Nursing as a science refers to the physiological disease processes as well as the techniques learned and implemented in inpatient care, whereas nursing as an art profession may be characterized as the provision of care, communication, comprehension, compassion, and love in the care of patients (Dendasck, 2017). Nurses use methodical information gained from learning institutions to use these abilities while bonds with clients. According to a research titled Opinions of Nursing Students on the Art of Nursing: A Qualitative Study, in order to balance the science and art in nursing, education must be restructured to interweave the two so that they may be related in nursing care. As a result, it is suggested that the same research be conducted in nurses from various cultures (Duran & Cetinkaya-Uslusoy, 2015). Compassionate care is linked to higher well-being outcomes, better compliance with preventative and management recommendations, fewer medical mistakes, lower costs, and better patient-family health care experiences, according to the art and science of care. Nursing management as a killis important, the scientific knowledge in care and art of making it; Those are being incorporated into every daily practice. Nursing, whether it is an art or a science, is a wonderful profession that promotes health and aids

the sick. It is a career that involves assisting people in getting back on their feet. Most importantly, it is a job that involves all of the necessary components for effective management (Newman, 2016). The nurse practitioner exemplifies the nature of a science and an art that are both necessary in the process and delivering of nursing care. The art of nursing is the creative application of information learned based on skills and competence, whereas the science of nursing is organized knowledge that deals with principles. Nurses' proficiency in the process of nursing care is critical for patient safety; not just competency, but caring with devotion and compassion are also important. Sound reasoning, appropriate decision making, and precise judgment must be embedded in the art and science of nursing as key components in iatrogenic damage prevention to a recipient of care and obtaining a higher quality of health.

2.2.2. Nursing Performance (Competency & Readiness)

Nurses play a critical role in the care of patient with long-term conditions, and the load on primary care is growing with the frequency of chronic illnesses and the population ages (Borgès et al., 2018). Along with their engagement in primary care, nurses must make full use of the breadth of their training in order to increase their expertise in health practice. Nursing practitioners may develop a practice and improving informal teaching occurrences in order to produce it more efficiently and successfully by incorporating new approaches into practice. In making informed practice judgments, nursing professionals can access comprehensive data and be able to interpret it correctly by incorporating new approaches into practice (Dunn & Milheim, 2017; Glassman, 2017). In the “Global strategic directions for strengthening nursing and midwifery 2016-2020, and dissected the themes in guiding the influences of nurse and midwife professionals in improving

world health", such as: workforce motivation throughout responsiveness and efficacy, ensure education, competency in all settings and stages of health agencies; operational leadership; organizational authority: optimize programme improvement; and maximize their potential and abilities. by learning/training, continuing professional development (CPD), and professionals collaboration; as well as generate political intention in order to establish an operative evidence-based workforce development strategy (Organization World Health, 2018).

2.3 Practice Rational Care:

The patients are at the core of nursing care in health care settings, demonstrated in the (figure 1) Model of Practice Rationale Care. Nurses must establish rapport via therapeutic conversation and effective performance of nursing procedures and skills. The influence of nurses' clinical reasoning on patient outcomes is contingent upon their ability to use clinical reasoning effectively when clinical decision-making occurs. Clinical reasoning is a technical term that relates to the way nurses think about patient problems. Those, nurses with inadequate abilities of clinical reasoning typically failing to recognize and detect patient deteriorating conditions, resulting in erroneous decision-making that results in inefficient patient care and increased patient suffering. On the other hand, clinical judgement refers to the conclusion of the clinical reasoning cycle. Within this setting, nurses reflect on their behaviors resulting from clinical decision-making. Clinical reasoning is the art of the nursing profession when it comes to ensuring patient safety during normal nursing interventions. Nurses must be led by solid clinical reasoning in order to achieve a favorable outcome and avoid iatrogenic damage to patients (Guerrero, 2019).

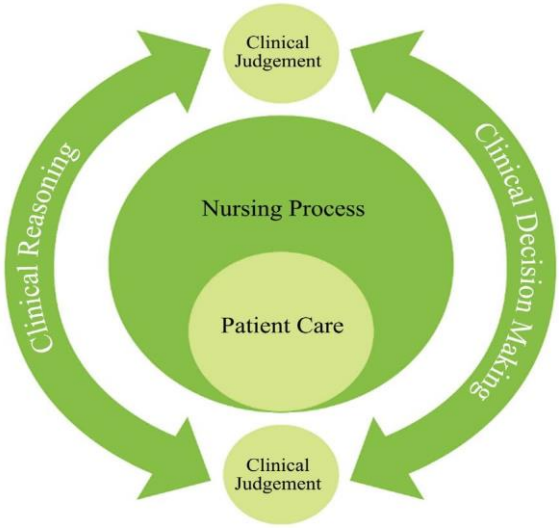


Figure (one): The practice rational care model (Guerrero, 2019).

With the rising need for nurses in the health-care sector throughout the world, every nurse is both obligated and challenged to deliver quality care. Dealing with patient concerns and issues is difficult, and there are more challenging to meeting the caring demands. Nurses should be prepared with skills, information, attitudes, and values, but most essentially, they must be able to deal with the larger picture of care of patients in the clinical setting. However, positive clinical judgement, good and right decision making, both nurses and patients burden, as well as their significant others, with a proper training and the appropriate application of clinical reasoning, will be decreased (Guerrero, 2019).

2.3.1. Elements of Care

Patient-centered care is a critical component of healthcare delivery. Rapport, compassion, and empathy are the pillars of a positive therapeutic experience, as are behavioral methods that promote an optimistic connection between the care practitioner and the patient (Raja et al., 2015). These methods include offering a full explanation and frequent chances for patients to ask questions, being aware of body language and establishing a good

clinical environment, avoiding the use of jargon, and managing time effectively (Raja et al., 2015). There are further talks, and patients are encouraged to express their perceptions and feelings. The role of nurses and human resources in overseeing choices are critical areas for improvement in order to provide optimal health care, and managers of nurses should be educated with information about work environments in order to enhance key elements of the nursing process (Gea-Caballero, 2018). Clinical reasoning is an in-depth examination of facts and information acquired from patients throughout the nursing process in order to determine patient risk and current problems, as well as the rationales for all nursing interventions and treatments given. Clinical judgement is the result of all actions that occur during clinical decision-making and clinical reasoning during the nursing care process, whereas a clinical decision making is the process by which a chosen action to perform are following thorough examinations, investigations and appropriate management are identifying to address patient's condition. Those results are escorted with an expectation of accountability and responsibility.

2.3.2. Clinical Reasoning

It is defined as the cognitive processes and strategies that nurses use to comprehend the significance of patient data, to identify and diagnose actual or potential patient problems, to make clinical judgments that aid in problem resolution, and to achieve positive patient outcomes (Fonteyn, 2008). Additionally, they view clinical reasoning as a process in which nurses observe the state of patients, analyze pertinent data/records, grasp the patients' problems, plan and implement interventions, evaluate results, reflect on the findings, and learn from the approaches. Clinical reasoning occurs on a daily basis in a hospital or nursing care setting. The necessity of

bringing a reasonable perspective will impact both the outcome of the management and the patient's state (Levett-Jones et al., 2010). The profession of nursing necessitates the development of complete judgement and decision-making abilities, as thinking critically and making clinical judgments are key components of nursing practice (BMJ, 2017). The use of nursing process records to examine the clinical reasoning developments before to and during exposing to a practice post- operative model with a high-reliability, resulted in the promotion of high-quality patient care (Lambie et al., 2015). Control, recognition, and responsiveness to key information, specific symptoms, employing inquiries that point to pathophysiological reasons, asking questions chronologically, concentrating on pact with patients, summarizing, and comprehending body semantics are all barometers of clinical reasoning (Haring et al., 2017). Prior to viewing the clinical reasoning impacts, it is critical that its development begin at the undergraduate level. It is an undergraduate skill that requires engagement and willpower during practice, and in order to gain these skills, students must develop their critical thinking and understanding abilities in order to navigate multifaceted healthcare environments through decisions and judgements (BMJ, 2017).

2.3.3. Clinical Decision Making

It is described as a contextual, ongoing, and changing process in which data are collected, analyzed, and assessed in order to make an evidence-based choice of action (Tiffen et al., 2014). Thus, improving healthcare necessitates improving clinical decision-making and making it even more logical. The normative philosophies selection emphasizes that, making a choice to be rational is a technique of selection, not of selection itself: choices may be excellent at first but become bad later, or vice versa;

nevertheless, better decisions will ultimately result in better results (Djulbegovic & Elqayam, 2017). Clinical decision-making is influenced by a variety of variables. According to a research titled Analyzing the efficacy of education and variables influencing clinical decision-making, making decisions, previous experience, and workload are all significant factors influencing a clinical decision-making. Those elements are applied in a variety of ways, and by recognizing all of them, the nursing process will be properly developed (Hsieh et al., 2017). The primary obstacles are a lack of substantial understanding of the nursing process, divergent perspectives on its development, a lack of consciousness and understanding amongst professional nurses regarding the implementation of nursing processes, support for management approaches, and issues with records during the process (Hsieh et al., 2017).

2.3.4. Clinical Judgment

Clinical judgement is a crucial and difficult topic for nursing practitioners because it involves the development of observational abilities, the identification of pertinent facts, and the discovery of connections between components via judgement and rationalization (BMJ, 2017). Thus, nurses are accountable for their acts and their judgement, as well as their inactivity and action (Tomlinson, 2015). This requires nurses to use clinical judgement while adhering to evidence-based practice. Daily activities that need acute observation and thinking abilities will result in a trustworthy and competent medical judgement. Nurses' experience has an effect on their quickness and ability to make thorough clinical judgments (BMJ, 2017). As a result, inexperienced nurses may struggle with this procedure, whereas a more experienced nurses act immediately rely on their perception. The

clinical judgement development categories are as follows: striving for professional autonomy in order to establish an individual proficient identity; striving for clinical judgement integration in order to utilize diverse skills in clinical judgement in response to the patient's condition and situation; frantically attempting to implement educational approaches in order to communicate judgement into the nursing education and curriculum; and an attempt to making an education intervention in order to communicate judgement into the nursing education and curriculum (Seidi, Alhani, & Salsali, 2015). The combine of the "Modified Early Warning Score (MEWS), an objective vital sign-based risk prediction scale, and the Patient Acuity Rating (PAR), a subjective seven-point Likert scale evaluation", is effective in determining the deterioration of patient's status. This requires integrating judgement with factual and subjective data in order to generalize evaluation throughout clinical deterioration (Patel et al., 2015). Additionally, this will aid in the timely mobilization of funding to treat the underlying cause of clinical deterioration (Patel et al., 2015). But at the other hand, the importance of strategies to facilitate clinical judgement in the nursing setting, as well as the reflection, theory-practice integration complexity, and clinical supplementation as critical components of facilitating clinical judgement, and learning experiences enhancing recommend to develop students' knowledge, thinking skills, and attributes by enrollment in educational environments (Van Graan, 2016).

2.4 What is Clinical Judgment?

Understanding precisely what is meant by clinical judgement is very difficult. Clinical judgement has been characterized in a variety of ways across the medical literature. A good clinical judgement involves a knowledge of not just the diagnostic and pathophysiological elements of a

disease, but also the context in which that sickness happened. Such judgement considers the family environment, lifestyle, and accessible personal, psychological, emotional, and social resources, and integrates them into any interventions and care plans.

According to Victor-Chmil (Kassirer, 2010), critical thinking, clinical reasoning, and clinical judgement are comparable and connected ideas. Critical thinking refers to the cognitive processes that are utilized to analyze information. Clinical reasoning is a cognitive and metacognitive process that analyses information in relation to a clinical issue or a particular patient. Clinical judgement is defined as the cognitive, psychomotor, and emotional processes manifested in actions and behaviors. According to Records and Weiss (Banning, 2008), clinical reasoning, diagnostic thinking, and clinical judgement are often confused and used interchangeably. Clinical judgement is defined as the evaluation of evidence from all accessible sources, including the clinician's previous experiences, followed by the development of suitable diagnoses and suggestions for action.

2.4.1. Clinical Judgment in Nursing

Within the nursing profession, theory informs how clinical judgement is expressed and assessed in research and practice. In contrast, no theoretical framework is established or followed for defining or assessing clinical judgement in allied and medical healthcare practice (Bergeron, 2006; Lee et al., 2014; Vasko et al., 2013). However, the connection between clinical judgement and action is suggested throughout the literature in the fields of medicine and allied health. Clinical judgement theory, on the other hand, is often used in nursing research designs. The Regan-Kubinski (1991) Model of Clinical Judgment, Gordon et al (1994). Integrated Clinical Judgment

Model, and Tanner's (2006) Clinical Judgment Model are all examples of theoretical models of nursing clinical judgement. Nursing researchers use the Gordon (1994) and Regan-Kubinski (1991) models, appears the least often among these models. The difficulty of operationalizing, assessing, and utilizing these models may explain their rare usage. Nursing researchers, on the other hand, often utilize a Clinical Judgment Tanner's Model to support their study or refer to it through an accompanying instrument, the LCJR (Laster, 2007). Following that, the LCJR as well as each one of those nursing theories, are examined in terms of how they educate the discipline about clinical judgement (A. S. Fedko & Dreifuerst, 2017).

2.4.1.a Clinical Judgment Measuring in Nursing

A defining statement and guiding definition are used to measure this concept. i.e., what is the measurement construct/object? At this instance, the clinical judgement is a concept for entry-level nursing practice within the domain of nursing. The original concept definition took into account the whole of the nursing literature study on clinical judgement, decision making, and critical thinking. Taking a wide view enabled the presentation of more subtleties of the clinical judgement construct to panels of Subject Matter Experts (SMEs) and allowing these nurses expert to evaluate the significance of those nuances. The following succinct guiding description of the underlying concept of nursing clinical judgement was adopted after many iterations:

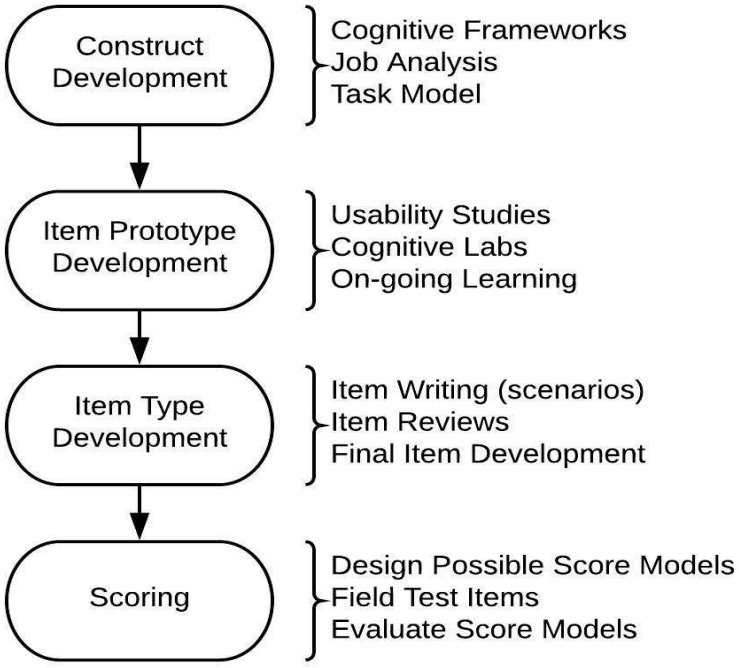


Figure (two): Process of item development (Betts, 2019).

Nursing clinical judgement is the observable result of critical thought and decision-making. It identifies as an iterative intellectual process, with the number of iterations indicating how often a set of judgements is required when problems develop over time or new symptoms arise. It is an iterative process that utilizes nursing knowledge to monitor and access presenting circumstances, priorities client concerns, and create the best feasible evidence-based solution to provide safe care for client. This concise description encapsulates the process's convergence of critical thinking, decision-making, and knowledge components. More significantly, judgements are made in light of the goal of delivering safe client care via the use of proven, evidence-based treatments. Along with developing a constructed definition, the item creation processes were driven by two factors that aided in representing the construct for measurement (Betts, 2019). At

first, a work analysis strategies of the skills, knowledge, and capacities, (KSAs) are required in the first year of nursing practice (N. C. o. S. B. o. Nursing, 2018). Within the strategic job analysis, the results of a linkage analysis (Raymond, 2016) revealed connections among all of the KSAs assessed. Underlying of all KSAs the clinical judgement was identified as the most closely related skill, while the nursing process was found as the most closely related knowledge statement (N. C. o. S. B. o. Nursing, 2018). This shows the fundamental significance of knowing the nursing process and making sound judgments for entry-level nursing competence. Additionally, these findings support prior research showing the critical role of clinical judgement in nursing practice. The construct representation of second area was devoted to the major clinical judgement theories that have been identified in the nursing literature to date, as described in the next sections. In conjunction with research on nursing decision making (Muntean, 2012), these theories aided in the development of the framework task model for development item, while the strategic job analysis defined the set of practice-relevant task statements and a set of necessary KSAs related to clinical judgement. Clinical judgement has been conceptualized by using a basic three cognitive frameworks in nursing (Muntean, 2012). Those are the humanistic/ intuitive and cognitive continuum theories (Harbison, 2001) (Benner, 1982; Tanner, 2006; Harbison, 2001; Oppenheimer, 2015). All three of these ideas were utilized to develop the task models for the clinical judgement questions (Dickison, 2019).

2.4.2. Clinical Judgment in Allied Health and Medicine

Clinical judgement is the process of creation a differential in which diagnoses are acted upon to accomplish a desired response, that described by the disciplines of medicine and allied health (Bergeron, 2006; Vasko et al., 2013). Thus, doctors' examinations of clinical judgement often begin with evaluating whether students took the appropriate action while determine and diagnosing patient treatment. As instance, (Bergeron, 2006) argued for the clinical judgement utilizing to assist in determining whether to admit a patient with suspected acute appendicitis without imaging to the operating room or to observe and follow the patient clinically. Bergeron's research placed a high premium on doctors' clinical judgement in the action setting. The author contrasted the action of entering the operating room to that of monitoring the patient and compared the results of these two acts. Bergeron particularly examined which activity resulted in greater complications as a method of assessing clinical judgement. Thus, Bergeron's (2006) research shows how clinical judgement is evaluated basing on actions and outcomes of patient.

In another research (Vasko et al., 2013) found that physicians relying on clinical judgement in the hemodialysis patient’s management was increased the accuracy of over-hydration treatment at (P-value <0.05). The authors examined three distinct methods for determining over hydration in hemodialysis patients. Among the three approaches, one required the physician to use his or her clinical judgement. Clinical judgement was used in this instance to establish if the patient was dehydrated based on the physician's actions and physical examination. Vasko and others study, such as Bergeron's study, examined the clinical assessment activity of clinician's and the results of clinical judgement associated with that action.

(Bloom et al., 2002) assessed clinical judgement in patients with infections of respiratory tract. The researcher examined the effect of clinical evaluation of physician's in particular on the viral vs bacterial pneumonia outcomes. The outcomes data were derived from culture findings obtained via a variety of serum as well as orifices. The clinician's action and clinical assessment was evaluated for treat or not to treat pneumonia bacterial vs virus. This activity then also compares to the results of the culture, which served as the basis for clinical judgement. Bloom (2002) followed Bergeron (2006) and Vasko (2013). Bloom (2002), like previous researchers, utilized a mix of action and result data to establish clinical judgement. In line with Bergeron (2006), Vasko (2013), and Bloom (2001), Lee (2014) based on action investigated the clinical judgement and result assessment as well. However, unlike Lee (2002), Bloom (2002), Bergeron (2006) and Vasko (2013), in that the authors evaluated cardiology fellows rather than post residency trained physicians. Lee and others are evaluated a clinical judgement and cardiology fellows in diagnosing ischemic of myocardium with and without the patient's BNP levels. Lee (2014) used a similar approach to the Vasko (2013) research in that they utilized doctors' clinical assessments as an indication of clinical judgement. The study's result was determined by whether the patient experienced true myocardial ischemia as determined by a coronary angiography or stress testing. The researchers discovered that when fellow's cardiology got access to values of BNP, based on the stress test results, the clinical judgement to identify myocardial ischemia improved. These studies demonstrate how researchers have investigated doctors and clinicians in medicine and allied health in terms of how they assess clinical judgement. The researchers determined clinical judgement based on action and result. Furthermore, this way to evaluated clinical judgment it is not only in the field of allied health and medicine.

Clinical judgement is also described similarly by social work and psychology researchers (Bierman et al., 2006; Rosenthal, 2004).

Bierman and others (2006), investigated clinical judgement in the context of home visit for disruptive and aggressive children. The researchers based on the family coordinator's assessment of the situation quantified the effect of customizing home visits. The result was a parental interpretation of the impact visits', which was assessed on the basis of the coordinator's clinical judgement (Bierman et al., 2006).

Rosenthal (2004), like Bierman and others (2006), examined clinical judgement between vocational rehabilitation counsellors in the context of race. The authors quantified the act of exposing bias in generic assessments, African American customers' perceptions of psychopathology and assessments of their educational and occupational prospects (Rosenthal, 2004). The result that was examined the counsellors' overall assessment based on little information provided to them about African American patient’s vs European American clients. Rosenthal (2004), like Bierman and others (2006), evaluated clinical judgement as a consequence of counsellors' activities in terms of patient outcomes. Those two studied, one on psychological coordinators of family and the other on counsellors, show that the researchers defined clinical judgement identically regardless of the discipline, allied health professions or medicine. Additionally, these studies show that researchers use the same concept of clinical judgement regardless of whether they are doing research with doctors, psychologists, counsellors, students, or post-residency educated physicians. The results of research studies evaluating clinical judgement indicated that medicine and allied health researchers put a premium on outcome and action. The significance of those two ideas is emphasized by the suggestion that clinical judgement was

made on the basis of whether an activity achieved a certain result. If a certain result was attained, the researchers determined that the individual exhibited superior clinical judgement in comparison to other participants. As a result, an individual's clinical judgement has a strong impact on their actions. Clinical judgement is probably most dependent on action. However, criticizes of the evidence provided would claim that these studies were not performed by educators or teachers but rather by actual physicians. While this may be true for certain studies, Lee and others (2014) examined fellow's cardiology who were still in clinical settings undergoing training, although with actual patients. It is comparable to how a researchers have often studied clinical judgement among students who are also undergoing a training in nursing education and have not yet been licensed to practice as registered nurses independently.

2.5 Evidence Based Practice and Clinical Judgment

Clinical judgement evolves in tandem with the growing body of work that supports evidence-based practice (EBP). Gupta and Upshur investigate some of the arguments for and against EBP. Most professional organizations, governments, and regulatory agencies have integrated evidence-based practice into their recognized standards of care.

With bodies of clinical knowledge growing in size and complexity, there are limitations to what one person may claim to really know from firsthand experience. Resistance to evidence-based practice comes mostly from practitioners' observations of inconsistencies between best practice recommendations provided by authorities and the requirements of individual patients, as well as the necessity to make care choices in the lack of conclusive relevant data. Montgomery observes that EBP "promises to improve knowledge and its application but does not provide full information

for every patient in every phase of every condition. In fact, EBP is not meant to replace clinical judgement, but rather to supplement it with information. Clinical judgement is required for framing the clinical inquiry and, once received, understanding what to do with the response to care for the patient" (Gaba, 2015).

2.6 The Model of Clinical Judgment

Clinical judgement is described as an interpretation or conclusion about a patient's requirements, condition, or issues, and/or the decisions to take action (or not), to utilize or alter conventional methods, or to improvise new ones as judged suitable by the patient's reaction (Tanner, 2006) page (204). The cognitive process employed by nurses to reach at a clinical judgement are referred to as clinical reasoning (Tanner, 2006). Clinical judgement defines by Tanner as a continuous and flexible processes of "noticing, interpreting, responding, and reflecting", based on three decades of research and an examination of over 200 papers. The CJM outlines the procedures that nurses utilize when confronted with complicated, confusing, and contradictory clinical circumstances that are prevalent in acute care settings. Despite the fact that the CJM was not created especially for this reason, it is helpful in describe a clinical judgements of nurses' when response and recognize deteriorated patient situation (Dresser, 2019).

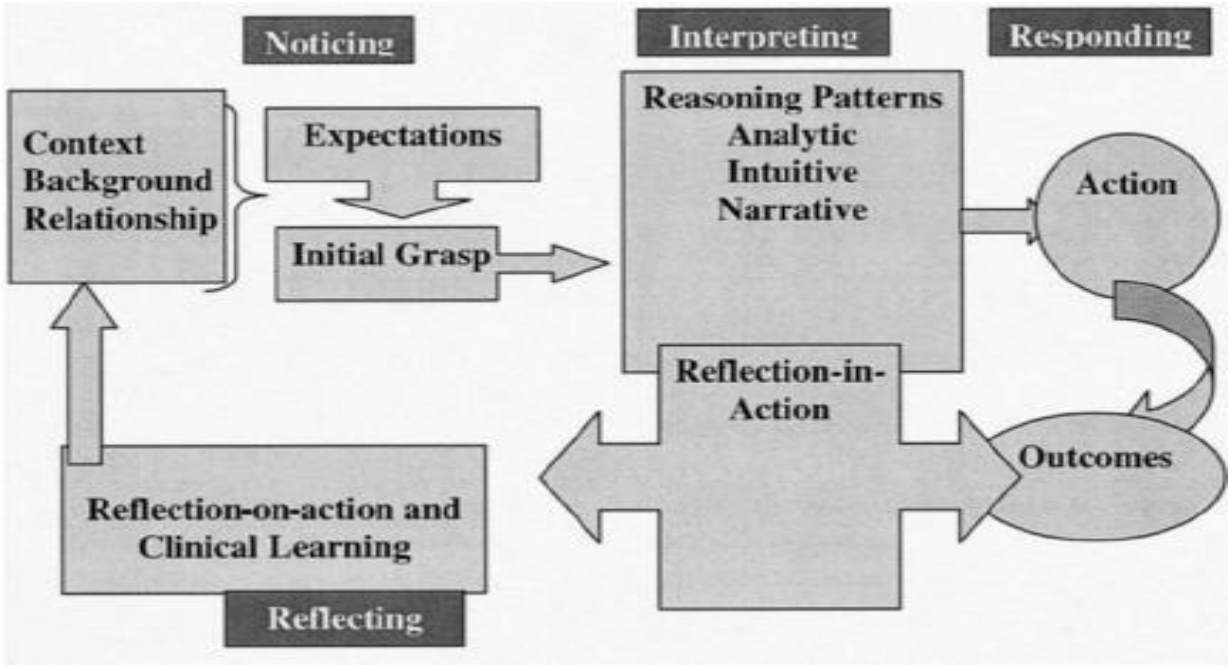


Figure (three). Tanners Model of Clinical Judgment (Dresser, 2019).

2.6.1. Contributing Conclusions in the Clinical Judgment Model.

There are five conclusions regarding clinical judgement in nursing that comes from Tanners review of literatures, that laid the groundwork for developing a model that explains the continuous processes nurses employ to obtain a clinical judgement and the factors that influence those processes. These findings are as following: (1) clinical judgement results from familiarity with the patient and his or her typical responses and concerns, (2) clinical judgement is influenced by the context of the culture or environment in which nursing care is provided, (3) clinical judgement results from familiarity with the patient and his or her typical responses and concerns, (4) reflection on practice is often triggered by a breakdown in clinical judgment and is critical for developing clinical judgment to be used in future situations, (5) clinical judgments are influenced more by what a nurse brings to a situation than by objective information available (Dresser,, 2019).

2.6.2. Academic Advisors Development by Application of Clinical Judgment Models

The tenets of clinical judgement models, which are regularly used to promote reasoning in health professionals, particularly clinical judgement and clinical competence, match with the development of professional reasoning in academic advisers and may be used to inform advisor training and development. Clinical judgement models may assist individuals responsible for educating advisors in communicating the requirements for professional reasoning, in part because they can account for variations in advisors' reasoning development phases. Academic advising technique is founded on the critical thinking process of professional reasoning. Although professional reasoning is a necessary component of successful advice, it is seldom explicitly taught. Academic advisers, like nurses and other competent healthcare practitioners, begin the field with little context for their reasoning and gradually develop the experience and knowledge necessary to provide efficiently, student-centered practice. Outstanding critical-thinking abilities are a key component of the engaged problem solving required for successful advising. However, critical thinking is context-dependent. Health professionals have investigated how workplace-specific critical thinking abilities, referred to as clinical competence or clinical judgement, develop in students who do not have an anticipated range of clinical knowledge and contribute to the development of expert practitioners. In the context of academic advising, these models for clinical judgement offer extra dimensions.

The models of Tanner's clinical judgement and clinical competence phases of Benner's, which are often apply to nurses, are good beginning points for examining similarities between academic advisers' professional

thinking and clinical reasoning among healthcare practitioners (Benner, 1982; Tanner, 2006). Tanner defined clinical reasoning as the processes by which nurses and other clinicians make their judgments, and encompasses both the deliberate process of generating and critically evaluating alternatives, weighing them against the evidence, and selecting the most appropriate, as well as those patterns that might be described as engaged, practical reasoning. Tanner approach of the reasoning process is defined by four dimensions: “noticing, interpreting, responding, and reflecting”.

The clinical competence of Benner's model explains the reasoning development phases of clinician’s' through time, in contrast to Tanner's model, which discusses how clinical judgement is used in the present. Through five phases of clinical competence, Benner describe the development of nurses, starting with a lack of technical proficiency and the need for continuous supervision and with the little mental effort progressing to the capacity to intuit and react to patient requirements.

The structures comparison of Tanner's and Benner's models, indicates that learning to think professionally occurs across time, and developed in the present. Professional reasoning, analogous to Tanner's concept of clinical judgement, refers to a certain degree of problem solving and critical thinking applied to the adviser's job in the formation of thought patterns relevant to a variety of advisor duties. Any study of a comparable professional reasoning model for academic advisers must likewise include both the short- and long-term uses of reasoning abilities.

Additionally, concern for professional reasoning goes beyond teaching basic functions to encouraging new methods to think like an adviser; advisors are trained to use critical thinking techniques that are specifically suited to the needs of academic advising as a profession. In order to improve

knowledge acquisition and interpersonal skills, the literature on advisor training provides a solid foundation for structuring professional development (Mann, 2018).

2.6.3. The Clinical Judgment Regan-Kubinski Model

The Clinical Judgment Regan-Kubinski Model explains how psychiatric nurses make clinical judgments. The (Regan-Kubinski) used a grounded theory method to conduct 36 interviews with 15 psychiatric nurses in order to elicit information about their clinical judgements. The (Regan-Kubinski) concluded from this study that nurses' judgements resulted in nursing activities. Clinical judgement is preceded in this paradigm by six steps: including setting up from initial cues, framing, pivotal cue, hypothesis testing, conclusions, and nursing action. According to model of Regan-Kubinski, clinical judgement begins when the nurse builds up the clinical scenario by gathering a cues that describe behaviors of patients. Using previous experiences and personal knowledge, nurses then framed the scenario based on the particular cues gathered (Regan-Kubinski, 1991). Following the scenario framing, nurses start interpretations after a critical cues choosing. Following the discovery of the key cue, nurses validated or refuted their hypothesis by collecting further patient cues. The core of clinical judgement happened when nurses formed a decision and took action after evaluating their ideas (Regan-Kubinski, 1991). Following the publication of the model of Regan-Kubinski, additional refinement of the notion of clinical judgement occurred in the shape of the Integrated Clinical Judgment Model. However, this paradigm of clinical judgement has not been extensively adopted by nursing educators or academics. As a consequence, there are many similarities between these models (Fedko, 2016; Gordon et al., 1994).

2.6.4. The Integrated Clinical Judgment Model

The Integrated Clinical Judgment Model was developed by Gordon et al. in 1994, This model was developed with input from a variety of nursing specialities, based on the premise that clinical judgement is multidimensional and mainly includes ethical, diagnostic, and therapeutic aspects. In this paradigm, Gordon and others found that the clinical judgement was seldom based only on diagnostic values. To put it another way, nurses' clinical judgement is based on a mix of objective facts and personal views and opinions.

Ethical judgement, according to the Integrated Clinical Judgment Model, involves the scope of assessments, nursing diagnoses, caregiving, and appraisals based upon nurses' beliefs and philosophic values (Gordon et al., 1994). The therapeutic judgement includes things like problem solving, prioritizing, projecting patient outcomes, and treatments selecting based on patient cues and knowledge. Finally, diagnostic judgement entails knowledge and competence in the application of diagnostic ideas and criteria, as well as sensitivity to signals and the capacity to evaluate health trends (Gordon et al., 1994).

Gordon and others developed a generic process that includes interpretation and components of information gathering, execution of the plan, plans for problem resolution, issue identification, and assessment. The researchers suggested that throughout each of the model's five general processes, nurses make diagnostic, ethical, and therapeutic decisions.

Nurses make ethical decisions on the information they gather based on the patients' and their own values at the same time. Nurses make diagnostic judgements during functional health pattern evaluations in the first phase, known as information gathering and interpretation. Nurses use diagnostic

judgement during the second general phase, issue identification, when a nursing diagnosis is postulated (Gordon et al., 1994). As a historian, ethical judgement affects nursing diagnosis via the perception of a patient's dependability and validity. Diagnostic judgement transfers to therapeutic judgement in the third general phase, termed plan for issue resolution, which includes prioritizing problems, designing treatments, and predicting patient outcomes. This third phase, which includes the prioritizing of patient demands and the creation a plan of actions, is also influenced by ethical judgement. The fourth general phase, implementation, includes both nursing activity and moral action as part of therapeutic and ethical judgments. The significance of this phase was emphasized by Gordon who referred to it as adequacy test of a clinical judgement (Gordon et al., 1994). This approach, along with the gathering and analysis of data, resulting in a nurse-patient contact that has a significant impact on nursing action. Assessment, the fifth and final generic phase, addresses moral evaluation as a component of ethical reasoning and outcome evaluation as a component of therapeutic judgment. The observed behavior serves as a last check of clinical judgement effectiveness when evaluating the results of the executed activity. Gordon and others, recommended that the Integrated Model of Clinical Judgment be utilized as a guide for evaluating clinical judgement and as a means of assessing patient data in nurse’s practices or in the educational arena, despite the fact that nursing researchers and clinicians use it sparingly. Gordon et al. have suggested utilizing the model for clinical judgement research in nursing, as well as for organizing nursing education practices and assessing course results. The Integrated Model of Clinical Judgment's complexity in comparison to other models, as well as the lack of a model-based rubric, might also have contributed to its lack of documented usage in nursing education research so far.

2.7 Concept Care Mapping and Critical Thinking Lead to Clinical Judgments

Concept care mapping necessitates the use of critical thinking in order to arrive at good clinical judgements. Clinical judgement has been described by the National Council of State Boards of Nursing as the observed result of critical thinking and decision making (NCSBN, 2019). The American Philosophical Association established a generally recognized definition of critical thinking for many nursing educators: Critical thinking is the act of deliberate, self-regulatory judgement.

This approach takes evidence, settings, concepts, techniques, and criteria into account. Critical thinking is utilized to evaluate connections in clinical data while creating a clinical concept care map. Thus, critical thinking abilities are developed via the process of creating idea care maps. Clinical judgements and nursing care choices are made through critical thinking and clinical reasoning. In 2000, the National League for Nursing Accrediting Commission's Report on Planning for Ongoing Systematic Evaluation and Assessment of Outcomes defined critical thinking as the deliberative non-linear process of gathering, interpreting, analyzing, drawing conclusions about, presenting, and evaluating information that is both factually and belief-based (Schuster, 2020). The American Nurses Association (ANA) states in the 2015 version of Nursing: Scope and Standards of Practice that nursing is a cyclic, iterative, and dynamic process that heavily depends on bidirectional feedback loops from each component (ANA, 2015) Nonlinear, cyclic, iterative, and dynamic concept care maps with bi-directional feedback loops will be utilized to gather, interpret, analyze, and draw.

2.8 Stages of Benner's in Clinical Competence

Benner studied the development of nurses' ability to understanding and synthesize information, as well as how it changing as they advance throughout their careers, until their skill reaches the point where they can generate complicated decisions with little knowledge of the process that underlie those decisions. Benner provided a long-term perspective on the clinical competences development. The five phases of Benner's clinical competence relate to growth of professional reasoning of academic advisors'.

First stage: (Novice)

The practitioner joins the profession as a beginner with few or without formal specific- occupation experience. The practitioner takes a long time to accomplish activities and needs frequent reminders while executing responsibilities, owing to a lack of confidence. This stage coincides with the training phase since few advisers undergo formal training before taking their first advising position. New advisor training varies greatly depending on the institution and position, but it is often focused on functional competency. A new advisor learns basic competencies during their first year, like as how to manage time effectively in student advising interactions, how to integrate teaching into advising, where to find common policies and procedures and how to explain them to students, and how to guide an advising meeting appropriately to achieve desired outcomes (Folsom, Joslin, & Yoder, 2005). Trainers may integrate the logic for different procedures as advisors acquire prescriptive skills began engage the adviser in a reasoning critical skills about their job.

The advisors are starting to form essential professional relationships at the first stage, to learn how advising is interwoven into the broader campus

environment, new advisors must actively connect to different resources (Miller, 2002) suggested:

Learning to become familiar with the campus culture is one of the first things that any new advisor should performed. Which students do you have? What requirements do they possess? Inquire of advisers who work in your area or at a similar level (freshmen, graduate students, etc.) about the problems that students usually bring to them. Then, make a connection between these problems and the appropriate campus resources.

Advisors, like nurses, bring interpersonal abilities to the practice, but they need further help to understand how to manage relationships within the constraints of particular professional standards and legal responsibilities. To meet more than the prescriptive needs that students bring to the advising engagement, novice advisers must integrate the relational element of advising. Although professional advisors may have previously worked with student's college, the academic advising relationship entails concerns that are not often obvious to a new adviser. Advisors, for instance, should think about all students physical spaces comfort, portray a kind and welcoming attitude, and develop methods for engaging with certain individual students and populations student (Laird, 2007).

The kind of assistance that novice advisers get for these skills differs by institution. Previously, alongside more technical components, the interpersonal skills were discussed in lecture format; But the shifting taking a place in this field to more experimental methods; for professional reasoning development these development strategies incorporate more opportunities, like as cognitive apprenticeships and role play (Duslak & McGill, 2014).

Second Stage (Advanced Beginner)

In the phase of advanced beginner, advisors having achieved a fundamental knowledge of practices comparable to that of a recently graduated from school of nursing. This level usually marks the conclusion of the training term for advisors, since the practitioner is capable of performing duties and interacting with students on a regular basis. The adviser can efficiently access information and knows the fundamentals of the necessary technology; nevertheless, they might have trouble finishing advising sessions on time, particularly if an unexpected scenario occurs. Practitioners in the advanced beginning phase, according to Benner (1982), need occasional supporting cues, and they gain a benefit from a more expertise advisors through criticism and frequent observation.

Although advisers in the stage of advanced beginning of professional reasoning investigate theory and literature, they may not be ready to completely incorporate those ideas into their work. When performing day-to-day duties, an adviser at the advanced beginning level is prepared to examine the role of student growth and advising theory. The professional (known also as primary-role) advisors continue to scholarship and examine theory as they go through the development stages, while student affairs professionals and faculty members who advise as part of their duties may reach the advanced beginner level. In accordance with the profession's expectations, the incorporation of reading and producing scholarship into advisor training teaches advisors to engage in professional reasoning: Advisors from diverse academic backgrounds need to recognize more explicitly their theoretical perspectives and consider their contributions to the theories and practice of advising (Schulenberg & Lindhorst, 2008).

Third stage (Competent):

In the competent stage the advisors implement applicable theory to their advising interactions, handle challenging advising circumstances with little assistance, effectively utilize day-to-day technology, and actively seek out chances for relationship development with advisees. According to Benner, a nurses usually practices for two or three years before reaching the competent level. This timeline also applied to development of advisor. When advising difficulties arise, these advisors may debrief with other advisers, as the Tanner explanation, the capacity to work through a breaks practice is essential for the professional reasoning development. At the stage of competent the advisors have achieved a degree of thinking that allows them to stay ahead of almost problems. Whether the breakdown is due to a change in circumstances or a gap in the adviser's present skill set, the advisor may continue to improve their professional reasoning skills by experiencing and learning from the deviation from anticipated results. The adviser may feel dissatisfied when there is a breaks in practice, such as an error that results in a student complaint or an unanticipated deviation from established policy. Debriefing with other advisers and non-advising professionals, as well as self-reflection, may help to relieve any dissonance and aid in the formation of higher-level thinking. This stage is marked by conscious, intentional planning (NSW Health, 2011). The University of Otterbein (n.d.) created a succinct graphic of the Top 5 Mistakes New Advisors Make to demonstrate to advisors the planning tools and expectations in place, such as urging a new advisor to check on advisees' progress annually, and explanations of the auditing degree. These techniques assist advisors in identifying practice gaps as they develop an intuitive sense of institutional and student needs. In essence, a competent-stage adviser is seen as a high-quality ground-level advisor.

Fourth stage (Proficient):

In the level of proficient, advisors establish comprehensive linkages between students' academic circumstances and other aspects of their life. A skilled adviser understands subtle meanings by integrating a theory with the complexity of\ personal reality, student, and institutional. When an adviser reaches the competent level, his or her professional thinking becomes less laborious and decision-making abilities improve. This level is identified for advisers by the integration of ideas (Himes, 2014). A competent professional perceives the full context by integrating the situation's significance into long-term objectives (NSW Health, 2011).

Advisors that are competent recognize and handle possible issues and evaluate circumstances from various perspectives. Advisors may notice and value diversity more than they did earlier in their professional growth because they have gained a better understanding of how diversity impacts practice and contributes to inclusiveness in advisory settings. Additionally, advisors in the competent phase appreciate a range of views in a making decisions and see variety of experiences and ideas as necessary for the process (Himes, 2014).

The proficient adviser’s ability to see the big picture makes them excellent candidates for leadership positions. When confronted with an issue, professional advisers use a many measures approach and apply a great-level of professionals reasoning abilities. Even when advisers are skilled, they may struggle to incorporate the entire picture of student reality and institutional in a process of decision-making. While advisors in early levels of professional reasoning growth cannot anticipate flawless integration of advising and administration components, but it is a critical characteristic for advising leaders. (Folsom et al., 2005).

Fifth Stage (Expert):

In the stage of expert advisors, they have refined and precise intuition. At this stage, advisers have encountered practice breakdowns, integrated theory, committed errors, gone beyond their traditional positions, and operated with an intuitive grasp of each situation and [zero] in on the accurate region of the problem without wasteful consideration of a large range of unfruitful, alternative diagnoses and solutions at this advanced stage (Benner, 1982). Expert advisers, although prone to make errors on occasion, err rarely, usually only in new circumstances requiring the practitioner's greatest degree of analytic skill (NSW Health, 2011). Expert advisers are at ease with using reflection to expand their reasoning abilities and knowledge base, and they see learning via study and vocational involvement as an important aspect of their job (Advising, 2005). The Integrating process of fresh knowledge became natural into practice.

Expert advisers interact in a fluidity with colleagues and students. Observers may observe that expert advisers may readily shift from the casual register of a student engagement to a more formal registers of higher education management as required. The impact of intuition adds to the capacity to code switch and imitate suitable body language, register, and voice characteristics. Using this fluid technique, the adviser does not divide the encounters into a student-versus-colleague dichotomy; rather, the skilled advisor reacts intuitively to indications about how a person wants to be addressed in the conversation. Effective advisors engage with students as distinct people, and the interaction allows advisors to address persons with particular needs, [which] advisors fulfil utilizing a range of techniques, (Colgan, 2016) stated. Expert advisers use a variety of interactional styles to

negotiate the institution's political environment; the expert advisor easily accesses and uses various communication abilities.

2.9 Competencies

Nursing programmers and students are evaluated based on their competencies (C. A. o. S. o. Nursing, 2012a). Competencies are listed elements or components required to perform a job in a health care professionals context (King & Anderson, 2012). They're connected to particular activities inside categorized groups or domains. Two types of skills are addressed in the planned research: competency of NP role, which are used to realize work of NP (Association, 2010), and competency of PS, which are used by a wide variety of professional's healthcare (Ginsburg et al., 2013). The competency-based advanced practice nursing frameworks will be addressed in the next section as they relate to NP role competence. The literature on the PS competency and NP role will be discussed as well.

2.9.1. The Based Advanced Practice Nursing Frameworks Competency.

As global development standards, a growing number of competency-based frameworks have been developed to recognize a common characteristic in advanced nursing practice (Sastre et al., 2014). These frameworks aim to identify competencies for NPs and reduce role ambiguity.

2.9.2. Competency-Based Education.

The used of a competency-based education is to establish criteria for a health professionale to evaluate their own competency in education, to influence curriculum, and to create performance assessments and job descriptions. Nurse regulation and education have been created using

competency-based conceptual frameworks, with the aim of both being to guarantee competent care (O'Connell, 2014; Wearing, Black, & Kline, 2010; Stanley et al., 2009). Professional practice is supported by competency-based nursing models, which typically include a schematic depiction of system or a theory that represents nursing practice (Elliott & Walden, 2015). The framework of NP core competence was created in Canada in cooperation with NPs and nurse supervisors from all across the country to guide regulatory and educational procedures (Association Canadian Nurse, 2010).

2.9.3. Professional Competence:

Professional competence is a complicated term, and there is no universally accepted definition that encompasses all significant areas of professional activity. Professional competence, according to Epstein and Hundert (2014), is the habitual and prudent use of communication, knowledge, clinical reasoning, emotions, values, and reflection in everyday practice for the benefit of the person and community served. Professional competence is defined as including four functions: cognitive function, integrative function, relational function, and affective/moral function. The thesis asserts that clinical reasoning is a critical professional competency and that every nursing student must acquire it throughout their nursing school (Epstein, 2014).

2.9.4. Novice to Expert

Despite clinical judgement is a necessary skill for all nurses, teaching and evaluating it has proven challenging in nursing education (Laster, 2011). Professional programmes should include a broader range of pedagogical methods that represent teaching and learning with a focus on clinical reasoning and clinical judgement (Patricia Benner et al., 2009).

According to Benner's (1984) novice to expert scale, practitioners are evaluated based on their approach to problem solving. The primary factors used to evaluate practitioners are their expertise, their quality of work, their autonomy, their ability to deal with complexity, and their sense of context. The more criteria a someone fulfils, the closer he or she gets into being an expert (Benner et al., 2010; Patricia Benner et al., 2009; Benner, 1982).

Novice: The novice practitioner is defined as someone who strictly follows given standards or plans, has limited situational awareness, and lacks discretionary judgement. The novice's knowledge base is limited and mostly dependent on textbook information.

Advanced beginner: An advanced beginner considers all elements and characteristics of a situation individually, assigning equal weight to each, and acting in a sequential manner.

Competent: A competent practitioner possesses relevant knowledge in the field of practice, is able to view activities in terms of long-term objectives, and can execute routine procedures.

Proficient: Proficient practitioners are able to perceive events holistically rather than in terms of separate elements, and they can determine what is most essential in a case. The proficient practitioner has a thorough knowledge of the subject and area of practice, and makes choices with confidence and efficiency.

Expert: The expert practitioner no longer depends on standards and guidelines and only employs analytic methods when difficulties arise. The expert practitioner has a thorough grasp of the field, as well as the capacity to apply authoritative knowledge of the subject and comprehend the big picture, as well as different options and perspectives to a particular issue.

Each step of Benner's model builds on the preceding one: As the learner develops clinical competence, abstract concepts are improved and extended. By ascribing this title to the nurse who delivers the most efficient nursing care, this idea has altered the nursing profession's view of what it means to be an expert (Benner, 1984). As a nurse advances to the expert level, she or he depends on fewer rules; practice improves not just through experience, but also via a more sophisticated understanding of suitable nursing theory (Peisachovich, 2014).

2.9.5. Safety Competency

Provide safe, high-quality healthcare that promotes patients' health in the context of their families and communities, based on evidence and standards of care.

Course Suggestion Learner Outcomes:

1.Conduct clinical procedures in a safe manner.

2. Only accept tasks that are within your particular area of practice, as determined by your expertise and educational background.

3. Recognize team members' distinctive practice boundaries.

4. In a dynamic working place environment, setting practice prioritization.

5. Recognize and report inappropriate activities to members of the health-care team (Knecht, 2016).

2.9.6. Patient safety competency:

Definitions of patient safety competencies. PS perceptions are represented via care provider attitudes, which include six important constructs: collaboration, effective communication, risk management, a knowledge of human and environmental variables, identifying and reacting to bad occurrences, and a safety culture (Ginsburg et al., 2012). Those better

practice components are critical for NPs who cooperating and consulting with colleagues from a variety of disciplines to promote the cause of good patient care. Working in team's notions include collaborative actions with other healthcare professionals, where views of power imbalances, disputes, debriefing after unfortunate occurrences, and involvement with patients are critical team tasks. Effective communication includes activities such as speaking clearly and consistently with patients, communicating successfully with other healthcare professionals, and communicating effectively verbally and nonverbally to avoid bad occurrences. The domain responsible for managing safety risks develops and executes safety solutions, as well as predicts and controls risk scenarios. What is significant about this research, which utilizes educational SE as an antecedent, demonstrates is that confidence rises when one can foresee potential problems and therefore explore mitigation measures. (Kanter, 2014), as shown by the PS component detecting and reacting to bad occurrences. Following that, the knowledge of human and environmental variables structures covers tiredness, safe technology application, ergonomics in the workplace, and resources. The recognizing and reacting to adverse occurrences components assess the capacity for identifying unpleasant events or near calls, mitigating damage and risk, reporting adverse experiences, and planning to avoid recurrence, reflective practice, and engaging in analysis. The culture of safety focuses on attitudes toward the system of health, like as the importance of speaking out and asking questions (Ginsburg et al., 2012). These constructs represent a Canadian perspective and include global best practice skills from international professional organizations and the World Health Organization's PS frameworks for the aim of assessing health practitioners' self-perceptions of safe patient care (Bressan et al., 2016; Ginsburg et al., 2013). One objective of defining PS skills is to guarantee that the professionals health is

competent (Wong, 2014); therefore, this research will contribute to the body of knowledge by evaluating recently graduating NPs' views of their competence in PS.

2.9.7. Team/Collaboration Competency

Collaborate the health care team with other members to execute and/or modify the care plan.

Course Suggestions Student Outcomes:

1. Notifies relevant team members of any changes in the patient's condition.
2. Consults with clinical specialists when making decisions about patient care in circumstances that are outside of his or her expertise and scope of practice.
3. Collaborates with a team of health care to contribute to evaluation and care planning.

(Knecht, 2016)

2.9.8. Relationship-Centered Care Competency

Determine preferences of patients and families by working together to identify their expectations, resources and cultural traditions while modifying care approaches.

Course Suggestions Learner Outcomes:

1. Clinical judgement should be guided by ethical standards.
2. When making clinical judgments, be receptive to others' opinions.

(Knecht, 2016)

2.9.9. System-Based Care Competency:

Assume the position of a team member or team leader, depending on the situation, the care environment, and the system needs, as determined by upper-level management.

Course Learner Outcomes that have been suggested:

1. Provide evidence to support the allocation of resources to fulfil patient care requirements.
2. Collaborate with the health care team members, patients, their families, and to develop health care goals/outcomes.
3. Solicit feedback in order to enhance individual, team, and system-wide objectives (Knecht, 2016).

2.9.10. Competency in Personal/Professional Development

Seek help in circumstances that require knowledge/actions outside the scope and individual expertise of LPN/LVN practice in order to deliver safe, excellent care.

Course Suggestions Student Outcomes:

1. Recognizes the importance of clinical practice that is informed by new information and emerging technologies.
2. Recognize reliable sources of information while making healthcare decisions.
3. Recognizes risks to relationship integrity, as well as the possibility of abuse and conflict.
4. Examines one's own personal values, beliefs, and biases in relation to human justice, equality, and dignity (Knecht, 2016).

2.10 Clinical reasoning.

The capacity to traverse this process effectively is critical in all health care professions to safe clinical practice. The clinical reasoning is the mental process through which people in a clinical environment collect and integrate client data in order to make client-care decisions. Nurses are unable to combine the observations of client with existing knowledge regarding illness states if they lack the capacity to think clinically. Because of this lack of integration, the nurse is unable to make timely and accurate decisions about client care. When nurses are unable to make timely and correct judgments about client care, the client's health may rapidly worsen. Because of the growing of patient's complexity and acuity, as well as the diminishing numbers of available and experienced nurses to assist a new graduated in making decisions, good clinical reasoning skills becomes even more important for the new graduated nurses. This fast deterioration in the client's health may and has resulted in serious client compromise and, in extreme cases, death. The unprepared nurses graduated, will be unable to traverse the clinical reasoning process, identify worsening patient circumstances, and intervene quickly to avoid serious patient compromise or even death. This inaction will eventually lead to an increase in morbidity and death rates throughout the country. If the basis of clinical reasoning is not established throughout the educational process, the consequence will be an even larger number of new, ill-equipped graduates with limited clinical reasoning skills caring for patients with high acuity levels and complicated disease processes.

Much little study has been conducted on individual student factors that may influence the development of clinical reasoning, such as clinical reasoning self-efficacy and locus of control. Much clinical reasoning research focuses on, what instructional methods promote clinical reasoning,

how clinical reasoning happens and how clinical reasoning may be evaluated. Without a firm grasp of the links between these variables and clinical reasoning, identifying students at risk of inefficient clinical reasoning growth and determining how faculty may intervene becomes difficult. Without a clear understanding of the connections between these variables and clinical reasoning, identifying individuals at risk of developing poor clinical thinking and knowing how faculty may assist becomes challenging (Holder, 2020).

2.11 Problem Solving.

Various views on problem solving, decision making, critical thinking, and clinical judgement may be found in the nursing literature. Problem solving, in general, refers to the capacity to solve clinical issues, some of which are related to the patient and others which emerge from clinical practice. Recognizing and describing the issue, collecting data to explain it further, finding potential methods, evaluating them against evidence, and selecting the optimal one based on patient requirements and reactions are all steps in the problem-solving process (Oermann & Gaberson, 2016).

Problem solving, which is seen as cognitive skills, may be acquired via interactions with patients, like as in grand rounds, or by simulated situations, such as case method and research. The student does not need to offer hands-on care, to acquire problem-solving abilities. Students acquire expertise in comprehending patient issues and the clinical setting, as well as deciding on methods to employ, through patients discussing during grand rounds, watching, and cases evaluating. Students are exposed to clinical circumstances that they may not face in their own clinical practices via cases and grand rounds.

Nurses make numerous important decisions in clinical practice while caring for communities, patients, and families. They choose which data to gather and what to do with it, as well as which issues to priorities, actions, resources, and intervention effectiveness. Tanner (2006) defined clinical reasoning as the process of creating several options, evaluating them against evidence, and selecting the most suitable method to employ. Students may practice these abilities using cases and rounds: they can create potential alternatives, evaluate them against evidence, analyze the implications of each, and then make a choice based on this analysis.

2.12 Decision Making.

Nurses must make choices regarding patient care including issues, potential solutions, and the appropriate strategy to employ in a given scenario as part of their professional nursing practice. Management of the clinical environment, care delivery, and other activities are among the other choices (Oermann & Gaberson, 2016). In order to choose the optimal course of action from a variety of options, the process decision-making includes collecting, evaluating, valuing data, and weighing. It is a rational decision to choose the best option in terms of proportional advantages and consequences. Nurses, on the other hand, seldom have complete knowledge of all potential options, advantages, and dangers, thus clinical decision-making is often fraught with ambiguity. Individual beliefs and biases, as well as cultural conventions, impact how a person sees and evaluates a situation.

Patients and staff members are involved in decision-making in nursing, which makes choices more likely to be accepted. To do this, clinical learning activities should expose students to a variety of actual decision-making scenarios.

2.13 Critical Thinking.

Critical thinking is a kind of judgement process. In the professional environment, thinking critically allows the nurse to make reasoned and informed decisions and determine what to do in a specific case. In clinical practice and other contexts, it is deliberate and well-informed thinking (Alfaro-LeFevre, 2013).

Based on the skills they've gained through their education and practice, knowledge, and available evidence, nurses and other clinicians make decisions about what to do or believe in a given situation; this process also entails weighing the likely consequences of various actions and assessing their efficacy (Facione & Facione, 2013).

Critical thinking development may be seen of as a progression for learners. Critical thinking phases were defined by Elder and Paul (2010). these involve: unreflective thinker, the challenged thinker, the beginner thinker, the practicing thinker, the advanced thinker, and the accomplished thinker are among them (Elder, 2010). Nursing faculty professors utilized these steps to create unfolding cases for simulation (West et al., 2013). Whenever the issue is not apparent or the nurse understands what is wrong but is uncertain about what to do, critical thinking may also be regarded as reflective thinking about patient concerns. The learner uses critical thinking to:

1. Consider various viewpoints on care;
2. Critique alternative methods that may be used in a clinical setting.
3. Evaluates methods in light of evidence and patient responses.
4. Makes good judgement
5. Inquires about problems in order to explain them more.
6. Uses a well–thought–out approach to problem solving.

(Alfaro-LeFevre, 2013; Facione & Facione, 2013; Facione, 2011).

2.13.1. Case Study

A case study presents students with a real or hypothetical patient scenario to analyze and make various decisions about it. Case studies are usually lengthier and more detailed than case methods, including background information for a more full picture on the patient, history of family, and another details. As a result, students may go further into case studies than they might with the case method and provide a more comprehensive justification for their study. Students may explain the theories and ideas that drove their analyzing, how they utilized them to comprehend the case, and the reviewed literature in their case study criticism (Gaberson, 2015).

2.13.2. Example of A Case Study

Mary, forty-four years old, comes into the doctor's office with a little cough and hoarseness. During the examination, she suffers from shortness of breath, especially while ascending the stairs and walking quickly. She's not smoked a cigarette. Blood pressure is 120/80, pulse is 88 bpm, RR is 32 bpm, and her tempe. is 36.6 degrees Celsius (97.8 degrees Fahrenheit). Mary is a mother of two adolescent girls. She works as a substitute teacher part-time. Mary has always been health-conscious, maintaining a focus on her weight and eating well. She expresses her concern to the nurse, stating that she read that the ladies who have never smoked may get lung cancer.

1. The orders of doctor is a (CT / PET scanning in combination). Why was it ordered for Mary, and what’s a (CT / PET scanning)?

2. In order to assist marry in preparing for the scan, what would you say to her?

3. Determine a possible diagnosis for Mary and add information to the case that supports that diagnosis. What kinds of issues do you think Mary will face?

Describe how you would handle each of these issues as a nurse.

4. Fill in the case with information on Mary and her family. Choose a family theory and apply it to this family. What did you discover about the family, and how will this affect your treatment?

5. What facilities does your community have for Mary?

(Gaberson, 2015).

2.13.3. Utilizing a Case Study and Case Method in a Clinical Courses

Teachers may design cases in the beginning of clinical courses that exhibit issues that are reasonably straightforward to detect and need conventional nursing treatments. At short cases, such as those used in the case method, and lengthier case studies may be incorporated throughout the curriculum of clinical courses to help students in applying the ideas and information they are gaining in class to more complicated clinical settings. Students learn how to apply ideas to clinical problems and how to thinking about them at this level. Students' may collaborate in groups to examine instances; debate various views on the situation, what they observed, and their opinions; and brainstorm potential methods to apply.

The instructor should begin by thinking aloud, leading students through the analysis by highlighting important elements of the case and his or her own expectations and judgments. The instructor may replicate a process of a clinical judgement through a case step by step by thinking aloud. As students

move through the curriculum, the cases may grow more complicated, with a variety of possible issues and methods.

Students may examine cases alone or in small groups during a post clinical conference, as an independent assignment, or online. They may exchange information on the resources they utilized to get a better understanding of the case. If cases are examined individually, they may be discussed further as a whole through a clinical group, or they can publish for others their ideas and answers online to think and comment on (Gaberson & Oermann, 2015).

2.14 Clinical Simulation

Human patient simulation using mannequins and clinical simulation have been extensively recognized and incorporated into clinical nursing education (Chronister & Brown, 2012) (Neill & Wotton, 2011). Simulation exercises that replicate real-world situations enable students to acquire technical skill competence in a secure, nonthreatening setting while also contributing to student learning, critical thinking development, and problem solving abilities (Garrett et al., 2010; Sittner et al., 2013).

In a realistic clinical setting, simulation utilizing a clinical scenario involves a student or group of students giving treatment for a patient represented by a mannequin, an actor, or an SP (Jeffries, 2010). Students may show psychomotor abilities, clinical reasoning, clinical judgement, problem solving, and critical thinking via the use of role-playing and interactive films or mannequins. Teachers may utilize simulation to include particular knowledge, like as a health information, patient's personal traits, components of family, and (mental, emotional, and physical state in a real-world situation that improves understanding of student's about the subject by

making it relevant (Jeffries, 2010). At the clinical nursing situations case, simulation allows participants to annotate their belief in reality in order to practice a clinical setting including patient monitoring, management, communication, and multidisciplinary cooperation in a low-risk, hands-on environment. Simulator activities have been recorded in the past in a number of fields, including medical, aviation, psychology, and education (Lusk & Fater, 2013). Simulation has been utilized to educate nursing students in all clinical domains. Historically, medical–surgical and emergency resuscitation situations were the most often utilized in nursing schools, according to the National Council of State Boards of Nursing's (NCSBN) National Simulation Survey (Kardong-Edgren et al., 2012). Other nursing education specialties, including pediatrics, geriatrics, obstetrics, and hospice or palliative care, are increasingly using simulation into their clinical experiences (Johnson et al., 2012; Pullen Jr et al., 2012; Simonelli & Paskausky, 2012; Parker, 2011). While, simulation could never completely replace direct student interaction with real patients, but it's probably increase the value and efficiency of student and instructor time in clinical settings.

2.15. Nursing Education.

Today's nurse educators have the challenging task of helping nursing students in developing accurate and dependable clinical judgement abilities. Nursing instructors are faced with the additional difficulty of assessing nursing students' clinical judgement skills. An accurate and reliable quantitative assessment of clinical judgement may eventually enable the development of an effective training approach that will enhance the new graduate’s ability and the quality to became a competent nurse more quickly.

What is more critical to the study's aim is the common conviction that sound judgement can be taught. Similarly, nursing educators explore ways for instilling in nursing students sound clinical judgement.

Nursing education has spent the past three decades emphasizing on the ideas of critical thinking and clinical judgement, with a particular focus on critical thinking. Clinical judgement didn’t get a more emphasis in nursing education until the early 1990's, owing in large part to rising patient safety concerns. In a before stated, failure to rescue has been recognized as a patient safety indicator that closely correlates with the quality of nurses' performance while observing a client, as well as the appropriateness of measures performed if problems are discovered early, or both (Pongmarutai, 2010).

2.15.1. Nursing Education’s Role.

The purpose of nursing education is to help students acquire critical clinical reasoning skills so that they may participate in safe clinical practice after graduation. Following graduation, any student who wants to be licensed as a registered nurse in the United States must pass the National Council Licensure Exam to demonstrate competency in clinical reasoning (NCLEX). To pass this test and safely perform nursing responsibilities, the applicant must have and be able to show sufficient knowledge, competence, and clinical reasoning ability. This nationally standardized test is created by the National Council of State Boards of Nursing (NCSBN) and is intended to verify that a person has the necessary ability, knowledge, and clinical reasoning to safely provide care as a nurse. Clinical reasoning is assessed throughout the test and is evaluated via the nursing process, which the NCSBN defines as a scientific and clinically based approach to care. This method necessitates the nurse's ability to assess a patient, analyze the

information collected, develop a care plan, nursing care deliver, and the clients care provided evaluating (Examination, 2019).

Clients are coming with more severe symptoms and have more co-morbid illnesses. The newly licensed graduates are expected to give care to clients who are more severely sick than ever before, putting their clinical reasoning skills to the test (Purling & King, 2012). Because of the rising in complexity and acuity, the newly graduates must have excellent abilities of clinical reasoning started from their employment.

To make matters worse, this rise in intensity and complexity is happening at a time when the bulk of nurses caring for patients is approaching retirement age. Over half of all nurses working today are over 50 years old, according to estimates (nurses, 2015). When all of these variables are taken into account, it is clear that the demand for competent bedside nurses will increase dramatically in the coming years. The need for competent nurses is expected to increase by sixteen percent over the eight years follows, according to the Department of Labor (Bureau of Labor Statistics, 2016).

2.15.2. Nursing Process.

Is the process by which all nursing activities are guided, this process, which is the systematic technique of solving problems employed by nurses. The Clinical reasoning as it is articulated in nursing, is the reasoning process (Treas & Wilkinson, 2013). The nurse collects the physical, psychological, social, lifestyle, economical, and spiritual data around his or her client throughout the assessment process. This method of problem-solving starts with an evaluation. The data is then examined in order to rapidly, systematically, and progressively identify which data are most relevant to the current issue. After analyzing the data, the nurse utilizes clinical reasoning to establish a diagnosis, which is a crucial assessment of a client's

reaction to current or prospective health care requirements. Once again, clinical reasoning is utilized to develop a plan of treatment for the client that includes quantifiable and attainable objectives. After developing a strategy, the nurse executes it and utilizes clinical reasoning to assess the outcome (Association., n.d)**.**

2.15.3. Self-efficacy:

Self-efficacy is developed via experiences of mastery, social interactions, emotional states, and vicarious experiences. When a person does a task or activity, assesses the outcomes, and then utilizes that assessment to make judgements about his or her capacity to perform that task or activity, mastery experience emerges. Any future efforts at the task or activity are directly influenced by the ideas formed after those first attempts. Social persuasion is the assessment that people get from others, often expressed verbally or in the form of judgements or views. These views or judgements may come from anybody and can either support or hinder the individual's growth of self-efficacy. Emotional states also have an effect on self-efficacy development. If a task or activity elicits good feelings in the person, he or she is more likely to participate in it than if elicited of passive emotions. Self-efficacy may be influenced by a person's vicarious experience., especially when the individual has little expertise with the task or activity. When a person without or has a little experience with a task or activity, the inspection of another person doing the activity or modelling proper conduct, along with the responses received from others, may have a strong impact (Resnick, 2018). The overall events of learning are seen in the education of nursing as students acquire clinical reasoning. When students visit a clinical setting and participate in the nursing process by providing direct patient care or when they care for a simulated patient, they gain mastery experience. Feelings of

accomplishment would boost a student's self-efficacy. Suffering from feelings of failure reduces a student's self-efficacy. Social persuasion happens as a result of the feedback students get from professors, classmates, and even family members during the programme. Positive feedback increases self-efficacy, whereas negative feedback decreases it. When students' conduct or knowledge is assessed through written examinations or skills assessments, emotional emotions are evoked. Success during these difficult circumstances would boost self-efficacy, whereas failure would erode it. Vicarious learning may take place in a number of settings, from seeing a student perform a skill in the lab to witnessing a nurse at work. If pupils believe that they can accomplish the same activity after seeing this occurrence, self-efficacy is enhanced. If people believe they are incapable of doing the same job, their self-efficacy reduces.

2.15.4. Locus of Control

The locus of control is a significant element affecting self-efficacy. According to Resnick (2018), when an individual has little or no understanding of a specific activity, watching and reacting to others completing the task or participating in the behavior has a significant impact on the observing individual's self-efficacy for that behaviors (Resnick, 2018)

2.15.5. Teaching strategies to promote clinical judgment

■ Outcome-Present-State-Test (OPT) is an acronym for outcome-present-state-test (Pesut, 1998).

– Link between the nursing process and the development of nursing thought

– Clinical reasoning model

■ Tanner Clinical Judgement Model is a clinical judgement model developed by Tanner (Tanner, 2006)

– Intuitive humanistic paradigm

– Describes variables that affect decision making (context, background, relationship)

– Based on expert nurse study. Distinguishes between expert and beginner nurses' thinking processes.

■ Nurses Critical Thinking Development- (Tesoro et al., 2020)

- Consists of critical thinking as well as a range of other cognitive processes.

- A strong emphasis on safety and detecting risk

■ Teaching Thinking in Nursing (Caputi Model) - (Caputi, 2020).

- Utilizes the Tanner CJ Model and critical thinking abilities. From Novice to Expert: Benner's Novice to Expert

- Pragmatic concepts for teaching thinking.

■ Cycle of Clinical Reasoning (Levett-Jones et al., 2010)

– Concentrates on the process's steps

2.15.6. Suggested Learning Activities to Meet Nursing Judgment Program Outcome

Provide chances for students to:

1. Incorporate national standards of care and best practices into their clinical judgement.
2. Define the professional limits of all health care team members.
3. Take part in situations that put the student's own ethics in clinical judgement to the test.
4. Make clinical decisions based on reliable data, theoretical understanding, and clinical competence.

5. Recognize complicated clinical situations requiring knowledge/actions that extend beyond the boundaries of individual competence and LPN/LVN practice.

6. Collaborate with various team members to create health care goals/outcomes in a variety of community-based settings.

7. Collaborate with the patient and family to ascertain their preferences for care adjustments.

2.15.7. Suggestions for Evaluating Graduates' Attainment of Practical/Vocational Nursing Program Outcomes

Make evidence-based decisions in practice that integrate nursing science into the delivery of safe, high-quality care to a varied patient population and their families in cooperation with the health care team.

Does the graduate:

1. Seek help from others in order to acquire new skills or procedures?
2. Inquire about orders that are unclear or need clarification?
3. Speak up when safety concerns are identified, using appropriate channels?
4. Are you able to complete and record the data collection/assessment process?
5. Initiate more frequent data collection/assessment if the patient's condition warrants it?
6. Assess the efficacy of interventions?
7. Take quick action upon seeing changes in a patient's status?
8. Consult with relevant members of the interprofessional team about findings?
9. Conduct a risk assessment (falls, roaming, sleep deprivation)?
10. Educate team members about possible damage to at-risk patients (falls, UTI, BS, sepsis)? (Knecht, 2016).

2.16. Measurement for Clinical judgement:

The clinical judgement assessment tool is developed by Tiwaporn Pongmarutai (2010). During the design phase of the questionnaire developmental, Tiwaporn Pongmarutai (2010) performed a thorough evaluation of clinical judgement literature about application of the Lens Model toward measurement of clinical judgement. The suggested instrument was developed in accordance with the phases of instrument creation described by Waltz, Strickland, and Lenz (2005). The “Clinical Judgment Assessment (CJA) Tool”, was created to evaluate a clinical judgement of nursing senior students'. It is based on the modified “Lens Model. Clinical case vignettes, one medical (Ischemic Stroke)”, and things relevant to the case were created. From real-life patient scenarios the vignettes and items were combined and generated information via informal interviews with a group of experienced nurses and nurse educators (with over ten years of nursing practices) who served as experts in the field. Things were created with consider of an appropriate quantity of items and content validity. In order to create a criterion for the measure, the experts requested to complete the evaluation using the originally developed instrument and examine forty-five items of clinical information pertinent to the cases. In addition, the researchers conducted a pilot study to verify the instrument's validity and reliability:

Proposes to measure clinical judgment of nurses. One clinical case vignettes, one medical (Ischemic Stroke), was created with items related to case. To develop a criterion for the measure, the experts were requested to examine clinical material pertinent to the case as well as complete the evaluation using the originally constructed instrument.

The conceptual framework and defining clinical judgement characteristics were used to build the instrument, which represented the process of clinical judgement (Pongmarutai, 2010).

2.17. Previous Studies:

First Study:

Fedko, (2017) studied the "Examining the Relationship Between Clinical Judgment and Nursing Actions in Prelicensure Students. The purpose of this research was to examine the clinical judgement of baccalaureate nursing students' during a simulation and to evaluate if LCJR scores were associated with display of the recommended nursing action for the situation". While faculty often utilize the Laster Clinical Judgment Rubric (LCJR) to assess a clinical judgement of students', it is unknown if LCJR results correlate with proper nursing action. The LCJR and predicted nursing activities were assessed on twenty- two students with senior-level in nursing in a pilot research, and the findings were analyzed using simple linear regression. Between clinical judgement and nursing action, there is a significant statistically correlations (r = 0.364). The findings show that overall LCJR scores may serve as an indicator for the fulfilment of recommended nursing actions.

Conclusions: This research showed that examining the relationship between nursing student's actions during an LCJR simulation and their clinical judgement is a worthwhile topic of investigation. The LCJR may be used by nurse educators to assess students' understanding of "a simulated patient experience; however, caution should be exercised when using the LCJR as a proxy for students' ability to perform indicated nursing actions, as higher scores do not always imply completion of necessary nursing actions".

Second study:

Bayoumy, (2020). Studied the “Clinical judgment skills among junior-level nursing students enrolled in adult health nursing courses: Errors and risk level classification”, The aim of this cross-sectional descriptive research was to evaluate the clinical judgement of fifty- five junior nursing students by administering a questionnaire that asked participants to estimate the severity and perceived risk of four vignettes and to identify variables contributing to mistakes. The effect of the mistakes mentioned in the four vignettes was perceived differently by participants. However, there was apparent consensus on mistake risk (the higher rate ranged from 36 percent to 53.6 percent). The most often recognized contributing variables were a lack of clinical experience and knowledge, as well as an overwhelming workload. Numerous junior nursing students demonstrated capacity for critical examination and categorization of errors, hazards, and related variables in the research. According to the present study's findings on mistake classification, related risk, and possible causes, students' overall agreement was modest. As a result, attempts to impart enhanced clinical judgement abilities to students engaged in nursing school must be stepped up, which requires frequent longitudinal evaluation.

Conclusions: The present research shown that junior nursing students are capable of doing critical analyses and classifications of errors, hazards, and related variables. On the basis of the students' overall agreement on several study results and their coherence with prior research data from comparable investigations, there is a moderate clinical judgement evaluating. It is inadequate for a demanding profession like nursing.

Third study:

Rashwan, (2016), studied the “Clinical Decision Making and Critical Thinking Dispositions among Students at Faculty of Nursing in Port- Said University”**,** the aim of this study is to examine the relationship between clinical decision making and critical thinking dispositions among nursing students at Port-Said University's college of nursing. The research was conducted using a correlative descriptive design. The research was performed at Port Said University's Faculty of Nursing. Subject: Included all (155) nursing students who were regular attendees throughout their third and fourth academic years at Port-Said University's Faculty of Nursing. Data gathering instruments: Two instruments were utilized to gather data. Scale for clinical decision-making in nursing. Inventory of critical thinking dispositions in California. Results: According to the study's findings, the second dimension canvass for goals and values scored the highest mean (36.26) for clinical decision making. Nursing students had a high level of competence in overall clinical decision making, but their greatest mean score for critical thinking traits was inquisitiveness, followed by analyticity and self-confidence. However, nursing students had the lowest mean score in truth seeking. Nursing students exhibited a modest degree of critical thinking.

Conclusion: Although there is a statistically significant connection between Critical thinking disposition of nursing students and certain aspects of these factors, there is no statistically significant correlation between them.

Fourth study:

Manetti, (2018). Study the "Evaluating the Clinical Judgment of Prelicensure Nursing Students in the Clinical Setting", It is challenge to evaluate clinical judgement for safe nursing practice. The Laster Clinical Judgment Rubric (LCJR) was employed in this research to assess clinical judgement of junior and senior nursing students in the clinical environment. Juniors performed well on the whole scale and all four subscales, while seniors performed very well on the total scale and three of the four subscales. The research offers data to justify the use of the LCJR in clinical practice settings to evaluate students' clinical judgement.

Conclusions: Nursing educators aim to provide new nurse graduates with sound clinical judgement. To attain this highly desired result, well-defined teaching-learning techniques, supported by assessment procedures based on solid theoretical frameworks, are required. The LCJR was effectively utilized in the clinical environment as a test of students' clinical judgement. Senior nursing students showed substantially better levels of clinical judgement in the clinical environment than junior students, as assessed by the LCJR.

Fifth study:

Seidi, (2015). Study the "Nurses' Clinical Judgment Development: A Qualitative Research in Iran, we investigated the process of clinical judgement development among Iranian nurses in this research. Samples and Procedures: This qualitative research was carried out in 2013 at hospitals affiliated with Kurdistan University of Medical Sciences in the Iranian city of Sanandaj". In a semi-structured interviews, the data were gathered, and 24

people took part in the research. The grounded theory approach was used for data analysis, which was done simultaneously with data collection. Results: The major worry of the research participants was being unprofessional in clinical judgement. As a result of this issue, they were attempting to integrate clinical judgement skills, rushing to implement effective educational initiatives, battling for professional autonomy, and attempting to foster professional and interprofessional cooperation in clinical judgement. The primary category was' striving to become professionals in clinical judgement development. They were able to improve their professional clinical judgement when they were professionally supported.

Conclusions: This study's results offered important information regarding nurses' professionalization in clinical judgement. As a result, the participants used a variety of methods to improve their clinical judgement. Integrating these methods into clinical education and nursing theory and may help to enhance clinical judgement of nurses.

CHAPTER THREE

METHODOLOGY

The methodology of research is generally a process of designing, organizing, and implementing specific procedures in order to gather valid and reliable data about research question, hypothesis or problem under investigation. However, this chapter describes the method of conducting the study by articulating the design, getting the administrative permission, selecting study settings and population, examining validity and reliability, collecting data as well as statistical analysis.

3.1 Study Design:

This dissertation is conducted by utilizing a quantitative, Cross-sectional design. The data was collected during a period of time that began on July 10_{th}, 2021, and finished on September 20_{th}, 2021. Though, this study is intended to detect the relationship between clinical judgement skills and performance of academic nurses at AL-Hillah Teaching Hospitals. Moreover, it carried out to accomplish the objectives of this study.

3.2 Setting of the Study:

The study is conducted in three governmental hospitals which are located in Al-Hillah city. First, the largest hospital named Imam Al-Sadiq Hospital which contains emergency room, medical and surgical rooms, Respiratory Care Unit (RCU), Intensive Care Unit (ICU), Cardiac Care Unit (CCU) and other medical centers. Imam Al-Sadiq Hospital provides secondary and tertiary healthcare services. Second, AL-Hillah Teaching Hospital consists of many medical and surgical departments that provide

primary, secondary and tertiary healthcare services. Also, this hospital has critical care units (CCUs) such as ICU, RCU, ER, and OR. Third, Marjan Medical City Hospital has various medical centers. All of these hospitals were chosen as study settings because they contain a critical care units were selected as a rich field to collect the study sample.

3.3 Sample of the Study:

The population for this current study is nurses who were working in the hospitals. The academic nurses are a target population; those who are working in the selected hospitals in critical care units at AL-Hillah City, Iraq. The nurses who met inclusion and exclusion criteria is the accessible population those who are working in Imam AL-Sadiq Hospital, AL-Hillah Teaching Hospital, and Marjan Medical City Hospital. Sample of this study was (91) participants are included in this study. However, the sampling method used was a purposive, non-probability sample of 91 out of 200 nurses in the critical care who willing to participate in this study and who met both inclusion and exclusion criteria. From them (34) critical-care nurses were recruited from Imam AL-Sadiq Hospital, (30) critical-care nurses were recruited from AL-Hillah Teaching Hospital, and (27) critical-care nurses were recruited from Marjan medical city hospital.

3.3.1 The inclusion criteria:

1. All male’s and female’s nurses who worked in selected hospitals' at critical care units.
2. All nurses who willing to participate in this research and they have a bachelor degree and above in nursing specialty.

3. All academic nurses had one years and above experience in a select hospital.
4. Nurses who specialized in critical care who were available throughout the data collecting period.

3.3.2 The Certain excluded criteria are set as follows:

1. Nurses who held administrative positions.
2. Nurses who had experience less than one year (novice nurse).
3. Nurses who had long term experience but don't have a bachelor degree and above in nursing specialist.

The participants were given a short explanation and discussion about the aim and goal of the research, which was also mentioned in their agreement to participate in this study (informed consent). The participants were informed that personal information and identity will be kept anonymous. Also, the consent form explained that participation in this study is voluntary and participants may withdraw at any time. Ninety-one nurses in the critical care units who willing to participate in this study and their participation approval is obtained.

3.3.3 Sample Size Calculation:

It was considered the probability to 0.05 and the power probability to 0.80, and based on expert opinion for effect size correlation between clinical judgement score and performance score of 0.29 for medium sample, 91 samples are needed. Show in figure (3-1).

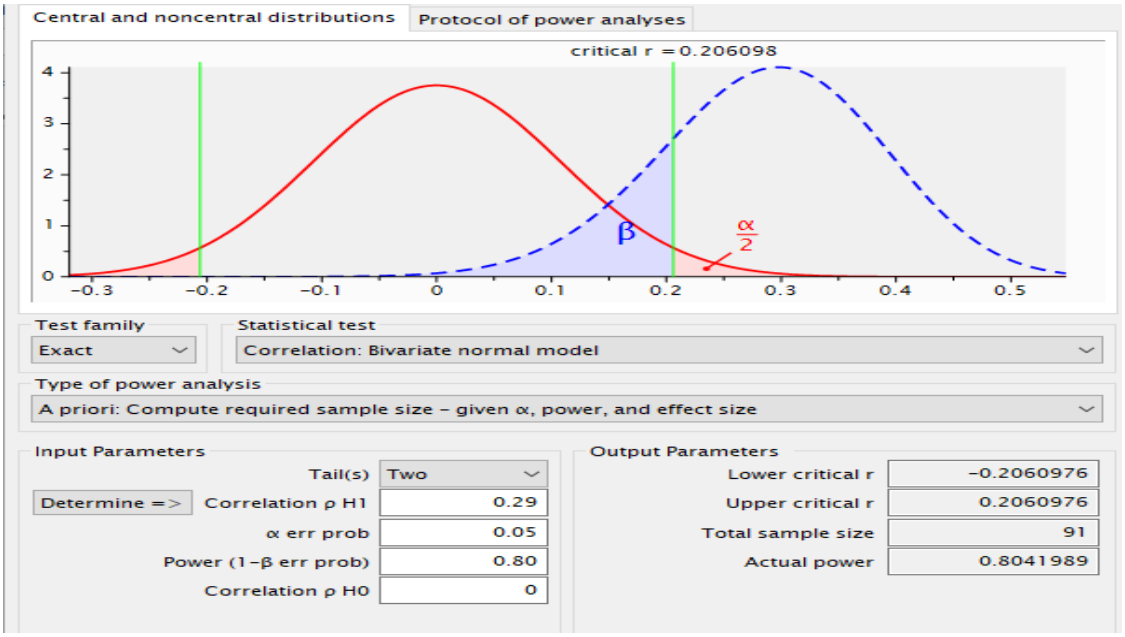


Figure (3-1): Sample Size Calculation

3.4. Administrative Committee Approval:

A. Scientific Committee Approval:

Initially, the researcher worked collaboratively with his academic advisor to select a research topic. According to the findings of many studies that demonstrated that there is a gap between clinical judgment and performance among critical-care nurses, the researcher did a comprehensive search in order to find the best clinical approach to bridge this gap. Studies were highly recommending ongoing educational activities that can embrace positive change on clinical judgment skills and performance of nursing staff and can ultimately lead to quality improvement of nursing care to achieve best patient outcomes.

After selecting the research topic, the researcher provided a presentation that focuses on the need of the research, importance of the study, aims, and the feasibility of the research study to the scientific committee. The researcher discussed the dissertation topic with the scientific

committee and articulated that the research proposal is a trustworthy topic in terms of examining the relationship between clinical judgment and performance of academic nurses'. This is happened in September 20, 2020.

After reviewing the dissertation proposal by the Scientific Postgraduate Committee at University of Babylon/ Faculty of Nursing Council, the research proposal was approved, and there was no major modification suggested to proceed.

B. Research Ethical Committee/ Ethical Approval:

Ethical approval is an important step in conducting a research study in terms of ensuring there is no harm or discomfort for the participants. Hence, the researcher provided a printed copy of the questionnaire , tools for both domains clinical judgment and performance, and gave brief explanation about the method of data collection and procedure to conduct the study. The research ethical committee reviewed the proposal and provided their permission to carry out this study.

After filling the approval application forms, the ethical approval was obtained from the Scientific Postgraduate Committee University of Babylon/ College of Nursing Council (Appendix A). The formal ethical application forms contain restricted rules to ensure safety and confidentiality of the participants. Moreover, the study ethical approval from AL-Hillah Health Directorate was also obtained before the actual data collection period and there was also an application forms in order to get access to the selected hospitals (See Appendix A). The researcher followed all the process and met the requirements of ethical approval.

3.5 The Study Instrument

After a comprehensive review of related literature about study problem, this questionnaire includes the following data (Appendix C):

1. **Part one:** contains demographical information that includes seven items, Participants will receive the questionnaire and demographic together. Participant identification number was assigned, because no name is required on this form to ensure reliability for statistical analysis purposes, items;
   - **Age.**
   - **Gender.**
   - **Marital status.**
   - **Nursing program enrolling**
   - **Number of year(s) graduate from nursing:**
   - **Years of experience in nursing**
   - **Residency**

2. **Part two:** Standard questionnaire: The Clinical Judgment Assessment (CJA) consists of 80 items about clinical judgement (Appendix C). The clinical judgement assessment questionnaire is developed by Tiwaporn Pongmarutai (2010), the authors' permission is obtained and can be found in (Appendix B).

   - The first part provided nurses with a variety of clinical information (signs) similar to what would be given throughout a change shift report.

   - The second part of the tool from the clinical record (client's chart) contained additional clinical information (cues) as well as those that students may obtain based on their assessment results. The clinical

information (signs) provided were a mix of information based on factual awareness (knowledge) of the client's health issue and clinical information that nurses had to consider (during her observation) when considering the client's health problem. The nurses were instructed to rate and analyze each item of clinical data, a "0" for "not necessary" and assigning a "1" for "important" to the present treatment plan.

- In the third part, based on the clinical data collected earlier the nurses were then instructed to first determine the appropriate nursing diagnosis for each patient by choosing from a list of designated nursing diagnoses that they believed would be the most suitable when planning treatment for the client. There was a list of nursing diagnoses accessible. This part of the test assessed a nurse's ability to evaluate relevant data and make a clinical judgment. Second, from sections one and two that they had marked as "important to plan today's care", nurses were asked to choose five clinical information items for each recognized nursing diagnosis by their belief about the most supportive information. Also, to support several nursing diagnoses if necessary the directive said that they may utilize the same clinical evidence.

- Participants were encouraged in the fourth part to priorities their clinical judgement by ranking from section three the indicated nursing diagnoses (for instance, one = greatest significance). At this level, identifying the distinguishing feature of prioritizing.

- Finally, in a five section, they utilized a Likert scale from zero to ten (where ten indicated complete confidences and zero indicated no confidence at all), to express their degree of trust in clinical judgement, nurses were asked to evaluate their level of confidence in

reaching their decision for the case. The level of confidence may be used to assess the outcomes as well as the efficacy of nurses in the clinical judgement process, although the confidence of nurses' in make clinical judgments might not necessarily reflect their competence levels.

Four major concept of instrument measures are:

1) information collection (using observation and knowledge), 2) clinical judgement accuracy, 3) interpretation, and 4) prioritizing were the four main ideas assessed. Clinical judgement, the last assessment (composite score), was a compilation of scores from the previous four components.

Scaling and Scoring Determination:

It is essential, the subsequent statistical analysis in regards of item scaling, that the scaling used in this study produces a substantial degree of variation between responders. For the first and second parts, the proposed questionnaire was scaled on a dichotomous basis, ranging from one (information relevant to the treatment plan) and zero (knowledge irrelevant to care plan). The scores of nurses' (for the instrument's first, second, and third parts) were computed in relation to the expert-identified criteria.

The score was given according to the clinical judgement of the critical-care nurse. If nurses adhered to an item that is generally accepted in the recommended clinical judgement guideline, they were given one scores, while the score of zero was given if the judgement was incorrectly.

3. **Part three:** Standard questionnaire: The performance assessment instruments. The performance questionnaire consists of eight categories (38 items) about performance measure of clinical nurses (Appendix D). The Clinical nurse performance instrument is developed by Kahya and Oral (2018).

   The appropriateness levels of the items were determined using a questionnaire with thirty-eight questions divided into eight categories. Which include:

   1- **Contextual**: which includes (11) items.

   2- **Professional skills**: which includes (4) items.

   3- **Clinical skills**: which includes (6) items.

   4- **Interpersonal Communication**: which includes (3) items.

   5- **Problem solving**: which includes (3) items.

   6- **Professional ethic**: which includes (3) items.

   7- **Teamwork**: which includes (4) items.

   8- **Leadership**: which includes (4) items.

Scaling and Scoring Determination:

The score was given according to the performance of the critical-care nurse. If nurses adhered to an item that is generally accepted in the recommended clinical nurse performance guideline, they were given three points, while the score of two was given if the performance was partially performed, and the score of one was given to nurses who were not performing the performance.

3.6. Validity of the Questionnaire:

The validity of the questionnaire was obtained by reviewing of (10) experts in order to estimate the clarity and relevancy, multi- disciplinary field experts with experience not less than 10 years of experience in their field, deep revision take place to the questionnaire, changes performed related to their opinion and advise Appendix(E).

3.7. Pilot Study:

After getting the face validity from the experts, the pilot study was conducted on 10 nurses who are working in selected hospitals at critical care units in Al-Hillah City over the period of time started from June 23, and ended on July 8, 2020.

The purposes of the pilot study were the following:

1. To evaluate critical-care nurses' clinical judgement and performance as well as to determine the feasibility of the main study and to refine the instrument if there any inconsistencies.
2. To estimate time consumption for each patient.
3. To determine the difficulties and limitations which occur during data collection.
4. To examine consistency and reliability of the questionnaire.

The study was feasible, and the instrument reliability was established by use a formula of "Cronbach's Alpha" which was acceptable.

3.8. Reliability:

The instrument's reliability was analyzed by applying a Cronbach's Alpha as a statistical method to calculate the reliability of the study questionnaire and measured the coefficient of internal consistency. The obtained value for the clinical judgement and performance were from standard questionnaires reliability that done previously. Thus the questionnaires of both domains (clinical judgement and performance) are considered reliable as presented in the following table (3.1).

Table (3.1) Reliability of clinical judgement and performance questionnaire.

No. of Items	Reliability Technique	Actual Value (r)	Accepted Value	Results
Clinical Judgement	Cronbach Alpha	0.879	0.70	Reliable (Pass)
Performance	Cronbach Alpha	0.96	0.70	Reliable (Pass)

The formula that was used to determine it was as follows:

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[n\sum x^2 - (\sum x))^2][n\sum y^2 - (\sum y)^2]}}$$

The correlation methods are often used to assess the degree of reliability. Reliability coefficients are typically measured in the range of (-1.00) to (+1.00), with a reliability value of more than 70 considered acceptable (Polit and Hungler, 2010).

3.9. Collection of the Data:

Permission letter is provided to respective head nurses of critical care units. The data were collected through the utilization of the questionnaire format. The participants were given a short explanation and discussion about the study's aim and method. The researcher explained to nurses that, using of structured interviews and self-report questionnaire techniques as a mean of data collection to investigate clinical judgement and performance of academic nurses. In addition, informed consent was obtained and confidentiality and privacy was guaranteed. A total number is ninety-one nurses in the critical care who were meeting the inclusion and exclusion criteria were selected by purposive sample technique. The data collection started from July 10th, 2021 to September 20th, 2021.

For the clinical judgement assessment part, the questionnaire being used in this research is an 80-item structured interview and self-report schedule which was adapted by Tiwaporn Pongmarutai (2010). During morning and night shifts, the participants were interviewed in critical care units by using interview and self-report methods to assess their actual judgement. It took about 30-45 minutes to filling out the questionnaire and demographic data forms.

For the performance assessment part, a structured self-administered questionnaire is utilized to assess nurses performance. the questionnaire being used in this research consist of eight categories (38

items), structured interview and self-report schedule which was adapted by Kahya and oral (2018). It took about 20-30 minutes for each participant.

3.10-Statistical Data Analysis Approach:

The data collection tools of both areas (clinical judgement and performance) Both regions' data collecting methods (clinical judgement and performance) were statistically analyzed using IBM's SPSS version 25. (Statistical Package for Social Science, SPSS, Chicago, IL). The correlation method was used to evaluate the data, with a statistical significance threshold of {P-value <0.05}. Because this research involves examining the association between variables, this statistical test was selected. This statistical test is an excellent option for data analysis. Both descriptive and inferential statistics were utilized by the researcher. Inferential statistics are sometimes differentiated from descriptive statistics. by using descriptive statistics, just explain what is or what the data reveals. Descriptive statistics are utilizing to represent the basic features of a study's data. It presents a concise description of the measures and sample. They, together with basic analysis graphs, serve as the base for virtually any "quantitative data analysis". With inferential statistics, we're attempting to draw inferences based on more than just the raw data. For instance, to infers what the public believes based on sample data may use inferential statistics. we might also use inferential statistics to evaluate the probability that an observed relationship between variables is trustworthy vs one that happened by chance in research. As a consequence, descriptive statistics are used to explain what is going on in our data, while inferential statistics are used to estimate general conditions based on data.

The following are a descriptive statistics that used in this study:

1. Frequency and percentage tables.
2. Summery statistics (mean and standard deviation)
3. Statistical figures (bar charts)
4. Cut off point equal to 0.33 due to two levels of measurements (inadequate and adequate responses), to divided the nurses' clinical judgement into three levels as follow:
   - Good judgement (mean 1.68-2.0).
   - Average judgement (mean 1.34-2.67).
   - Poor judgement (mean 1-1.33).

The cut of point is calculated through the following steps:

1. Determine the range (R). R = maximum value – minimum value (2-1=1).
2. Dividing the range by the levels of nurses' knowledge. (1/3=0.33)
3. The cut of point is 0.33.

While for the evaluation of the nurses' performance the cutoff point is equal to 0.66, and it determined using the same steps of determine cut off points for the nurses' clinical judgement.

3.10.1. Descriptive Data Analysis Approach

a) Statistics tables (Frequency and percentages) that are:

$$\% = \frac{Frequency}{Sample\ Size} x100$$

b) Mean of scores (M.S):

Mean of scores calculated as follows:

$$\mathbf{M.S} = \frac{f1*s1 + f2*s2 + f3*s3}{N}$$

M.S. = mean of scores, f = frequencies, S = scores, N = numbers of sample.

$$\textbf{Range of Score} = \frac{\textbf{Max(M.S) – Min (M.S)}}{\textbf{Rating}} = \frac{\textbf{3–1}}{\textbf{3}} = \textbf{0.66}$$

(I) Mean of scores less than (1-1.66) is evaluated as poor.

(II) Mean of scores equal to (1.67-2.33) is evaluated as Average.

(III) Mean of scores more than (2.34) is evaluated as good.

c. Confidence interval (95 percent) for population mean values.

d. "Standard Deviation"

$$\text{Standard deviation} = \sqrt{\frac{\Sigma(X - \bar{X})^2}{n-1}}$$

3.10. 2. Inferential Data Analysis

A. Person correlation

B. Chi-Square test

To find out the differences between various dichotomous random variable category nominal scales.

$$\chi^2 = \frac{\sum_{all\ i}(O_i - E_i)^2}{E_i}$$

"X^2=chi-square

$\sum$= sum

Where O_i is the observed frequency of group i and E_i is the expected frequency.

For the abbreviations of the level of measurement for the comparison significant (C.S.), the following are used:

(1) **NS**: Non significant at P>0.05

(2) **S**: Significant at P<0.05

(3) **HS**: Highly significant at P<0.01”

3.11. Limitations:

The main limitations of the current study include the following:

a) Sample size were not equal from the hospitals, the number of nurses in Marjan Medical City less than Imam Sadiq hospital and Al- Hillah teaching hospital, because of the administrative arrangement which taken place by the Babylon Health Directorate.

b) Initially, since sufficient power was not achieved, the study's findings were likely affected by the limited sample size utilizing individuals from a single location. This research should be performed on a wider scale to establish the actual impact between clinical judgement and nursing performance execution.

c) The limitations of the dissertation include the quantity and scope of the literature. Although the researcher did a comprehensive search, in many important domains, we found few studies. In addition, lack of local references in Iraq related to current study's topic.

d) This study was restricted to academic nurses who were enrolled in a bachelor of nursing science (BSN) programme or above, such as MSN and Ph.D. programmes in nursing. As a result, no generalizations could be drawn about nurses enrolled in a licensed practical nurse programme or a diploma programme, or advanced practice students.

e) Because of the study sample was a purposive sample with no randomization, it is difficult to determine if previous information, experience, and abilities influenced the development and

advancement of clinical judgement. This study's sample is typical of the population at this specific nursing environment, but it is not representative of other populations.

CHAPTER FOUR

STATISTICAL RESULTS OF THE STUDY

This chapter includes data analysis and results according to predetermined objectives of the study.

Table 4.1 Demographic Characteristics of the study Participants.

Items	categories	Frequent	percent
Age / Years	20-24	16	17.6
	25-29	51	**56.0**
	30-34	21	23.1
	35-39	2	2.2
	40 and more	1	1.1
Total		**91**	**100%**
Gender	Male	35	38.5
	Female	56	**61.5**
Total		**91**	**100%**
Marital Status	Single	52	**57.1**
	Married	39	42.9
Total		**91**	**100%**
Nursing program enrolling	Baccalaureate (BSN)	90	**98.9**
	Master degree (MSN)	1	1.1
Total		**91**	**100%**

Number of year(s) graduate from nursing	1-5 years	86	**94.5**
	6-10 years	5	5.5
Total		**91**	**100%**
Years of experience in nursing	1-5 years	80	**87.9**
	6-10 years	10	11.0
	11 and above	1	1.1
Total		**91**	**100%**
Residency	Urban	60	**65.9**
	Rural	31	34.1
Total		**91**	**100%**

Table (4-1) reveals that (56.0%) of the sample are within the second age group (25-29) years old registered, which considered as a high value among participants. Regarding their genders, results indicate that (61.5%) is female and the remaining is male. For the marital status, it is obvious results are single and constituted (57.1%) out of the total number of the study participants. Concerning with nursing program enrolling, findings indicate that the most of the participants (98.9%) are within Baccalaureate degree. It also displays that the Number of year(s) graduate from nursing and years of experience in nursing was within first categories (1-5 years), constituted (94.5% and 87.9%) respectively. Concerning residence, most of them are living in urban areas, it constituted (65.9%).

Table (4.2.A): Distribution of study sample by their Clinical Judgement

Section one:

L	Item	Scale	F	%	M.S	S.d.	level
1	Race	Important	38	41.8	1.42	.496	Average
		Not important	53	58.2			
		Total	*91*	*100*			
2	Male	Important	46	50.5	1.51	.503	Average
		Not important	45	49.5			
		Total	*91*	*100*			
3	BMI 29.6	Important	63	69.2	1.69	.464	Good
		Not important	28	30.8			
		Total	*100*	*100*			
4	Two days ago admitted to Intermediate Care Unit from emergency room	Important	71	78.0	1.22	.416	Poor
		Not important	20	22.0			
		Total	*100*	*100*			
5	Sudden right side weakness & slurred speech is a chief complaint of patient	Important	81	89.0	1.89	.314	Good
		Not important	10	11.0			
		Total	*100*	*100*			
6	Admitting Diagnosis: Acute Ischemic Stroke	Important	86	94.5	1.95	.229	Good
		Not important	5	5.5			
		Total	*100*	*100*			
7	Past medical history of Hypertension (HTN)	Important	86	94.5	1.95	.229	Good
		Not important	5	5.5			
		Total	*100*	*100*			

Continues…

Table (4.2.A) to be continued

8	Past medical history of Hypercholesterolemia	Important	84	92.3	1.92	.268	Good
		Not important	7	7.7			
		Total	*91*	*100*			
9	In medical past history patient have diabetes mellitus (DM)	Important	73	80.2	1.20	.401	Poor
		Not important	18	19.8			
		Total	*91*	*100*			
10	NPO	Important	63	69.2	1.31	.464	Poor
		Not important	28	30.8			
		Total	*91*	*100*			
11	Aspiration Precautions	Important	61	67.0	1.67	.473	Good
		Not important	30	33.0			
		Total	*91*	*100*			
12	Today, a speech pathologist repeat the bedside swallow evaluation	Important	55	60.4	1.60	.492	Average
		Not important	36	39.6			
		Total	*91*	*100*			
13	Advance diet as recommended by speech therapy	Important	59	64.8	1.35	.480	Average
		Not important	32	35.2			
		Total	*91*	*100*			
14	Allergic to Sulfa	Important	54	59.3	1.59	.494	Average
		Not important	37	40.7			
		Total	*91*	*100*			

Continues...

Table (4.2.A) to be continued

15	Full code (Class I)	Important	59	64.8	1.65	.480	Average
		Not important	32	35.2			
		Total	*91*	*100*			
16	Three time (TID), out of bed to chair activity with physical therapy	Important	72	79.1	1.79	.409	Good
		Not important	19	20.9			
		Total	*91*	*100*			
17	Every two hours turn while in bed with two assists last night	Important	69	75.8	1.76	.431	Good
		Not important	22	24.2			
		Total	*91*	*100*			
18	No sign noted of inflammation at the site of intravenous (IV) on left forearm	Important	57	62.6	1.63	.486	Average
		Not important	34	37.4			
		Total	*91*	*100*			
19	Main IV is 0.9% Normal Saline	Important	60	65.9	1.66	.477	Average
		Not important	31	34.1			
		Total	*91*	*100*			
20	IV infusing at 125 ml/hr.	Important	63	69.2	1.69	.464	Good
		Not important	28	30.8			
		Total	*91*	*100*			
21	Urine output was 1600 ml for the night shift	Important	74	81.3	1.19	.392	Poor
		Not important	17	18.7			
		Total	*91*	*100*			
22	Vital signs every 4 hours	Important	84	92.3	1.92	.268	Good
		Not important	7	7.7			
		Total	*91*	*100*			

Continues...

Table (4.2.A) to be continued

23	This morning, temperature 98.4 F (36.8 C)	Important	61	67.0	1.33	.473	Poor
		Not important	30	33.0			
		Total	*91*	*100*			
24	This morning, pulse 78 bpm	Important	67	73.6	1.26	.443	Poor
		Not important	24	26.4			
		Total	*91*	*100*			
25	This morning, respiration 22 bpm	Important	72	79.1	1.21	.409	Poor
		Not important	19	20.9			
		Total	*91*	*100*			
26	This morning, blood pressure was 150\70 mm Hg	Important	72	79.1	1.79	.409	Good
		Not important	19	20.9			
		Total	*91*	*100*			
27	Last night pain was 2/10 on a self report 0 to 10 pain rating scale	Important	62	68.1	1.32	.469	Poor
		Not important	29	31.9			
		Total	*91*	*100*			
28	O_2 to keep SpO_2 > 94%	Important	76	83.5	1.84	.373	Good
		Not important	15	16.5			
		Total	*91*	*100*			
29	Last night SpO_2 > 94%, no O_2 required	Important	64	70.3	1.70	.459	Good
		Not important	27	29.7			
		Total	*91*	*100*			

Continues...

Table (4.2.A) to be continued

30	Neuro. checks every 4 hours	Important	67	73.6	1.74	.443	Good
		Not important	24	26.4			
		Total	*91*	*100*			
31	Slurs patient, but with some difficulties can be understood	Important	67	73.6	1.74	.443	Good
		Not important	24	26.4			
		Total	*91*	*100*			
32	His words often interpret for staff by his wife	Important	52	57.1	1.43	.498	Average
		Not important	39	42.9			
		Total	*91*	*100*			
33	Mild facial palsy	Important	71	78.0	1.78	.416	Good
		Not important	20	22.0			
		Total	*91*	*100*			
34	In his right leg & right arm flaccid paralysis is present	Important	72	79.1	1.79	.409	Good
		Not important	19	20.9			
		Total	*91*	*100*			
35	No family member present this morning	Important	46	50.5	1.49	.503	Average
		Not important	45	49.5			
		Total	*91*	*100*			

L=list, F= Frequency, %= Percentage, M.S.= Mean of score " Cut off point (0.33), Poor (mean of score 1-1.33), Average (mean of score 1.34-1.67), Always (mean of score 1.68 and more), S.d= Stander deviation".

The results in table (4.2.A) show that the majority of the study sample response to the clinical judgement (section one) were indicate important to 34 out of 35 items, the remaining item (question one) regarding race the answer were not important. However, the majority of participants' responses were important at almost items. Based on the differences in the frequency and percentage of the correct answers of all 35 items regarding clinical judgement (section one), the important answer was correct answer in all items, except with items (4, 9. 10, 13, 21, 23, 24, 25, 27, 32, and 35) the correct answer was not important.

Section two:

Table (4.2.B)

L	Item	Scale	F	%	M.S	S.d.	level
36	Physical therapy is used to treat and evaluate alteration in function/ gross motor development	Important	76	83.5	1.16	.373	Poor
		Not important	15	16.5			
		Total	*91*	*100*			
37	Occupational Therapy is used to treat & evaluate alteration in function/ fine motor development, cognitive development, and activity of daily living ADLs	Important	68	74.7	1.75	.437	Good
		Not important	23	25.3			
		Total	*91*	*100*			
38	Measure of (FIM) functional independence degree is (85/126)	Important	63	69.2	1.69	.464	Good
		Not important	28	30.8			
		Total	*91*	*100*			
39	Score of (MMSE) mini mental state exam was (22/30)	Important	74	81.3	1.19	.392	Poor
		Not important	17	18.7			
		Total	*91*	*100*			

Continues...

Table (4.2.B) to be continued

40	Orientation was only to person not time nor place	Important	63	69.2	1.69	.464	Good
		Not important	28	30.8			
		Total	*91*	*100*			
41	A smoking history of 35 pack-years	Important	62	68.1	1.32	.469	Poor
		Not important	29	31.9			
		Total	*91*	*100*			
42	Patient has been married for 32 years	Important	31	34.1	1.66	.477	Average
		Not important	60	65.9			
		Total	*91*	*100*			
43	(NIHSS) Stroke Scale score was eight on admission	Important	69	75.8	1.24	.431	Poor
		Not important	22	24.2			
		Total	*91*	*100*			
44	Without contrast CT brain was negative on admission	Important	55	60.4	1.60	.492	Average
		Not important	36	39.6			
		Total	*91*	*100*			
45	After one day admission repeat CT brain without contrast, show a hyper-dense on (MCA) left middle cerebral artery	Important	80	87.9	1.88	.328	Good
		Not important	11	12.1			
		Total	*91*	*100*			
46	Ultra-sonography carotid duplex show left ICA stenosis sixty percent	Important	78	85.7	1.14	.352	Poor
		Not important	13	14.3			
		Total	*91*	*100*			

Continues...

Table (4.2.B) to be continued

47	White blood cell was (9800) on admission (Normal range 5000-10.000/mm^3)	Important	67	73.6	1.26	.443	Poor
		Not important	24	26.4			
		Total	*91*	*100*			
48	Red blood cell on admission (4.9) (Normal range 3.8 to 5.5 $x10^6$\µL)	Important	58	63.7	1.36	.483	Average
		Not important	33	36.3			
		Total	*91*	*100*			
49	Hemoglobin on admission was (12.5) (N. Range 11.7 to 16.1 g\dL)	Important	54	59.3	1.41	.494	Average
		Not important	37	40.7			
		Total	*91*	*100*			
50	On admission Hct. 38 (Range 37%-47%)	Important	60	65.9	1.34	.477	Average
		Not important	31	34.1			
		Total	*91*	*100*			
51	Platelet on admission was (355.000) (N. range 150.000 to 400.000 mm^3)	Important	59	64.8	1.35	.480	Average
		Not important	32	35.2			
		Total	*91*	*100*			
52	Sodium (Na) on admission was 142 (N. range 136 to 145 mmol\L)	Important	57	62.6	1.37	.486	Average
		Not important	34	37.4			
		Total	*91*	*100*			
53	Potassium (K) on admission was 4.5 (N.range 3.5 to 5.0 mmol\L)	Important	57	62.6	1.37	.486	Average
		Not important	34	37.4			
		Total	*100*	*100*			

Continues...

Table (4.2.B) to be continued

54	Chloride (Cl) on admission was 102 (N.range 98 to 106 mmol\L)	Important	52	57.1	1.43	.498	Average
		Not important	39	42.9			
		Total	*100*	*100*			
55	Carbon dioxide on admission was 27 (N.range 23 to 31 mmol\L)	Important	48	52.7	1.47	.502	Average
		Not important	43	47.3			
		Total	*100*	*100*			
56	Prothrombin time was 25 at five morning today (N.range 11 to 12.5 second)	Important	67	73.6	1.74	.443	Good
		Not important	24	26.4			
		Total	*100*	*100*			
57	INR was 2.9 today in five morning(N.range 0.7 to 1.8)	Important	78	85.7	1.86	.352	Good
		Not important	13	14.3			
		Total	*100*	*100*			
58	aPTT was 58 at morning today (N.range 30 to 40 second)	Important	78	85.7	1.86	.352	Good
		Not important	13	14.3			
		Total	*100*	*100*			
59	At six o'clock today blood glucose capillary was 148 mg\dL	Important	67	73.6	1.74	.443	Good
		Not important	24	26.4			
		Total	*100*	*100*			
60	Insulin Sliding Scale: less than 150 = 0 unit	Important	52	57.1	1.57	.498	Average
		Not important	39	42.9			
		Total	*100*	*100*			

Continues...

Table (4.2.B) to be continued

61	Amlodipine (Norvasc®) 10 mg PO daily	Important	61	67.0	1.67	.473	Good
		Not important	30	33.0			
		Total	*100*	*100*			
62	Enteric Coated ASA 325 mg PO daily	Important	77	84.6	1.85	.363	Good
		Not important	14	15.4			
		Total	*100*	*100*			
63	Warfarin (Coumadin®) 5 mg. PO daily	Important	68	74.7	1.75	.437	Good
		Not important	23	25.3			
		Total	*91*	*100*			
64	Nicotine Patch (14mg) daily	Important	51	56.0	1.44	.499	Average
		Not important	40	44.0			
		Total	*91*	*100*			
65	Medical doctor calling if temperature > 38 C (100.5° F)	Important	60	65.9	1.66	.477	Average
		Not important	31	34.1			
		Total	*91*	*100*			
66	Enoxaparin (Lovenox®) 40 mg. SQ daily	Important	64	70.3	1.70	.459	Good
		Not important	27	29.7			
		Total	*91*	*100*			
67	Acetaminophen 650 mg. PO every 6 hours prn. Temp. >100° F37.8	Important	61	67.0	1.33	.473	Poor
		Not important	30	33.0			
		Total	*91*	*100*			
68	Every eight hrs one mg oral/ intravenous lorazepam (Ativan) as needed for anxiety	Important	64	70.3	1.30	.459	Poor
		Not important	27	29.7			
		Total	*91*	*100*			

Continues...

Table (4.2.B) to be continued

69	Appears unaware of positioning of neglected side.	Important	55	60.4	1.60	.492	Average
		Not important	36	39.6			
		Total	*91*	*100*			
70	With left hand capable to brush his teeth	Important	42	46.2	1.54	.501	Average
		Not important	49	53.8			
		Total	*91*	*100*			

L=list, F= Frequency, %= Percentage, M.S.= Mean of score " Cut off point (0.33), Poor (mean of score 1-1.33), Average (mean of score 1.34-1.67), Always (mean of score 1.68 and more), S.d= Stander deviation."

The results in table (4.2.B) showed that the majority of the study sample response to the clinical judgement (section two) were indicate important to 33 out of 35 items, the remaining items (questions 42, to 70) regarding (Patient has been married for 32 years, with left hand capable to brush his teeth) respectively, the answer were not important. However, the majority of participants' responses were important at almost items. Based on the differences in the frequency and percentage of the correct answers of all 35 items regarding clinical judgement (section two), the important answer was correct answer in all items, except with items (36, 39, 41, 42, 43, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 64, 67, 68, and 70) the correct answer was not important.

Section three:

Table (4.2.C)

L	Item (Nursing Diagnosis)	Scale	F	%	M.S	S.d.	level
71	Impaired Memory	Important	63	69.2	1.31	.464	Poor
		Not important	28	30.8			
		Total	*100*	*100*			
72	Excess Fluid volume	Important	64	70.3	1.30	.459	Poor
		Not important	27	29.7			
		Total	*100*	*100*			
73	Impaired Swallowing	Important	68	74.7	1.75	.437	Good
		Not important	23	25.3			
		Total	*100*	*100*			
74	Defensive Coping	Important	46	50.5	1.49	.503	Average
		Not important	45	49.5			
		Total	*100*	*100*			
75	Impaired physical Mobility	Important	71	78.0	1.78	.416	Good
		Not important	20	22.0			
		Total	*100*	*100*			
76	Risk for Disuse syndrome	Important	51	56.0	1.44	.499	Average
		Not important	40	44.0			
		Total	*100*	*100*			
77	Impaired verbal Communication	Important	64	70.3	1.70	.459	Good
		Not important	27	29.7			
		Total	*100*	*100*			

Continues...

Table (4.2.C) to be continued

78	Risk for Aspiration	Important	71	78.0	1.78	.416	Good
		Not important	20	22.0			
		Total	*100*	*100*			
79	Unilateral Neglect	Important	45	49.5	1.49	.503	Average
		Not important	46	50.5			
		Total	*100*	*100*			
80	Acute pain	Important	74	81.3	1.19	.392	Poor
		Not important	17	18.7			
		Total	*100*	*100*			

L=list, F= Frequency, %= Percentage, M.S.= Mean of score " Cut off point (0.33), Poor (mean of score 1-1.33), Average (mean of score 1.34-1.66), Always (mean of score 1.67 and more), S.d= Stander deviation. "

The results in table (4.2.C) show that the majority of the study sample response to the clinical judgement (section three) were indicate important to 9 out of 10 items, the remaining item (question 79) regarding (unilateral neglect nursing diagnosis) the answer were not important. However, the majority of participants' responses were important at almost items. Based on the differences in the frequency and percentage of the correct answers of all 10 items regarding clinical judgement (section three), the important answer was correct answer in half items (73, 75, 77, 78, 79), the remaining items (71, 72, 74, 76, 80) the correct answer was not important.

Section Four:

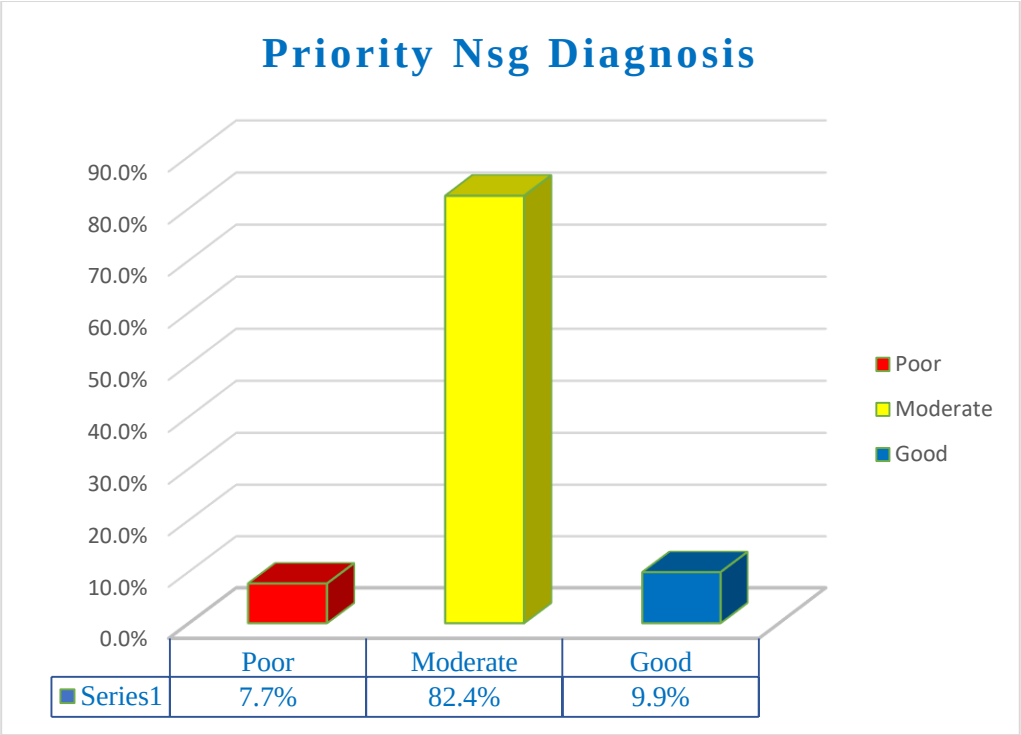


Figure No (4.1): Distribution of Participants' According to Rank of Priority Nursing Diagnosis.

The above figure illustrates rank of priority nursing diagnoses rated as important from section three. The result indicated that the majority of respondents (82.4%) within a moderate level.

Section Five:

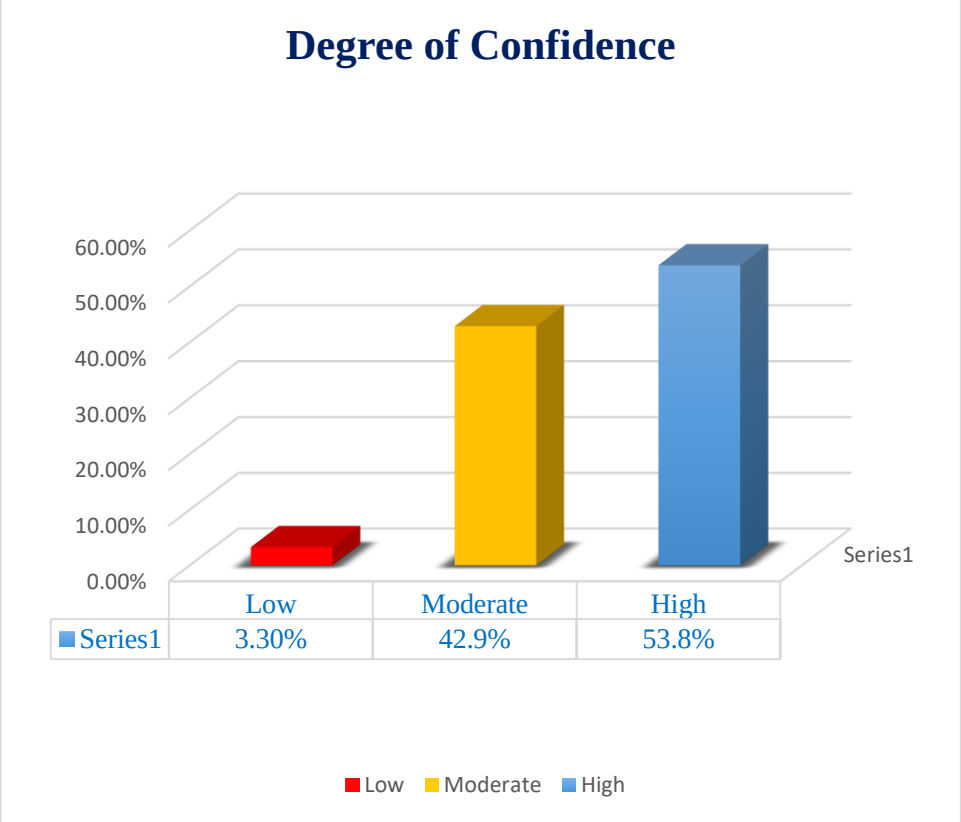


Figure No (4.2): Distribution of Participants' According to Degree of Confidence in their Clinical judgement.

The above figure illustrates the degree of confidence of participant in their clinical judgment that. The result indicated that the majority of respondents (53.8%) within a high confidence.

Table (4.2.D): Overall distribution of study sample related to their Clinical Judgement

	Scale	F	%	M.S	S.d.	level
Overall Clinical Judgement	Important	**64**	**70**	**1.56**	**0.23**	**Average**
	Not important	**27**	**30**			
	Total	***91***	***100***			

F= Frequency, %= Percentage, M.S.= Mean of score " Cut off point (0.33), Poor (mean of score 1-1.33), Average (mean of score 1.34-1.66), Good (mean of score 1.67 and more), S.d= Stander deviation. "

The results in table (4.2.D) show that overall clinical judgement at (section one, two and three). Based on the statistical cut off point, the majority of participants had average clinical judgement. Based on the differences in the frequency and percentage of all aspects of clinical judgement assessment, overall mean (1.56) of the study results indicate that there was an acceptable clinical judgement of study participants, as portrayed in figure (4.3).

Table (4.3.A): Distribution of study sample by their Performance

L	Items	Scale	F	%	M.S	S.d.	level
1	**Contextual:** Being thrifty	Always	30	33.0	**2.20**	**.654**	Average
		Sometime	49	53.8			
		Never	12	13.2			
		Total	*100*	*100*			
2	**Contextual:** Not complaining about organizational conditions	Always	26	28.6	**2.13**	**.653**	Average
		Sometime	51	56.0			
		Never	14	15.4			
		Total	*100*	*100*			
3	**Contextual:** Not keeping others engaged in individual problems	Always	31	34.1	**2.01**	**.837**	Average
		Sometime	28	30.8			
		Never	31	34.1			
		Total	*100*	*100*			
4	**Contextual:** Absenteeism	Always	7	7.7	**2.55**	**.637**	Good
		Sometime	27	29.7			
		Never	57	62.6			
		Total	*100*	*100*			
5	**Contextual:** Participating in training meeting	Always	25	27.5	**2.22**	**.533**	Average
		Sometime	61	67.0			
		Never	5	5.5			
		Total	*100*	*100*			
6	**Contextual:** Having a neat, clean appearance	Always	66	72.5	**2.70**	**.505**	Good
		Sometime	23	25.3			
		Never	2	2.2			
		Total	*100*	*100*			
7	**Contextual:** Taking responsibility for the tasks.	Always	65	71.4	**2.69**	**.510**	Good
		Sometime	24	26.4			
		Never	2	2.2			
		Total	*100*	*100*			

Continues...

Table (4.3.A) to be continued

8	**Contextual:** Working harder than necessary	Always	51	56.0	**2.49**	**.621**	Good
		Sometime	34	37.4			
		Never	6	6.6			
		Total	*100*	*100*			
9	**Contextual:** Working systematically	Always	57	62.6	**2.60**	**.535**	Good
		Sometime	32	35.2			
		Never	2	2.2			
		Total	*100*	*100*			
10	**Contextual:** Engage in development of self to enhance own effectiveness	Always	52	57.1	**2.51**	**.621**	Good
		Sometime	33	36.3			
		Never	6	6.6			
		Total	*100*	*100*			
11	**Contextual:** Obeying cleanliness rules	Always	68	74.7	**2.74**	**.468**	Good
		Sometime	22	24.2			
		Never	1	1.1			
		Total	*100*	*100*			
12	**Professional skill:** Calmness	Always	58	63.7	**2.64**	**.483**	Good
		Sometime	33	36.3			
		Never	0	00.0			
		Total	*100*	*100*			
13	**Professional skill:** Keeping nursing equipment in good condition	Always	64	70.3	**2.69**	**.487**	Good
		Sometime	26	28.6			
		Never	1	1.1			
		Total	*100*	*100*			
14	**Professional skill:** Patients problems assessing and Identification	Always	60	65.9	**2.63**	**.551**	Good
		Sometime	28	30.8			
		Never	3	3.3			
		Total	*100*	*100*			

Continues...

Table (4.3.A) to be continued

15	**Professional skill:** General Professional skill	Always	58	63.7	**2.62**	**.533**	Good
		Sometime	31	34.1			
		Never	2	2.2			
		Total	*100*	*100*			
16	**Clinical skill:** Planning patient care according to individual needs	Always	46	50.5	**2.48**	**.545**	Good
		Sometime	43	47.3			
		Never	2	2.2			
		Total	*100*	*100*			
17	**Clinical skill:** Managing the nursing activities in time	Always	59	64.8	**2.62**	**.553**	Good
		Sometime	29	31.9			
		Never	3	3.3			
		Total	*100*	*100*			
18	**Clinical skill:** Providing the patient with well-prepared or careful nursing care	Always	58	63.7	**2.59**	**.577**	Good
		Sometime	29	31.9			
		Never	4	4.4			
		Total	*100*	*100*			
19	**Clinical skill:** Constantly monitoring the patient's status and documenting his or her condition	Always	70	76.9	**2.75**	**.485**	Good
		Sometime	19	20.9			
		Never	2	2.2			
		Total	*100*	*100*			
20	**Clinical skill:** Make an efforts to enhancing his\her well being	Always	44	48.4	**2.45**	**.563**	Good
		Sometime	44	48.4			
		Never	3	3.3			
		Total	*100*	*100*			
21	**Clinical skill:** Following and adhering to hospital policies, procedures and clinical rule.	Always	48	52.7	**2.51**	**.545**	Good
		Sometime	41	45.1			
		Never	2	2.2			
		Total	*100*	*100*			

Continues...

Table (4.3.A) to be continued

22	**Interpersonal Communication:** Expressing enthusiasm for nursing work	Always	49	53.8	**2.52**	**.545**	Good
		Sometime	40	44.0			
		Never	2	2.2			
		Total	*100*	*100*			
23	**Interpersonal Communication:** Cooperating with supervisor nurse	Always	63	69.2	**2.68**	**.492**	Good
		Sometime	27	29.7			
		Never	1	1.1			
		Total	*100*	*100*			
24	**Interpersonal Communication:** Behaving in a friendly manner	Always	65	71.4	**2.70**	**.483**	Good
		Sometime	25	27.5			
		Never	1	1.1			
		Total	*100*	*100*			
25	**Problem solving:** Detecting unexpected changes in the patient's health condition	Always	61	67.0	**2.63**	**.571**	Good
		Sometime	26	28.6			
		Never	4	4.4			
		Total	*100*	*100*			
26	**Problem solving:** Solving speedy clinical problems	Always	46	50.5	**2.48**	**.545**	Good
		Sometime	43	47.3			
		Never	2	2.2			
		Total	*100*	*100*			
27	**Problem solving:** Taking initiative to solve a work problem	Always	51	56.0	**2.52**	**.584**	Good
		Sometime	36	39.6			
		Never	4	4.4			
		Total	*100*	*100*			
28	**Professional ethic:** Attitude to patient and his/her family	Always	44	48.4	**2.45**	**.563**	Good
		Sometime	44	48.4			
		Never	3	3.3			
		Total	*100*	*100*			

Continues...

Table (4.3.A) to be continued

29	**Professional ethic:** Confidentially	Always	72	79.1	**2.78**	**.442**	Good
		Sometime	18	19.8			
		Never	1	1.1			
		Total	*100*	*100*			
30	**Professional ethic:** Informing the patient and his or her family	Always	37	40.7	**2.34**	**.600**	Good
		Sometime	48	52.7			
		Never	6	6.6			
		Total	*100*	*100*			
31	**Teamwork:** Cooperating with the members of other teams	Always	65	71.4	**2.70**	**.483**	Good
		Sometime	25	27.5			
		Never	1	1.1			
		Total	*100*	*100*			
32	**Teamwork:** Engaging responsibly in meetings and group activities	Always	37	40.7	**2.37**	**.551**	Good
		Sometime	51	56.0			
		Never	3	3.3			
		Total	*100*	*100*			
33	**Teamwork:** Feedback Giving in a constructive way to teamwork	Always	37	40.7	**2.36**	**.568**	Good
		Sometime	50	54.9			
		Never	4	4.4			
		Total	*100*	*100*			
34	**Teamwork:** Participating in research-based practices and contributing to them	Always	38	41.8	**2.40**	**.535**	Good
		Sometime	51	56.0			
		Never	2	2.2			
		Total	*100*	*100*			
35	**Leadership:** Motivating other nurses	Always	56	61.5	**2.62**	**.489**	Good
		Sometime	35	38.5			
		Never	0	00.0			
		Total	*100*	*100*			

Continues...

Table (4.3.A) to be continued

36	**Leadership:** Coaching others in duties	Always	55	60.4	**2.59**	**.516**	Good
		Sometime	35	38.5			
		Never	1	1.1			
		Total	*100*	*100*			
37	**Leadership:** Having a supervisor attributes	Always	40	44.0	**2.43**	**.519**	Good
		Sometime	50	54.9			
		Never	1	1.1			
		Total	*100*	*100*			
38	**Leadership:** Assisting nurses to entrance a practice begin level	Always	42	46.2	**2.46**	**.501**	Good
		Sometime	49	53.8			
		Never	0	00.0			
		Total	*100*	*100*			

F= Frequency, %= Percentage, M.S.= Mean of score " Cut off point (0.66), Poor (mean of score 1-1.66), Average (mean of score 1.67-2.33), Good (mean of score 2.34 and more), S.d= Stander deviation. "

The results in table (4.3. A) showed that the majority of the study sample response to the Performance, consists of 38 items, divided on eight categories (contextual, professional skill, clinical skill, interpersonal communication, problem solving, professional ethic, teamwork, leadership). Regarding contextual domain, most of them were sometime (being thrifty, not complaining about organizational conditions, participating in training meeting), it constituted (53.8%, 56.0% and 67.0%) respectively. Also, most of them are always (not keep others engaging in individual problems, having a neat, clean appearance, taking responsibility for the tasks, working harder than necessary, working systematically, engage in self-development to improve own effectiveness, obeying cleanliness rules), it constituted (34.1%,

72.5%, 71.4%, 56.0%, 62.6%, 57.1 and 74.7%) respectively. While, they response never to (absenteeism, not-keeping others engaging in individual problems), it constituted (62.6% and 34.1%) respectively. Regarding professional skill domain, most of them were always (calmness, keeping-nursing-equipment in good-condition, identify and assess problems the patient, general Professional-skill), it constituted (63.7%, 70.3%, 65.9% and 63.7%) respectively. Concerning with clinical skill domain, most of them were always (patient-care planning according to needs of individuals, nursing activities managing in time, well-prepared or careful nursing care providing to the patient, patient's status monitoring constantly and documenting his or her condition, make an effort to enhance his\her wellbeing, following and adhering to hospital policies, procedures and clinical rule), it constituted (50.5%, 64.8%, 63.7%, 76.9. %, 48.4% and 52.7 %) respectively. Also, sometime response to question (make efforts to enhance his/her wellbeing, following and adhering to hospital policies, procedures and clinical rule) were 48.4%. Regarding interpersonal communication domain, most of them were always (enthusiasm express for nursing-work, cooperation with a supervisor nurse, behave in a friendly manners), it constituted (53.8%, 69.2%, and 71.4) respectively. For the problem solving domain, most of them are always (Detecting unexpected changes in the patient's health-condition, clinical problems solve speedy, taking initiative to work problem solving), constituted (67.0%, 50.5% and 56.0) respectively. Regarding the professional ethic domain, most of them always and sometime have attitudes to patient and his\her family (84.4%), and always have confidentiality (79.1%). Also they sometime Informing the patient and his or her family (52.7%). Concerning with teamwork domain, most of them are sometime (engage responsibly in meetings and group-activities, Feedback Giving in a constructive way to teamwork, participating

in research-based practices and contributing to them), it constituted (56.0%, 54.9% and 56.0) respectively. Also, they always cooperate with a members of other teams (71.4%). Finally, the leadership domain, the study participant always (Motivating other nurses, coaching others in duties), it constituted (61.5% and 60.4%) respectively. And sometime (have attributes of supervisor, assisting nurses to entrance a practice begin level), it constituted (54.9% and 53.8%) respectively.

Table (4.3.B): Overall distribution of study sample related to their performance.

	Scale	F	%	M.S	S.d.	level
Overall Performance	**Never**	**1**	**1.1**	**2.52**	**0.18**	**Good**
	Sometime	**17**	**18.7**			
	Always	**73**	**80.2**			
	Total	***91***	***100***			

F= Frequency, %= Percentage, M.S.= Mean of score " Cut off point (0.66), Poor (mean of score 1-1.66), Average (mean of score 1.67-2.33), Good (mean of score 2.34 and more), S.d= Stander deviation. "

The results in table (4.3.B) showed that overall nursing performance based on the statistical cut off point, the majority of participants had a good performance. Based on the differences in the frequency and percentage of all aspects of clinical nurse's performance, overall mean (2.52) of the study results indicated that there are a good performance of study participants, as portrayed in figure (4.4).

Table (4-4): Statistical Relationship between the Overall Clinical Judgement of nurses and their Demographic Characteristics

Demographic data	Rating	Clinical Judgement		Total	χ^2	d.f	χ^2 crit.
		Average	Good				
Age of nurses	20-24	15	1	16	15.9	4	0.07
	25-29	47	4	51			
	30-34	21	0	21			
	35-39	2	0	2			
	40 & above	0	1	1			
	Total	85	6	91			
	P-value= 0.003 →HS						
Gender	**Male**	51	5	56	1.28	1	2.31
	Female	34	1	35			
	Total	85	6	91			
	P-value=0.256 →NS						
Marital status	**Single**	48	4	52	0.238	1	2.57
	Married	37	2	39			
	Total	85	6	91			
	P-value= 0.626 →NS						
Nursing enrolling program	**BSN**	85	5	90	14.32	1	0.07
	MSN	0	1	1			
	Total	85	6	91			
	P-value= 0.000→HS						

Number of year(s) graduate from nursing	**1-5 yrs**	80	6	86	**0.37**	**1**	**0.33**
	6-10 yrs	5	0	5			
	Total	85	6	91			
	P-value= 0.541 →NS						
Years of Experience in nursing	**1-5 yrs**	75	5	80	**14.88**	**2**	**0.07**
	6-10 yrs	10	0	10			
	11& above	0	1	1			
	Total	85	6	91			
	P-value= 0.001→HS						
Residency	**Urban**	57	3	60	**0.72**	**1**	**2.04**
	Rural	28	3	31			
	Total	85	6	91			
	P-value=0.394 →NS						

χ^2obs. = Chi-square observer, P-value= Probability value, χ^2crit. = Chi-square critical, df= Degree of freedom, NS= non-significant, S= significant, HS= high significant

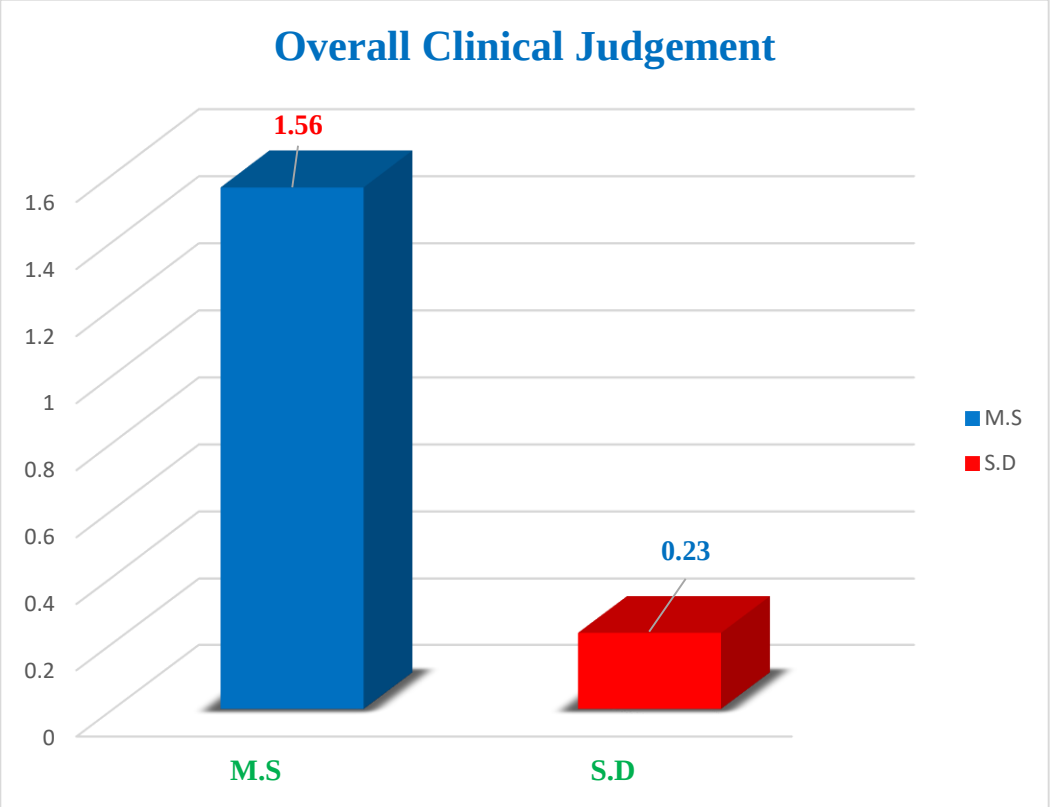
Chi-square analysis was conducted to determine the association between the nurses' clinical judgement and their demographic data. The study results presented in table (4.4) implied that there was a statistically significant relationship between the nurses' clinical judgement and their (age, nursing enrolling program, and years of experience), at p-value less than 0.05. While other variables (gender, marital status, number of year(s) graduate from nursing, residency) there were no statistically significant, p-value was more than 0.05.

Table (4-5): Correlation between the Overall clinical judgement skills and Overall performance.

Aspect	N. Item	M.S	S.d	Correlation
Clinical Judgement	**80**	**1.56**	**0.23**	**0.126**
Performance	**38**	**2.52**	**0.18**	

N= number, M.S.= Mean of score, S.d= Stander deviation.

Pearson Correlation analysis was conducted to determine the correlation between the nurses' clinical judgement and performance. The results presented in table (4.5) indicated that there was a significant correlation between the nurses 'clinical judgement and their performance at (0.126) level of significant.



M.S.= Mean of score Cut off point (0.33), Poor (mean of score 1-1.33), Average (mean of score 1.34-1.66), Good (mean of score 1.67 and more), S.d= Stander deviation.

Figure No (4-3) Distribution of the Sample According to Overall Clinical Judgement.

This figure illustrates that overall clinical judgement of academic nurses based on the statistical cut off point, overall mean (1.56) of the study results indicated that there was an acceptable clinical judgement of study participants.

M.S.= Mean of score Cut off point (0.66), poor (mean of score 1-1.66), average e (mean of score 1.67-2.33), good (mean of score 2.34 and more), S.d= Stander deviation.

Figure No (4-4): Distribution of the Sample According to Overall Responses for performance

This figure illustrates that overall performance of academic nurses based on the statistical cut off point, overall mean (2.52) of the study results indicated that there was a good performance of study participants.

CHAPTER FIVE

DISCUSSION OF STUDY RESULTS

This chapter provides a carefully structured, analyzed, and logically developed overview of the outcomes with a support from the relevant articles available. As noted earlier, the objectives of this dissertation were to explore the relationship between clinical judgment and performance of academic nurses in three selected public governmental hospitals. This study also aimed to assess clinical judgement and performance of academic nurses at the point of care. Other objectives of this study were to find out relationship between the nurses' clinical judgment and their demographical characteristics (age, gender, marital status, nursing program enrolling, number of years graduate from nursing, years of experience in nursing and residency).

5.1 Demographic Characteristics of the Study Sample.

In this study, the demographic characteristics discussed are included age, gender, marital status, nursing program enrolling, number of years graduate from nursing, years of experience in nursing and residency.

However, this study finding revealed that the greater percentage (56.0%) was within the second age group (25-29) years old. According to gender the majority of participants (61.5%) was female and remaining (38.5%) are male.

The results of other study obtained from the study done by (Canto et al., 2021), titled clinical judgment performance of undergraduate nursing students, which indicated that the mean age of participant was 22.4 years old

(minimum of 18; maximum of 46), and most of participant was female 147(88%), and others was male 19 (11.4%).

Another study of (Rashwan, 2016), the results indicated that about two thirds of study participant (67.7%) are included in age group with more than 20 years old, and both male and female are equal in number.

As well as, in another study of Fawas and others (2016), the results indicated that 33 (58.9%) of study sample were female and 23 (41.1) was male (Fawaz et al., 2016).

For the marital status, it is obvious single were constituted (57.1%) out of the study participants total number. As a consequence of these findings, a study had been assessed "factors affecting the academic performance of student nurses: A cross-sectional study". After statistically analysis, results were indicated that the majority of the respondents were single (84.6%) (Alshemari et al., 2017).

Concerning with nursing program enrolling, findings indicate that the most of the participants (98.9%) are within Baccalaureate degree. Results in parallel with the study of Jung and others (2020), who studied the "comparison of nursing performance competencies and practical education needs based on clinical careers of operating room nurses: a cross-sectional study ". Their findings were indicated that most of the nurses 65.3% had bachelor's degrees (Jung et al., 2020).

however, in another study of (Jacobs & others, 2018), the results show that the respondents 10 (34%) were with the higher academic qualification was a degree of master's in nursing (Jacobs et al., 2018).

Critical care units need more competent nurses who achieved at least Bachelor of Science in nursing degree in order to be qualified in providing high quality nursing care and achieve better patients' outcomes.

Results also displays that the Number of year(s) graduate from nursing was within first categories (1-5 years), constituted (94.5%). Regarding the critical-care nurses' experience, our result showed that the majority of nurses (87.9%) had (1-5 years) experience in nursing, (11.0%) had (6-10 years) as a total experience in their current hospitals and (1.1%) had more than eleven and more years' experience as a nurse. In another study of Jacobs & others (2018), who studied the consensus of the characteristics of clinical judgement utilized by nurses' in their practice: results of a survey. Their findings reveal that the time period of working of participants in the field of nursing varied from (5 - 42) years, and fifteen (52%) of them have experience range from (30 - 45) years (Jacobs et al., 2018).

In addition, another study of Adderley (2013), who studied community nurses' judgement and decision making for the management of venous leg ulceration, the results showed that the nursing experience was (84%) more than 10 years in nursing (Adderley, 2013).

Concerning residence, most of them were living in urban areas, it constituted (65.9%). This also is indicated in (Vlaeyen et al., 2021) study who studied "predicting falls in nursing homes: a prospective multicenter cohort study comparing fall history, staff clinical judgment". Findings indicated that fifteen homes nursing participate in study, of which six of them living in urban area and nine in suburban setting.

Also, the (Gabra et al., 2013) had been understudied “critical thinking and clinical judgment skills for baccalaureate nursing students in el-minia university”. Results showed that, two thirds of study subject were female (62.9%), while only about more than one third of study subject were males (37.1%), and more than half of the study subject were from rural (59%), while, (41.0%) of study subject were from urban.

5.2 Overall Clinical Judgement for the Academic Nurses.

Findings revealed that the overall clinical judgement at (section one, two and three). Based on the statistical cut off point, the majority of participants had average clinical judgement. Based on the differences in the frequency and percentage of all aspects of clinical judgement assessment, overall mean (1.56) of the study results indicate that there was an acceptable clinical judgement for the study participants.

In a study of Thompson (2014), who conducted a study titled “What. What. What. Clinical Judgment in Tanzanian Nurse Education” This study revealed that nurses possessed a good understanding of clinical judgement and its importance to nursing practice (Thompson, 2014).

In another study done by (Victor, 2017), who studied “improving clinical nursing judgment in prelicensure students”. The findings indicated that, the clinical nursing judgement increased significantly at the beginning and ending of a bachelor degree program.

In contrast with another study of (Nielsen et al., 2016), who studied “A framework to support preceptors' evaluation and development of new nurses' clinical judgment”, the results showed that, possessing an organized framework offered objective means of evaluating and developing

the clinical judgement of new graduate nurses. It is supposed that academic clinical preceptors may find this approach beneficial in preparing students for transfer to practice.

In additions, another study done by (Rashwan, 2016), with titled "clinical decision making and critical thinking dispositions among students at faculty of nursing in port-said university", The study results revealed that, the second dimension canvass for objectives and values scored the highest mean (36.26) clinical decision making. The nursing students had high ability in total clinical decision making, while has the highest mean score for critical thinking characteristics was inquisitiveness for nursing students, followed by analyticity among nursing students, as well as followed by self-confidence among nursing students. However, the lowest mean score was in truth seeking for nursing students. Nursing students had a moderate level of the critical thinking disposition.

Furthermore study done by (Thornton, 2010) and (Steadman, 2018). Stated that the experience serves as a catalyst for the development of learning, intuition, skills, self-confidence, and clinical nursing judgement. Many of nursing expert believe that clinical judgement improves with time as a result of experiences.

Finally, A study done by (Wilber, 2014), that studied the "Fitting things together: A grounded theory study of clinical judgment in nursing", the researcher interviewed fifteen hospital nurses who had two or three years of clinical experience while providing patient care, to explore the practices they used to make clinical judgments. The researcher highlighted difficulties in current studies on the consistent use of a clinical judgement definition and assessment in complicated practice settings.

5.2.a. Distribution of Participants' According to Rank of Priority Nursing Diagnosis.

In section four clinical judgement. The result indicated that the majority of respondents that rank a priority nursing diagnoses were (82.4%) within a moderate level.

The finding that mentioned was supported by (Herdman & Kamitsuru, 2019), they indicated that the nurse's skills and knowledge in critical thinking, clinical reasoning, analyses of data, and understanding of potential situations, standard measurements used to detect problems, and mechanisms of disease processes, as well as ability to combine all information for conclusions, characteristics of possible situations, are required to making a suitable nursing diagnosis.

In another study of (McLaughlin et al., 2008), who studied "The role of personality and self-efficacy in the selection and retention of successful nursing students: a longitudinal study", mentioned that a nurses who have a degree of bachelorette in nursing are thought to utilize greater levels of cognitive abilities, as they learn to analyze conditions, reflection on their performance, evaluating interventions and making clinical judgements.

5.2.b. Distribution of Participants' According to Degree of Confidence in their Clinical judgement.

In section five clinical judgement. The result indicated that the majority of respondents (53.8%) within a high confidence. In light of this, another study of Fenske & others (2013), who conducted a study titled "Perception versus reality: A comparative study of the clinical judgment skills of nurses during a simulated activity", the results indicated that there is

an increased confidence in the skills of clinical judgment among nurses who have less than one year of experience in the field of nursing and whose ages range from twenty-one to twenty-five; and in comparing with their actual skills, they have consistently rated themselves at a much higher level (Fenske et al., 2013).

In another study of (Ghoneimy, 2012), who studied "Relationship between dispositions and skills of critical thinking among second year nursing students at Benha faculty of nursing", result indicated that most percentage of the participant had a positive disposition level of self-confidence.

Also, the study of Adderley (2013), who studied "community nurses' judgement and decision making for the management of venous leg ulceration", the results indicated that the nurses was under confidence in their judgment despite a higher level of experience (Adderley, 2013).

Furthermore, the study of (Nash et al., 2009), who studied "Enhancing transition: An enhanced model of clinical placement for final year nursing students", results indicated that the nursing students have acknowledged the importance of feeling confident in their ability to apply knowledge and skills in a clinical setting.

Finally, this interpretation is supported by (Simmons, 2010), who states that evaluating clinical information for significance is part of a cognitive process for weighing relevant alternative action.

5.3 Overall Performance for the Academic Nurses.

Findings reveals that overall nursing performance based on the statistical cut off point, the majority of participants had a good performance. Based on the differences in the frequency and percentage of all aspects of clinical nurse's performance, overall mean (2.52) of the study results indicate that there is a good performance of study participants.

This result supported by Canto (2021), that studied "clinical judgment performance of undergraduate nursing students", which carried out upon (166) participants which indicated that, 65.7% evaluated themselves as proficient in relation to the reported performance on clinical judgment (Canto et al., 2021).

Also, the American Association of Colleges of Nursing (AACN, 2015), endorse a Bachelor's degree in Nursing as a requirement for entrance into the practicing profession, critical thinking, citing the nurses' competence, development of professional, superior knowledge, and the preparations of these nurses for a complex setting practice.

In addition, in the (Jameel & Ahmed, 2019), study indicated that the performance has the power to improve an organization's efficacy and efficiency. In today's competitive health environment, hospitals must have top-notch employees if they are to meet their goals and maintain a competitive advantage.

Another study done by (SA, 2019) who studied "evaluation of nurses 'performance from nurses' viewpoints on providing safe care to patients in aja hospitals". The result revealed that, in the critical care unit, the nurses' care performance was not good, so several improvements are suggested.

5.4 Discussion of Nurses Clinical Judgement Associated with their Demographic Data.

Findings, demonstrate a statistically significant relationship between the participant clinical judgement and their (age, nursing enrolling program, and years of experience), at p-value less than 0.05. While other variables (gender, marital status, number of year(s) graduate from nursing, residency) there is a non-significant relationship, at p-value (>0.05). This findings was supported by result obtained from Nakash and Alegria (2013), who studied "Examination of the role of implicit clinical judgments during the mental health intake", results indicated that a clinical judgement that depend on Knowledge and experience would lead to information integration (Nakash & Alegria, 2013).

Moreover, in a study of Yang (2019), that studied "Improving clinical judgment by simulation: a randomized trial and validation of the Laster clinical judgment rubric in Chinese". The results indicated that, there were a non-significant impacts of ages, genders, or categories on the clinical judgement sub-domains (Yang et al., 2019).

In another study (Román-Cereto et al., 2018), which studied "cultural adaptation and validation of the Laster clinical judgment rubric in nursing students in Spain" the relations between the participant ages, the values of the various LCJR items, and their total scores were analyzed, and it was shown that there was a very little but significant association between age and prioritization data {p-value(0.042); rho (-0.168)} and skills {p-value (0.039); rho (-0.170)}. The correlation was inverse in both instances, indicating that younger participants scored higher on these parameters.

Whereas, in the study of (Alfaro- LeFevre, 2009), age had been identified as one of the personal variables that affect critical thinking, the increasing in age was correlated with a better degree of critical thinking, as person become older, they have more chances to practice reasoning in a various situation.

Another study done by (Gabra et al., 2013), they studied "critical thinking and clinical judgment skills for baccalaureate nursing students in el-minia university". Which indicated that there are a non-significant statistical differences between items of clinical judgement and critical thinking and with characteristics of demographic data (residency and genders).

Furthermore study done by (Turkel et al., 2016). The results indicated that the nurses with or even have more than sixteen years of expertise, the self-assessed was significantly high in making a clinical decision, prioritizing, problems detection, reflection, and clinical implementation than less experienced nurses.

This finding also agreed with (Miller et al., 2011), who found no statistical significant difference was reported that gender was related to critical thinking disposition scores.

5.5. Discussion the Relationship between the Overall Clinical Judgement and Overall Performance.

The current study findings indicated that there was a significant association between the nurses' clinical judgement and performance. The results presented in table (4.5) indicated that there was a significant correlation between the nurses 'clinical judgement and their performance at (0.126) level of significant.

The findings of the present study are found to be compatible with Andrea Steadman Fedko (2017) who conducted a study titled "examining the relationship between clinical judgment and nursing actions in prelicensure students". The results indicated that, there was a modest correlation {r = 0.36} with a statistically significant {P- value (0.04)} between total Laster Clinical Judgment Rubric (LCJR) score of students' and the indication actions, as well as, the responding dimension was shown to have a statistically significant association with completion of the indicated action. As a consequence, the higher overall LCJR ratings were associated with more indicated nursing activities being completed (Fedko & Dreifuerst, 2017).

Furthermore, a study done by Chmil & others (2015), under title "effects of an experiential learning simulation design on clinical nursing judgment development". The study found that the relationship was positive and statistically significant between the performance of simulation and the development of nursing clinical judgment. Also, the linear regression analysis scale showed forty-seven percent of the variance between the two variables in simulation performance {C-SEI scores} was related to the {LCJR score} of development clinical nursing judgment, at P- value more than (0.001) (Chmil et al., 2015).

Also, this result is congruent with the findings of previous clinical judgement studies, Fenske and others (2013), who conducted a study titled "Perception versus reality: a comparative study of the clinical judgment skills of nurses during a simulated activity". The findings of this research found a significant distinction among nurse's actual skills of clinical judgment and perceptions about their clinical judgment abilities. The length

and lifetime of nursing experience enhanced the results of actual performance and self-evaluation (Fenske et al., 2013).

Another study of (Pitt et al., 2015), who studied “the influence of critical thinking skills on performance and progression in a pre-registration nursing program” the study found a significant relationship between students entry critical thinking scores and their academic performance.

We hypothesized that there will be a statistically significant relationship between clinical judgement and performance of academic nurses. Accordingly, hypothesis (I) is accepted at (0.126) level of significant and null hypothesis is rejected (table 4.5).

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

This chapter presents conclusions that are derived out of the study findings' interpretation and discussion. The recommendations are based on the study conclusions.

6.1 Conclusions

According to the current study findings, the following conclusions have been made to concentrate on preset objectives and hypotheses. The research hypotheses were formulated to predict statistical significant level scores regarding participants' clinical judgement and performance. After analyzing collected data, the statistical results indicated that there was a significant association between clinical judgement and performance of the study participants'. Based on the findings of the study, the designated hypotheses is accepted and null hypotheses are rejected. This is evidence that academic nurses have average (acceptable) clinical judgment making abilities and they have a good performance in clinical setting. The objectives of the current study have been met and research questions have been answered by articulating that clinical judgement and performance of critical care nurses were acceptable.

In regard to the study findings and their interpretations, the study reaches to the following conclusions:

6.1.1. The majority of the study participant who work in the critical care units were within the second age group (25-29) years old, female, single, had a Baccalaureate degree in nursing, within (1-5) years

graduate from nursing, with (1-5 years) experience in nursing, and most of them was living in urban areas.

6.1.2. Most of the study participants had average (acceptable) clinical judgement abilities.

6.1.3. The majority of respondents that rank a priority nursing diagnoses were within a moderate level.

6.1.4. The majority of respondents are within a high level of confidence in their clinical judgement.

6.1.5. Most of the study participants had a good performance.

6.1.6. There was association between the nurses' clinical judgement and their (age, years of experience, and nursing enrolling programme).

6.1.7. There was a correlation between the nurses' clinical judgement and performance.

6.2 Recommendations.

Based on the finding and conclusion of this study, the study strongly recommends the following:

1. Encourage the healthcare staff to use the clinical judgement abilities in their critical care units to provide safe and effective care for patients.
2. Continuous nursing education department in each hospital must act to encourage nurses to developed clinical judgement and performance abilities through a periodic educational sessions and make it as a mandatory for job promotion. Moreover, providing training program for novice nurses before recruiting them in the critical care units.

3. Encourage head nurses and managerial staff to work with academic institutions of nursing and be synergistically cooperated to provide best evidence-based recommended performance for their staff of nurse.
4. Future studies should be conducted to evaluate nurses' clinical judgement and performance regarding certain nursing situations in different healthcare settings. Number of clinical instructors and nursing educators should be increased to meet needs of nurses staff to improve critical thinking, clinical judgment and decision.
5. To meet the demand for advanced and efficient clinical judgment between nurse's, nursing educators must address the developing and using of innovating educational strategies.
6. More clinical training is needed to facilities the development of nurses' critical thinking, clinical judgment, and decision making abilities through providing multiple different clinical settings.
7. In addition to the study instrument (CJA tool), Future research studies should also look at the use of other methods for assessing clinical judgment. This could include the development of a modern clinical judgment tool that measure all concepts of the Tanner model for measuring clinical judgment.
8. Develop a prerequisite Licensure Examination for nurses to set minimum qualification competencies and provide assurance to public that predetermine standards have been met.
9. In order to produce a high effect size and ensuring that these findings can be replicated, this study should be repeated with a larger sample size and different places.

6.3. Strength

The strengths of this dissertation are adding a body of consolidated knowledge to the previous published research studies that supported the importance of clinical judgement and performance of academic nurses who working in critical care units.

6.4. Implication in Nursing

The clinical judgement and performance of nurses are major clinical issues in nursing, because lacking or poor clinical judgement and insufficient performance would have a major effect towards nursing care outcomes, patient safety, and direct clinical consequences. Therefore, this study can be used in a wide range of implications as follows:

6.4.a: Implication in Nursing Knowledge:

The present study focuses on a synthesizing way of gaining nurses' knowledge, which it gained from the four types of knowing (empirical knowing, ethical knowing, personal knowing, aesthetic knowing). In addition, this study provides a modern resource of knowledge and evidence for the use of clinical judgment in nursing practice and performance in nursing, which helps nurses develop their abilities to comprehend and apply of clinical judgment skills in nursing activity.

6.4.b: Implication in Nursing Research:

This study can provide a scientific base for further studies to be formulated whether to answer questions, solve problems, or even to develop the nursing clinical judgement and performance to enhance nursing care and efficacy to deal with various clinical situations in critical care units with a safe

and high level of nursing care. Therefore, its effect on patient's health outcomes and their quality of life. Also, this study can help researchers to understand the scope and nature of their current involvement in their own care and treatment therefore it will be encouraging them to formulate a new way to enhance and measure the clinical judgement abilities and performance of nurses' staff in the future.

6.4.b: Implication in Nursing Practice:

This study provides a basic model for the practice of nursing. Clinical judgment is seen as a problem-solving activity throughout nurses' use of creative and critical thinking skills to apply their nursing knowledge, values, attitudes, and logic while assessing and providing patient care by using both deductive and inductive reasoning to express patient care. Also, this work can be considered as a guideline to urge nurses to use clinical judgment and performance skills in order to improve their clinical skills and provide effective care for patients as well as reduce medical errors and provide safety and security for those in critical care units.

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APPENDIX (A)

Administrative Arrangements

University of Babylon
College of Nursing
Research Ethics Committee

جـــامـعة بـــابـــل
كـــلية التمريـض
لجنة اخلاقيات البحث العلمي

Issue No: 51
Date: 6 /04 /2021

Approval Letter

To,
Ahmed Mohammed Jasim

The Research Ethics committee at the **University of Babylon, College of Nursing** has reviewed and discussed your application to conduct the research study entitled "**The Relationship between Clinical Judgement Skills and Performance of Academic Nurses at Al-hilla Teaching Hospitals.**"

The Following documents have been reviewed and approved:

1. Research protocol
2. Research instrument/s
3. Participant informed consent

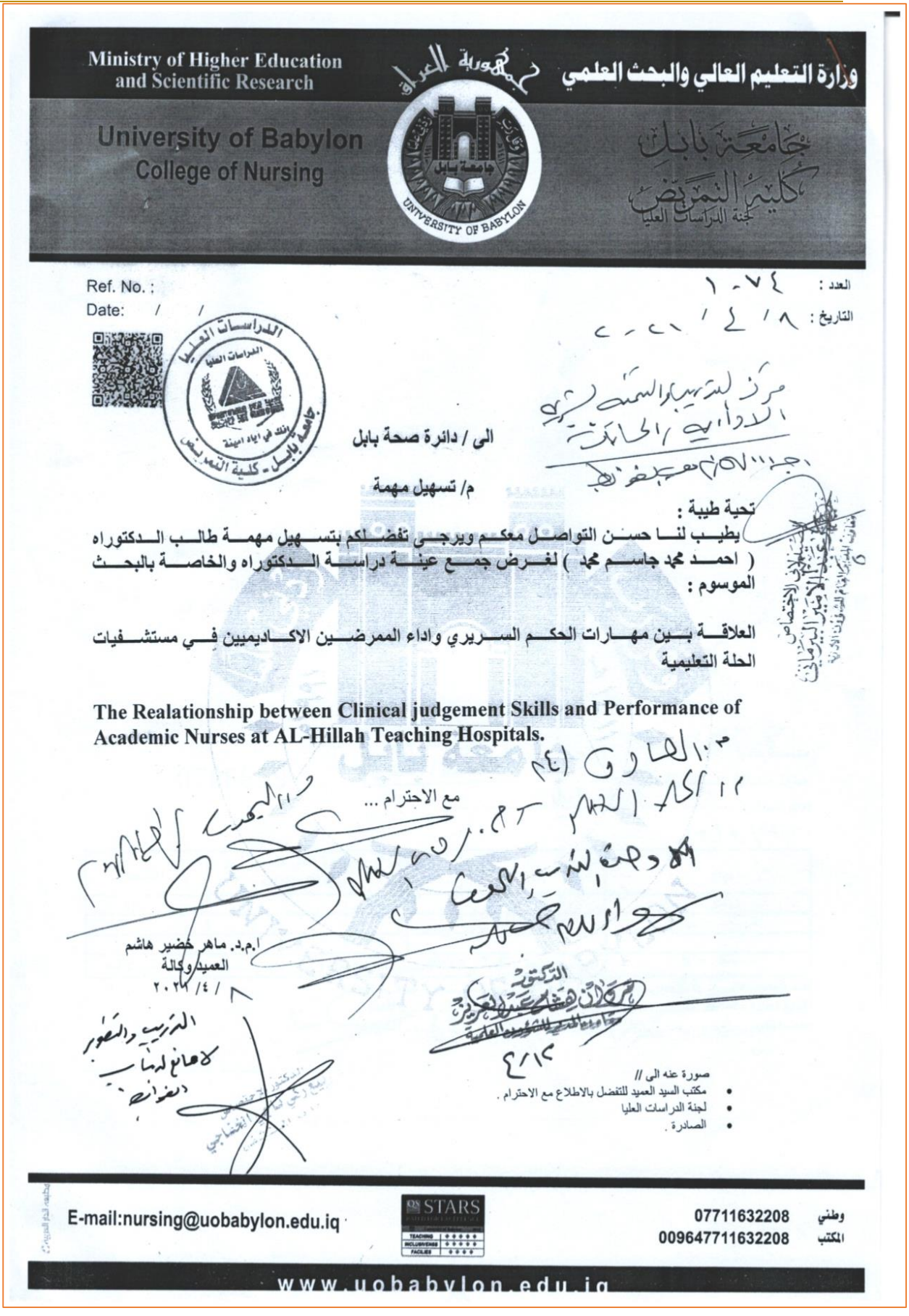
Committee Decision:

The committee approves the study to be conducted in the presented form. The Research Ethics committee expects to be informed about any changes occurring during the study, any revision in the protocol and participant informed consent.

Prof. Dr. Salma K. Jehad
Chair Committee
College of Nursing
Research Ethical Committee
5 /4 /2021

To,

APPENDIX (A)



Ministry of Higher Education and Scientific Research
وزارة التعليم العالي والبحث العلمي
University of Babylon
College of Nursing
جامعة بابل
كلية التمريض
لجنة الدراسات العليا

Ref. No. :
Date: / /

العدد : ١٠٧٤
التاريخ : ٨ / ٤ / ٢٠٢٢

الى / دائرة صحة بابل

م/ تسهيل مهمة

تحية طيبة :

يطيب لنا حسن التواصل معكم ويرجى تفضلكم بتسهيل مهمة طالب الدكتوراه (احمد محمد جاسم محمد) لغرض جمع عينة دراسة الدكتوراه والخاصة بالبحث الموسوم :

العلاقة بين مهارات الحكم السريري واداء الممرضين الاكاديميين في مستشفيات الحلة التعليمية

The Realationship between Clinical judgement Skills and Performance of Academic Nurses at AL-Hillah Teaching Hospitals.

مع الاحترام ...

ا.م.د. ماهر خضير هاشم
العميد وكالة
٨ / ٤ / ٢٠٢٢

صورة عنه الى //
- مكتب السيد العميد للتفضل بالاطلاع مع الاحترام .
- لجنة الدراسات العليا
- الصادرة .

E-mail:nursing@uobabylon.edu.iq

وطني 07711632208
المكتب 009647711632208

www.uobabylon.edu.iq

APPENDIX (A)

جمهورية العراق

Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com Tel:282628 or 282621		وزارة الصحة والبيئة دائرة صحة محافظة بابـــل المديـــر العـــام مركـــز التدريب والتنمية البشرية وحدة أدارة البحوث العدد : ٣٧٨ التاريخ: ١٥/ ٤/ ٢٠٢١

إلى / مستشفى الأمام الصادق (ع)
مستشفى الحلة التعليمي
مستشفى مرجان التعليمي

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

/ تسهيل مهمة

تحية طيبة ...

أشارة إلى كتاب جامعة بابل / كلية التمريض / لجنة الدراسات العليا ذي العدد ١٠٧٤ في ٨/٤/ ٢٠٢١

نرفق لكم ربطا استمارات الموافقة المبدئية لمشروع البحث العائد للباحث طالب الدراسات العليا الدكتوراه (احمد محمد جاسم محمد) .

للتفضل بالاطلاع وتسهيل مهمة الموما أليها من خلال توقيع وختم استمارات اجراء البحث المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة المبدئية ليتسنى لنا أجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

المرفقات :
استمارة عدد /٢

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ / ٢٠٢١

نسخة منه إلى :
- مركز التدريب والتنمية البشرية / وحدة أدارة البحوث مع الأوليات ...

APPENDIX (A)

جمهورية العراق

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إلى / مستشفى الأمام الصادق (ع)
مستشفى الحلة التعليمي
مستشفى مرجان التعليمي

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

/ تسهيل مهمة

تحية طيبة ...

أشارة إلى كتاب جامعة بابل / كلية التمريض / لجنة الدراسات العليا ذي العدد ١٠٧٤ في ٨/٤/ ٢٠٢١

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المرفقات :
استمارة عدد /٢

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ / ٢٠٢١

نسخة منه إلى :
- مركز التدريب والتنمية البشرية / وحدة أدارة البحوث مع الأوليات ...

APPENDIX (A)

جمهورية العراق

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إلى / مستشفى الأمام الصادق (ع)
مستشفى الحلة التعليمي
مستشفى مرجان التعليمي

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

/ تسهيل مهمة

تحية طيبة ...

أشارة إلى كتاب جامعة بابل / كلية التمريض / لجنة الدراسات العليا ذي العدد ١٠٧٤ في ٢٠٢١ /٤/٨

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للتفضل بالاطلاع وتسهيل مهمة المومأ أليها من خلال توقيع وختم استمارات اجراء البحث المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة المبدئية ليتسنى لنا أجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

المرفقات :
استمارة عدد /٢

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ /٢٠٢١

نسخة منه إلى :
- مركز التدريب والتنمية البشرية / وحدة أدارة البحوث مع الأوليات ...

APPENDIX (A)

جمهورية العـــراق

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استمارة رقم :- ٤٧
رقم القرار :- ٤٧
تاريخ القرار :- ٢٧/ ٦/ ٢٠٢١

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

قرار لجنة البحوث

تحية طيبة ...

درست لجنة البحوث في دائرة صحة بابل مشروع البحث المعنونة (العلاقة بين مهارات الحكم السريري واداء الممرضين الاكاديميين في مستشفيات الحلة التعليمية) والمقدم من الباحث (احمد محمد جاسم محمد) إلى وحدة أدارة البحوث والمعرفي مركز التدريب والتنمية البشرية في دائرة صحة بابل بتاريخ ٢٠٢١/٦/٢٤ وقررت :

قبول مشروع البحث أعلاه كونه مستوفيا للمعايير المعتمدة في وزارة الصحة والخاصة بتنفيذ البحوث ولا مانع من تنفيذه في مؤسسات الدائرة .

مـــــع الاحتـــرام

الدكتور / محمد عبد الله عجرش
رئيس لجنة البحوث

٢٠٢١/ /

نسخة منه إلى :
- مكتب المدير العام / مركز التدريب والتنمية البشرية / وحدة إدارة البحوث ... مع الأوليات.

APPENDIX (A)

جمهوريه العراق

Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com Tel:282628 or 282621		وزارة الصحة والبيئة دائرة صحة محافظة بابـــل المديـــر العـــام مركـز التدريب والتنمية البشرية وحدة أدارة البحوث العدد : ٦٠٦ التاريخ: ٢٧/ ٦ /٢٠٢١

إلى / جامعة العميد / قسم الموارد البشرية

م / دراسة تطبيقية

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

السلام عليكم ..

أشارة إلى كتابكم المرقم ١٤٣٨ في ٢٠٢١/٦/١٩....

بخصوص الدراسة المقدمة من قبل (م .م احمد محمد جاسم) بعنوان (The Relationship between Clinical Judgment Skills and performance of Academic Nurses at AL-Hillah Teaching Hospitals)

هي دراسة علمية بحثية ويمكن الاستفادة منها في مؤسساتنا الصحية .

للتفضل بالاطلاع ..... مع الاحترام .

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ / ٢٠٢١

نسخة منه إلى :

- **مركز التدريب والتنمية البشرية / وحدة أدارة البحوث .... مع الأوليات .**

APPENDIX (B)

Tiwaporn Pongmarutai sent you a message on ResearchGate

١ رسالة

Tiwaporn Pongmarutai via ResearchGate <no-reply@researchgatemail.net> الجمعة، ٢٧ أغسطس ٢٠٢١ في ٣:٥٩ م

إلى: Ahmed Jasim <ahmed.mohammed.nurh5@student.uobabylon.edu.iq>

ResearchGate

Tiwaporn sent you a message

Tiwaporn Pongmarutai
CP Medical Center

Dear Prof. Ahmed Mohammed Jason,

It is with honor to grant a permission for you to use information in my dissertation for the purpose of advancing our nursing profession.

Unfortunately, at the moment, due to COVID19 situation in Thailand, I am not able to travel back to my hometown, to get you the information you requested. Will do so as soon as I can.

Looking forward to reading your dissertation.

Best wishes!

–

Reply on ResearchGate

APPENDIX (C)

English Questionnaire

Part one: Demographical information: the following questions allow the researcher to identify demographic factor that may contribute to clinical judgement being measures. Please mark or write as appropriate.

1. Age: ☐ Years old

2. Gender: male ☐ Female ☐

3. Marital status:

- Single ☐
- Married ☐
- Divorced ☐
- Widowed ☐
- Separated ☐

4. Nursing program enrolling

- Baccalaureate degree (BSN) ☐
- Master degree (MSN) ☐
- Doctorate (PhD) ☐

5. Number of year(s) graduate from nursing: ☐

APPENDIX (C)

6. Years of experience in nursing ☐

7. Residency:

- Rural ☐
- Urban ☐

Part two: Clinical Judgment Assessment Tool

Clinical setting: Med/surg.Unit, Acute Care Hospital **Day &Time**: …….. at …… Am/ Pm

Your role: you are a full time nurse (Academic nurse), receiving a shift change report, from a night nurse, to plan of your care for your client.

Case one:

Section 1:

Instruction: Your first client is Adams. M., 55 years old, who is transferred to your unit from intermediate care unit (IMC) this morning.

- Please rate each piece of information about A.M. based on the importance to your plan of care today.

Rating scale: 0 = not important to my plan of care today ("I can plan the care without it")

1 = important to my plan of care today ("a must have information")

The following page (section 1) presents you with a case 1. The patient is an acute ischemic stroke. The first section provides you with clinical information as it would be presented during a shift change report and asks you to rate each item based on how you perceive it as relevant/important to your plan of care for this patient today.

APPENDIX (C)

Section 1:

Information about A.M. obtained from shift change report	Rating	
	0	1
1. Race		
2. Male		
3. BMI 29.6		
4. Admitted 2 days ago from ER to Intermediate Care Unit (IMC)		
5. Chief complaint: Sudden Rt. side weakness and slurred speech		
6. Admitting Diagnosis: Acute Ischemic Stroke		
7. Past medical history of Hypertension (HTN)		
8. Past medical history of Hypercholesterolemia		
9. Past medical history of Type 2 Diabetes Mellitus (DM)		
10. NPO		
11. Aspiration Precautions		
12. Repeat bedside swallow evaluation by speech pathologist Today		
13. Advance diet as recommended by speech therapy		
14. Allergic to Sulfa		
15. Full code (Class I)		
16. Activity: Out of bed to chair TID with PT		
17. Turn every 2 hours while in bed with 2 assists last night		
18. IV on left forearm, no sign of inflammation noted at the site		
19. Main IV is 0.9% Normal Saline		
20. IV infusing at 125 ml/hr.		
21. Urine output was 1600 ml for the night shift		
22. Vital signs every 4 hours		
23. This morning, temperature 98.4 F (36.8 C)		
24. This morning, pulse 78 bpm		
25. This morning, respiration 22 bpm		
26. Blood pressure this morning was 150/70 mm Hg.		
27. Last night pain was 2/10 on a self report 0 to 10 pain rating scale		
28. O_2 to keep $SpO_2 > 94\%$		
29. Last night $SpO_2 > 94\%$, no O_2 required		
30. Neuro. checks every 4 hours		
31. Patient slurs but can be understood with some difficulty		
32. His wife often have to interpret his words for staff		
33. Mild facial palsy		

APPENDIX (C)

34. Flaccid paralysis is present in his right. arm and right. Leg		
35. No family member present this morning		

Section 2:

Instruction: The following are additional information about A.M. you obtained from his chart.

- Please rate each piece of additional information below about A.M. based on the importance to your plan of care today. **Using the same rating scale as section 1.**

Rating scale:

0 = not important to my plan of care today ("I can plan the care without it")

1 = important to my plan of care today ("a must have information")

Additional information may be needed after the shift change report. The following page (section 2) presents you with additional information as it would be acquired from the patient's chart as well as an actual observation/assessment. The second section asks you to rate each item based on how you perceive it as relevant/important to your plan of care for this patient today.

Item (Additional information obtained from the A.M.'s chart as well as an actual observation/assessment)	Rating	
	0	1
36. Physical Therapy to evaluate and treat altered gross motor development/function		
37. Occupational Therapy to evaluate and treat altered fine motor development/function, ADLs, and cognitive development		
38. Functional Independence Measure (FIM) score is 85/126		

APPENDIX (C)

39. Mini-Mental State Examination (MMSE) score is 22/30		
40. Only orientate to person not place nor time		
41. A smoking history of 35 pack-years		
42. Patient has been married for 32 years		
43. On admission, Stroke Scale (NIHSS) score was 8		
44. CT brain without contrast on admission was negative		
45. CT brain without contrast repeated day 1 after admission shows a hyperdense left middle cerebral artery (MCA)		
46. Carotid duplex ultrasonography shows 60% stenosis left ICA		
47. On admission WBC 9,800 (Range 5,000-10,000/mm^3)		
48. On admission RBC 4.9 (Range 3.8-5.5x10^6/µL)		
49. On admission Hg. 12.5 (Range 11.7-16.1g/dL)		
50. On admission Hct. 38 (Range 37%-47%)		
51. On admission Platelet 355,000 (Range 150,000-400,000mm^3)		
52. On admission Na. 142 (Range 136-145 mmol/L)		
53. On admission K 4.5 (Range 3.5-5.0 mmol/L)		
54. On admission Cl 102 (Range 98-106 mmol/L)		
55. On admission CO_2 27 (Range 23-31 mmol/L)		
56. At 5 am today PT 25 (Range 11-12.5 sec)		
57. At 5 am today INR 2.9 (Range 0.7-1.8)		
58. At 5 am today aPTT 58 (Range 30-40 sec)		
59. Capillary blood glucose at 0600 hr today was 148 mg/Dl		
60. Insulin Sliding Scale: less than 150 = 0 unit		
61. Amlodipine (Norvasc®) 10 mg PO daily		
62. Enteric Coated ASA 325 mg PO daily		
63. Warfarin (Coumadin®) 5 mg. PO daily		
64. Nicotine Patch (14mg) daily		
65. Call M.D. if temp > 100.5° F (38 C)		
66. Enoxaparin (Lovenox®) 40 mg. SQ daily		
67. Acetaminophen 650 mg. PO every 6 hours prn. Temp. >100°F37.8		
68. Lorazepam (Ativan®) 1 mg PO/IV every 8 hours prn anxiety		
69. Appears unaware of positioning of neglected side.		
70. Able to brush his teeth with his left hand		

Please identify additional clinical information you believe to be important to plan the care for this patient that are not already provided for you----------
---

APPENDIX (C)

Section 3:

Instruction: Base on information about A.M. you have obtained (from section 1 and 2).

- Please rate the following nursing diagnosis based on the importance to your plan of care today. **Using the same rating scale as section 1.**

Rating scale: 0 = not important to my plan of care today ("I can plan the care without it")

1 = important to my plan of care today ("a must have information")

- With each nursing diagnosis rate as "important" to your plan of care today, identify the 5 most supportive clinical information (item # from section 1&2) you are considering (the same clinical information may support more one nursing diagnosis).

Nursing Diagnosis	Rating		Clinical Information (items from section 1&2) being considered				
	0	1					
71. Impaired Memory							
72. Excess Fluid volume							
73. Impaired Swallowing							
74. Defensive Coping							
75. Impaired physical Mobility							
76. Risk for Disuse syndrome							
77. Impaired verbal Communication							
78. Risk for Aspiration							
79. Unilateral Neglect							
80. Acute pain							

Section 4: Base on nursing diagnoses rated as "important" to your plan of care today (from section 3), rank them according to priority of important.

Rank priority	Nursing Diagnoses
1	
2	
3	

APPENDIX (C)

4	
5	

Section 5:

Instruction: please rate the degree of confidence that you have in your judgment for this case (circle the degree of confidence)

Not at all confident — very

0 1 2 3 4 5 6 7 8 9 10

Part three: (Nurses Performance)

	Category	Clinical nurse performance	Scale		
		Item	Always	Some time	Never
1.	Contextual	Being thrifty			
		Not complaining about organizational conditions			
		Not keeping others engaged in individual problems			
		Absenteeism			
		Participating in training meeting			
		Having a neat, clean appearance			
		Taking responsibility for the tasks.			
		Working harder than necessary			
		Working systematically			
		Engaging in self-development to improve own effectiveness			

APPENDIX (C)

		Obeying cleanliness rules			
.2	**Professional skill**	Calmness			
		Keeping nursing equipment in good condition			
		Identify and assessing of the patient's problems			
		General Professional skill			
3.	**Clinical skill**	Planning patient care according to individual needs			
		Managing the nursing activities in time			
		Delivering well-prepared or careful nursing service to the patient			
		Monitoring patient's condition constantly and record his/her situation			
		Making an effort to enhance his/her well-being			
		Endorsing and following clinical rules, procedures and hospital policies			
4.	**Interpersonal Communication**	Expressing enthusiasm for nursing work			
		Cooperating with supervisor nurse			
		Behaving in a friendly manner			
5.	**Problem solving**	Identifying sudden changes related to patient's condition			
		Solving speedy clinical problems			
		Taking initiative to solve a work problem			
6.	**Professional ethic**	Attitude to patient and his/her family			
		Confidentially			
		Giving information to patient and his/her family			
7.	**Teamwork**	Cooperating with the members of other teams			

APPENDIX (C)

		Engaging responsibly in meetings and group activities			
		Giving feedback to colleagues in a constructive way			
		Engaging in and contributing to research-based practices			
8.	**Leadership**	Motivating other nurses			
		Coaching others in duties			
		Having a supervisor attributes			
		Helping to entry-to-practice beginning level nurses			

APPENDIX (D)

Arabic Questionnaire

المشاركون الأعزاء:

الاستبانة التي بين ايديكم جزء من متطلبات البحث للدراسة. يرجى تفضلكم بالاجابة على الأسئلة التالية بكل صدق وامانة ، مع العلم أن إجاباتك ستعامل بسرية تامة. متمنيا لكم الموفقية والنجاح . جزيل الشكر والتقدير لتعاونكم.

الجزء الأول (المعلومات الديموغرافية):

الأسئلة التالية تسمح للباحث بتحديد العامل الديموغرافي الذي قد يساهم في اتخاذ القرارات السريرية كمقاييس. يرجى وضع علامة أو الكتابة بالشكل المناسب.

1. العمر: ☐ سنة

2. الجنس:

ذكر ☐ أنثى ☐

3 - الحالة الاجتماعية:

اعزب ☐ متزوج ☐ أرمل ☐

منفصل ☐ مطلق ☐

4. الشهاده الحاصل عليها في برنامج التمريض:

- شهادة البكالوريوس (BSN) ☐
- درجة الماجستير (MSN) ☐
- درجة الدكتوراه ☐

APPENDIX (D)

5. عدد سنوات التخرج من التمريض:

1-5 سنوات. ☐

6-10 سنوات. ☐

11 وما فوق. ☐

6. عدد سنوات الخبرة في التمريض

1-5 سنوات. ☐

6-10 سنوات. ☐

11 وما فوق. ☐

7. بيئة السكن:

حضر ☐ ريف ☐

الجزء الثاني: أداة تقييم الأحكام السريرية

الإعداد السريري: وحدة طبية / وحدة جراحية ، مستشفى الرعاية الحرجة ، اليوم والوقت: ..... في ..... صباحًا / مساءً

دورك: أنت ممرض (ة) بدوام كامل (ممرض أكاديمي) ، تتلقى تقرير تغيير المناوبة ، من ممرض (ة) ليلية ، لتخطيط رعايتك لعميلك.

دراسة الحالة:

القسم الاول:

التعليمات: عميلك الأول هو (آدم. م) ، 55 عامًا ، تم نقله إلى وحدتك من وحدات الرعاية في هذا الصباح.

APPENDIX (D)

 يرجى تقييم كل معلومة عن (آدم. م) بناءً على أهمية خطة الرعاية الخاصة بك اليوم.

مقياس التقييم: 0 = غير مهم لخطة رعايتي اليوم ("يمكنني التخطيط للرعاية بدونها")

1 = مهم لخطة رعايتي اليوم ("يجب أن يكون لديك معلومات")

الصفحة التالية (القسم الاول) تعرض لك حالة:

1. المريض مصاب بسكتة دماغية حادة. يوفر لك هذا القسم معلومات سريرية كما سيتم تقديمها خلال تقرير تغيير المناوبة ويطلب منك تقييم كل عنصر بناءً على كيفية إدراكك له باعتباره وثيق الصلة / مهماً بخطة رعايتك لهذا المريض اليوم.

معلومات عن (آدم. م) تم الحصول عليها من تصنيف تقرير تغيير المناوبة	التقييم	
	0	1
1. العرق		
2. ذكر		
3. مؤشر كتلة الجسم (29.6)		
4. تم الدخول قبل يومين من ردهة الطوارئ إلى وحدة الرعاية		
5. الشكوى الرئيسية: ضعف مفاجئ بالجانب الأيمن وتداخل في الكلام (slurred speech)		
6. التشخيص عند الدخول : السكتة الدماغية الحادة (Acute Ischemic Stroke)		
7. التاريخ الطبي السابق لدية ارتفاع ضغط الدم (HTN)		
8. التاريخ الطبي السابق لدية فرط كوليسترول الدم		
9. التاريخ الطبي السابق لدية مرض السكري من النوع الثاني (DMT2)		
10. لا شيء عن طريق الفم (NPO)		
11. محاذير استنشاق السوائل (Aspiration)		
12. تكرار تقييم الابتلاع من قبل أخصائي أمراض النطق يومياً		
13. النظام الغذائي المتقدم على النحو الموصى به في علاج النطق		
14. حساسية من السلفا (Sulfa)		
15. الترميز الكامل للحالة في السجل الطبي (الفئة الأولى)		
16. النشاط: الخروج من السرير للكرسي ثلاث مرات في اليوم مع العلاج الطبيعي		

APPENDIX (D)

17. التدوير في السرير كل ساعتين أثناء وجودك بمساعدة مرتين الليلة الماضية		
18. قسطرة في الوريد على الساعد الأيسر ، ولم يلاحظ أي أثر للالتهاب في الموقع		
19. السائل الوريدي الرئيسي هو 0.9٪ محلول ملحي عادي (نورمل سلاين)		
20. تسريب السائل في الوريد بمعدل 125 مل / ساعة.		
21. كمية الادرار كانت 1600 مل في المناوبة الليلية		
22. قياس العلامات الحيوية كل 4 ساعات		
23. هذا الصباح ، درجة الحرارة 98.4 فهرنهايت (36.8 سيليزي)		
24. هذا الصباح ، النبض 78 نبضة في الدقيقة		
25. هذا الصباح ، التنفس 22 نفس في الدقيقة		
26. بلغ ضغط الدم هذا الصباح (70/150) ملم زئبق.		
27. كان الألم الليلة الماضية 10/2 في تقرير ذاتي من(0 إلى 10) مقياس تصنيف الألم		
28. الحفاظ على الاوكسجين اكبر من 94 <SpO2٪		
29. الليلة الماضية 94 <SpO2٪ ، لا حاجة إلى O2		
30. تقييم الجهازالعصبي كل 4 ساعات		
31. المريض تلفُظه متلكئ (slurs) ولكن يمكن فهمه ببعض الصعوبة		
32. زوجته غالبا ما تفسر كلماته للملاك		
33. شلل وجهي خفيف (Mild facial palsy)		
34. شلل رخو (Flaccid paralysis) موجود في الذراع والساق اليمين		
35. لا أحد من أفراد الأسرة حاضر هذا الصباح		

القسم الثاني:

التعليمات: فيما يلي معلومات إضافية حول (**آدم. م**) حصلت عليه من الجدول.

 يرجى تقييم كل جزء من المعلومات الإضافية أدناه حول) **آدم. م**) بناءً على أهمية خطة الرعاية الخاصة بك اليوم. باستخدام نفس مقياس التصنيف كما في القسم الاول.

مقياس التصنيف:

APPENDIX (D)

0 = ليس مهمًا لخطتي للرعاية اليوم ("يمكنني التخطيط للرعاية بدونها")

1 = مهم لخطة رعايتي اليوم ("يجب أن يكون لديك معلومات")

قد تكون هناك حاجة إلى معلومات إضافية بعد تقرير تغيير المناوبة. تقدم لك الصفحة التالية (القسم الثاني) معلومات إضافية حيث سيتم الحصول عليها من جدول المريض بالإضافة إلى الملاحظة / التقييم الفعلي.

يطلب منك القسم الثاني تقييم كل عنصر بناءً على كيفية إدراكك له باعتباره وثيق الصلة / مهمًا بخطة رعايتك لهذا المريض اليوم.

<table>
<tr><th rowspan="2">(معلومات إضافية تم الحصول عليها من السجل الطبي (آدم. م) بالإضافة إلى الملاحظة / التقييم الفعلي)</th><th colspan="2">التقييم</th></tr>
<tr><th>0</th><th>1</th></tr>
<tr><td>36. العلاج الطبيعي لتقييم ومعالجة تغير اجمالي تطور الحركه والوضيفة</td><td></td><td></td></tr>
<tr><td>37. أخصائي العلاج الوظيفي المهني لتقييم وعلاج الحركات الدقيقة المتغيرة (التطوير / الوظيفة ، فعاليات الحياه اليومية ، والتنمية المعرفية)</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>38. درجة مقياس الاستقلال الوظيفي (Functional Independence Measure) هي 126/85

ملاحظة: هو مقياس تقييم وظيفي مقبول على نطاق واسع يستخدم أثناء إعادة تأهيل المرضى الداخليين. يقيس FIM الأداء المستقل في الرعاية الذاتية ، والتحكم في العضلة العاصرة ، والانتقال ، والحركة ، والتواصل ، والإدراك الاجتماعي. بإضافة النقاط لكل عنصر ، يتراوح إجمالي الدرجة المحتملة من 18 (الأدنى) إلى 126 (أعلى) مستوى من الاستقلال.</td><td></td><td></td></tr>
<tr><td>39. درجة فحص الحالة العقلية المصغر (MMSE) هي 30/22

ملاحظة: هو اختبار يستخدم على نطاق واسع لفحص الوضائف المعرفية لدى كبار السن يتضمن اختبارات التوجه والانتباه والذاكرة واللغة والمهارات البصرية المكانية. تبلغ درجة MMSE نقطة كحد أقصى(30) . يتم تجميع الدرجات بشكل عام على النحو التالي:

Mini-Mental State Exam

<table>
<tr><th colspan="2">درجة فحص الحالة العقلية المصغر</th></tr>
<tr><td>30-25</td><td>الإدراك الطبيعي</td></tr>
<tr><td>24-21</td><td>الخرف الخفيف</td></tr>
<tr><td>20-10</td><td>الخرف المعتدل</td></tr>
<tr><td>9 او اقل</td><td>الخرف الشديد</td></tr>
</table>
</td><td></td><td></td></tr>
<tr><td>40. الوعي (Orientate) فقط إلى الشخص لا المكان ولا الزمان</td><td></td><td></td></tr>
<tr><td>41. تاريخ التدخين يصل الى 35 سنة (باكيت)</td><td></td><td></td></tr>
</table>

APPENDIX (D)

42. المريض متزوج منذ 32 سنة		
43. عند الدخول ، كانت نتيجة مقياس السكتة الدماغية 8 (NIHSS) National Institutes of Health Stroke Scale *شدة السكتة الدماغية* *0* عدم وجود أعراض السكتة الدماغية *4-1* سكتة دماغية طفيفة *15-5* سكتة دماغية معتدلة *20-16* سكتة دماغية معتدلة إلى شديدة *42-21* سكتة دماغية شديدة		
44. كان التصوير المقطعي للدماغ بدون صبغة (المفراس) سلبياً (negative)		
45. كان التصوير المقطعي للدماغ بدون صبغة (المفراس) بعده تكراره في اليوم الاول بعد الدخول يُظهر الشريان الدماغي الأيسر الأوسط مفرط الكثافة MCA		
46. فحص دوبلر (الأمواج فوق الصوتية) للشرايين السباتية المزدوج يظهر 60٪ تضيق في الشريان السباتي الداخلي ICA		
47. عند دخول المريض كانت كريات الدم البيضاء 9800 (المعدل الطبيعي 5000-10000 / مم 3)		
48. وكانت كريات الدم الحمراء 4.9 (المعدل الطبيعي 3.8-5.5 x 106/ ميكرولتر)		
49. وكان الزئبق 12.5 (المعدل الطبيعي 11.7-16.1 جم / ديسيلتر)		
50. والهيماتوكريت HCT 38 (المعدل 37٪ -47٪)		
51. وكانت الصفائح الدموية 355000 (المعدل 150.000-400.000 مم 3)		
52. الصوديوم 142 (المعدل 136-145 مليمول / لتر)		
53. البوتاسيوم 4.5 (المعدل 3.5-0.5 مليمول / لتر)		
54- الكلوريد 102 (المعدل 98-106 مليمول / لتر)		
55- ثاني أكسيد الكربون 27 (المعدل 23-31 مليمول / لتر)		
56. عند الساعة الخامسة صباحًا اليوم زمن البروثرومبين (25) والمدى الطبيعي(11-12.5 ثانية)		
57. في الساعة الخامسة صباحًا اليوم (النسبه المعيارية العالميه الطبيعية للتخثر INR) كانت النسبة 2.9 (المدى الطبيعي 0.7-1.8)		

APPENDIX (D)

58. في الخامسة من صباح اليوم (وقت الترومبوبلاستين الجزئي aPTT) كان 58 (المدى الطبيعي 30-40 ثانية)		
59. في الساعة السادسة كان جلوكوز الدم الشعري 148 ملغم / ديسيلتر		
60. مقياس انزلاق الأنسولين (Sliding-scale insulin therapy (SSI: أقل من 150 = 0 وحدة		
61. أملوديبين (نورفاسك ®) 10 ملغم عن طريق الفم / يومياً		
62. الاسبرين (ASA acetylsalicylic acid) 325 ملغم فموياً يومياً		
63. وارفارين (Coumadin®) 5 مجم عن طريق الفم يوميا		
64. لصقة نيكوتين (14 ملغ) يومياً		
65. استدعاء الطبيب إذا كانت درجة الحرارة> 100.5 درجة فهرنهايت (38 C)		
66. إينوكساپارين (لوفينوكس) 40 ملغم. SQ يوميا		
67. اسيتامينوفين 650 ملغ. عن طريق الفم كل 6 ساعات عند الحاجة، عندما درجة حرارة > 100 درجة فهرنهايت (37.8 C)		
68. لورازيبام (Ativan®) 1 ملغم عن طريق الفم او وريدي عند الحاجة كل 8 ساعات لمعالجة القلق.		
69. يبدو غير مدرك لوضعية الجانب المتضرر		
70. قادر على تنظيف أسنانه بيده اليسرى		

يرجى تحديد المعلومات السريرية الإضافية التي تعتقد أنها مهمة لتخطيط رعاية هذا المريض والتي لم يتم توفيرها لك بالفعل ---------- ---------- ----------

القسم الثالث:

التعليمات: استناداً على معلومات حول (آدم. م) حصلت عليها (من القسم الاول والثاني).

- يرجى تقييم التشخيص التمريضي التالي بناءً على الأهمية لخطة الرعاية الخاصة بك اليوم. باستخدام نفس مقياس التصنيف كما في القسم 1.

مقياس التصنيف: 0 = غير مهم لخطة رعايتي اليوم ("يمكنني التخطيط للرعاية بدونها")

APPENDIX (D)

1 = مهم لخطة رعايتي اليوم ("يجب أن يكون لديك معلومات")

 مع كل معدل تشخيص تمريضي "مهم" لخطة رعايتك اليوم ، حدد المعلومات السريرية الخمس الأكثر دعمًا (رقم البند من القسم الاول والثاني) التي تفكر فيها

ملاحظة/ (قد تدعم نفس المعلومات السريرية أكثر من تشخيص تمريضي واحد).

التشخيص التمريضي	Rating		المعلومات السريرية (من القسم الاول والثاني التي يجري النظر فيها)				
	1	0					
71. ضعف الذاكرة Impaired Memory							
72. زيادة حجم السوائل Excess Fluid volume							
73. ضعف البلع Impaired Swallowing							
74. التكيف الدفاعي Defensive Coping							
75. ضعف الحركة الجسدية Impaired physical Mobility							
76. خطر الإصابة بمتلازمة الإهمال Risk for Disuse syndrome							
77. ضعف الاتصال اللفظي Impaired verbal Communication							
78. خطر استنشاق السوائل Risk for Aspiration							
79. الإهمال من جانب واحد Unilateral Neglect							
80. الآلام الحادة Acute pain							

القسم الرابع:

استناداً على تشخيصات التمريض المصنفة على أنها "مهمة" لخطة رعايتك اليوم (من القسم الثالث) ، رتبها وفقًا للأولوية المهمة.

APPENDIX (D)

ترتيب الاولويه	التشخيص التمريضي
1	
2	
3	
4	
5	

القسم الخامس:

تعليمات: يرجى تقييم درجة الثقة التي لديك في حكمك على هذه القضية (ضع دائرة حول درجة الثقة)

0 1 2 3 4 5 6 7 8 9 10

APPENDIX (D)

الجزء الثالث: (الأداء)

	التصنيفات	اداء الممرض/ة السريري	المقياس		
		العناصر	دائما	احيانا	ابدا
1.	السياقية	أن تكون مقتصدًا			
		عدم التذمر من الظروف التنظيمية			
		عدم إشراك الآخرين في المشاكل الفردية			
		الغياب			
		المشاركة في الدعوات التدريبية			
		لدية مظهر أنيق ونظيف			
		تحمل مسؤولية المهام.			
		العمل بجدية أكبر من اللازم			
		العمل بشكل منهجي			
		الانخراط في تطوير الذات لتحسين الفعالية			
		الالتزام بقواعد النظافة			
2.	المهارة المهنية	الهدوء			
		الحفاظ على المعدات التمريضية في حالة جيدة			
		تحديد وتقييم مشاكل المريض			
		المهارة المهنية العامة			
3.	المهارة السريرية	تخطيط رعاية المرضى حسب الاحتياجات الفردية			
		إدارة الأنشطة التمريضية في الوقت المناسب			
		تقديم خدمة تمريضية معده جيداً أو دقيقة للمريض			
		مراقبة حالة المريض باستمرار وتسجيل حالته			

APPENDIX (D)

		بذل جهد لتحسين الرفاهية			
		اعتماد واتباع القواعد والإجراءات والسياسات الطبية الخاصة بالمستشفى			
4.	**التواصل مع الاخرين**	الإعراب عن الحماس للعمل التمريضي			
		التعاون مع الممرض المسؤول			
		التصرف بطريقة ودية			
5.	**حل المشاكل**	تحديد التغيرات المفاجئة المتعلقة بحالة المريض			
		حل المشكلات السريرية سريعاً			
		أخذ زمام المبادرة لحل مشاكل العمل			
6.	**الاخلاق المهنية**	التوجة للمريض وعائلتة			
		السرية			
		إعطاء المعلومات للمريض وعائلته			
7.	**العمل بروح الفريق الواحد**	التعاون مع أعضاء الفريق الأخرين			
		الانخراط بالمسؤولية في الاجتماعات وأنشطة المجموعة			
		إعطاء التغذية الراجعة للزملاء بطريقة بناءة			
		الانخراط في الممارسات القائمة على البحث والمساهمة فيها			
8.	**القيادة**	تحفيز الممرضين الأخرين			
		تدريب الآخرين على الواجبات			
		وجود سمات المشرف			
		مساعدة الممرضين على مستوى الانخراط في ممارسة إلعمل			

APPENDIX (E)

Panel of Experts

قائمة بأسماء خبراء الاستبانة

ت	اسم الخبير	اللقب العلمي	الاختصاص	مكان العمل	سنوات الخبرة
.1	د. محمد فاضل خليفة	استاذ	تمريض صحة الاسرة والمجتمع	جامعة بغداد / كلية التمريض	42
41	د. فخرية جبر محيبس	استاذ	تمريض البالغين	جامعة بابل / كلية التمريض	41
.3	د. وداد كامل محمد	أستاذ	تمريض البالغين	جامعة بغداد / كلية التمريض	37
.4	د. هدى باقر حسن	استاذ	تمريض البالغين	جامعة بغداد / كلية التمريض	34
.5	د. راجحة عبدالحسن	استاذ	تمريض البالغين	جامعة الكوفة / كلية التمريض	32
.6	د. حسين جاسم محمد	استاذ	تمريض صحة الاسرة والمجتمع	جامعة بابل / كلية التمريض	29
.7	د. سحر ادهم علي	أستاذ	تمريض البالغين	جامعة بابل / كلية التمريض	25
.8	د. حسن عبدالله عذبي	أستاذ مساعد	تمريض البالغين	جامعة كربلاء / كلية التمريض	18
.9	د. صادق عبد الحسين حسن	أستاذ مساعد	تمريض البالغين	جامعة بابل / كلية التمريض	16
.10	د. ضياء كريم عبد علي	أستاذ مساعد	تمريض البالغين	جامعة العميد / كلية التمريض	15
.11	د. حيدر عبد الحمزه	أستاذ مساعد	تمريض الصحة النفسية و العقلية	جامعة الكوفة / كلية التمريض	12
.12	د. نسيم سمير صقر	استاذ مساعد	تمريض البالغين	جامعة وارث الانبياء (ع)/ كلية التمريض	11

الخلاصة

الخلفية: الحكم السريري هو أساس ممارسات التمريض ويعمل كأساس لأنشطة الممرضين وتوفير الرعاية الامنة للمرضى. يجب على الممرضين استخدام التفكير النقدي والحكم السريري من أجل تقديم رعاية عالية الجودة وإدارة نمو الادوار المرتبطة بتعقيد أنظمة الرعاية الصحية الحالية. يُعرف الحكم السريري على أنه مهارات أساسية لجميع الممرضين ويعمل كعامل للتمييز بين الممرضين المحترفين وأولئك الذين يقومون بأدوار تقنية بحتة.

أهداف الدراسة:إن أهداف هذه الدراسة هي تقييم الحكم السريري وأداء الممرضين الأكاديميين في جانب الرعاية. بالإضافة إلى ايجاد العلاقة بين الحكم السريري وبعض المتغيرات.

منـهجية البحـث: دراسة وصفية مقطعية تم استخدامها لهذا البحث الكمي , تم اعتماد أسلوب أخذ العينات الهادف غير الاحتمالي وتعين (91) ممرضًا للرعاية الحرجة من ثلاثة مستشفيات حكومية عامة. تم جمع البيانات من خلال استخدام نموذج الاستبيان وتزويدها من قبل الباحث وتقييم البيانات التي تم تحليلها إلكترونياً باستخدام برنامج التحليل الإحصائي (SPSSالإصدار 25).

نـتـائج الدراسة: أظهرت النتائج ان غالبية عينة الدراسة (56.0٪) من الفئة العمرية الثانية (25-29) سنة ، (61.5٪) من الاناث ، عزباء ، حاصلات على شهادة البكالوريوس في التمريض ، ضمن (1-5) من سنوات التخرج من التمريض. (1-5 سنوات) خبرة في التمريض ومعظمهم يعيشون في المناطق الحضرية.

أشارت النتائج إلى أن غالبية المشاركين يتمتعون بقدرة متوسطة على الحكم السريري وأداء جيد. هناك ارتباط كبير بين الحكم السريري للممرضين وأدائهم. هناك علاقة ذات دلالة إحصائية بين الحكم السريري للممرضين و (العمر ، برنامج الالتحاق بالتمريض ، وسنوات الخبرة) بقيمة احتمالية اكبر من ($p < 0.05$).

الاستنتاجات والتوصيات: وجدت الدراسة أن درجات الدخول في الحكم السريري ترتبط بشكل كبير بالأداء الأكاديمي لممرضي الرعاية الحرجة. علاوة على ذلك ، فإن الممرضين الأكاديميين يتمتعون بمهارات مقبولة للحكم السريري وأداء جيد.

التوصيات: بناءً على نتائج هذه الدراسة ، توصي الدراسة بشدة بتشجيع طاقم الرعاية الصحية على استخدام قدرات الحكم السريري في وحدات الرعاية الحرجة الخاصة بهم لتوفير رعاية آمنة وفعالة للمرضى. يجب أن يعمل قسم تعليم التمريض المستمر في كل مستشفى على تشجيع الممرضات على

الخلاصة

تطوير الحكم السريري وقدرات الأداء من خلال جلسات تعليمية دورية وجعلها إلزامية للترقية الوظيفية. علاوة على ذلك ، توفير برنامج تدريبي للممرضين المبتدئين قبل توظيفهم في وحدات العناية الحرجة.

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة بابل كلية التمريض

العلاقة بين مهارات الحكم السريري واداء الممرضين الأكاديميين في مستشفيات الحلة التعليمية

أطروحة مقدمة الى

مجلس كلية التمريض جامعة بابل

كجزء من متطلبات نيل

درجة الدكتوراه فلسفة في علوم التمريض

من قبل

أحمد محمد جاسم شلاش

بإشراف

أ.د. شذى سعدي محمد

شعبان 1443 **اذار 2022**