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Effect of Critical Thinking Educational Program on Nurses' Knowledge in Al-Hillah Teaching Hospitals

A Dissertation Submitted to The Council of Nursing College, Babylon University in partial fulfillment of the requirements for the Degree of Doctorate of Philosophy in Nursing

By

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بسم الله الرحمن الرحيم

﴿يُؤۡتِي ٱلۡحِكۡمَةَ مَن يَشَآءُۚ وَمَن يُؤۡتَ ٱلۡحِكۡمَةَ فَقَدۡ أُوتِيَ خَيۡرٗا كَثِيرٗاۗ وَمَا يَذَّكَّرُ إِلَّآ أُوْلُواْ ٱلۡأَلۡبَٰبِ٢٦٩﴾

سُورَةُ البَقَرَةِ ﴿٢٦٩﴾

Supervisor certification

I certify that this dissertation which is entitled (**Effect of Critical Thinking Educational Program on Nurses' Knowledge in Al-Hillah Teaching Hospitals),** was prepared under my supervision at the College of Nursing, University of Babylon in partial fulfillment of the requirements for the degree of Doctorate of Philosophy in Nursing.

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Certification

We, the members of the dissertation discussion committee, certify that we have reviewed the dissertation entitled **(Effect of Critical Thinking Educational Program on Nurses' Knowledge in Al-Hillah Teaching Hospitals),** submitted by **Amenah Abdul Hassan Jebur,** and examined the student in it is content, and what is related to it in / /2023.

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Dedications

To who she gave me happiness, to who she educated me the give and inundated me with her kindness and generosity... My virtuous mother whom I did not find words enough her right, God blesses her with health and wellness.

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Abstract

Background: The critical thinking as an intellectual discipline consisting of the following components of thought: identification of purpose and problem, concept definition, the discovery of assumptions, consideration of points of view, detection of implications/consequences, validation of evidence, and reflection.

Objective: To find out the effect of critical thinking educational program on nurses' knowledge in Al-Hillah Teaching Hospitals.

Methodology: A quantitative, quasi-experimental design, application for both the interventional group and control group of nurses to determine the effect of an educational program of critical thinking on nurses' knowledge from the period between 10th October 2020 to 30th August 2022. A non – probability purposive sample was selected are divided into two groups (36) nurses interventional group, and (36) nurses control group. A special questionnaire and educational program were conducted through an extensive literature review, collecting data, a questionnaire was utilized; it was composed of four fundamental parts. The validity obtained by the panel of (16) experts and reliability were calculated after carrying out a pilot study.

Results: The results of the study presented that most of the study sample were higher percentage of age 24 (66.7%), and 20 (55.6%) of the interventional and control group were between (24-29) years age group. Concerning gender high percentage of 24 (66.7%), and 28 (77.8%) of both groups were female.

Conclusions: The nurses who have been exposed to the critical thinking educational program acquired improvement in knowledge after the program implementation compared to their overall pre-intervention evaluation.

Recommendations: Based on the current study's findings, research, education, and healthcare nursing staff and nursing management need to work together to provide a conducive atmosphere for critical thinking and innovation.

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List of Abbreviations

Abbreviation	Meaning
AND	Associate degree nursing
ASQ	Annotation, Summarizing, and Questioning
CCTDI	California Critical thinking Disposition Inventory
COVID-19	Corona Virus Infectious Disease 2019
CT	Critical Thinking
d. f	Degree of freedom
DNT	Developing Nurses' Thinking
EBP	Evidence-based practice
f	Frequency
HS	High significant
HSRT	Health Sciences Reasoning Test
IV	Intravenous
M.S	Mean of score
MAI	Metacognitive Awareness Inventory
MCQ	Multiple choice questions
N	Sampling
NCS	Nurse Competence Scale
NGRNs	Newly graduated registered nurses
NPs'	Nurse practitioners
NS	None significant
p. value	Probability Value
QARRD	Questioning Aid for Rich, Real-Time Discussion
RBC	RELATIONSHIP-BASED CARE
WGCTA	Watson-Glaser Critical-thinking Appraisal
WHO	The World Health Organization

List of Symbols

(*r*)	Pearson (*r*) correlation
($\bar{X}$)	Mean
E	Expected frequencies
n_1	The interventional group sample
n_2	The control group sample
O	Observed frequencies
S^2_1	The interventional group variance
S^2_2	The control group variance
SD	Standard deviation
SPSS	Statistical Package for Social Sciences
Symbol	**Meaning**
$\bar{X}_1$	The interventional group mean
$\bar{X}_2$	The control group mean
Σ	Sigma, the statistical symbol for summation
χ^2	Chi-square

Chapter One

Introduction

1.1. Introduction:

Critical thinking (CT)is one of the basic competencies of clinical nurses and is widely accepted as being associated with the provision of quality and safe care, however, the construct of critical thinking poses considerable difficulties for researchers. The first difficulty is the absence of a conceptual description to use as a starting point, The development of higher-order thinking skills to support clinical reasoning and a solid foundation of knowledge, and engagement in higher levels of cognitive reasoning such as application or synthesis of knowledge. Bloom's taxonomy has been used to assess critical thinking skills, with the support of a deeper conceptual understanding of scientific process skills. Similarly, clinical practice also requires to development of higher-order thinking skills that include all of Bloom's levels (Zaidi, et al., 2018).

The Critical Thinking Foundation describes critical thinking as an intellectual discipline that involves the following elements of thought: purpose and problem identification, concept clarification, the discovery of assumptions, consideration of points of view, detection of implications/consequences, validation of evidence, and reflection (Seibert et al., 2021).

Annually, large numbers of new nurses are entering the professional practice environment. To function effectively in practice, nurses must reflect on identifying how they learn, be skillful thinkers, and know when to retrieve and apply previously learned information or skills to clinical situations for effective decision-making, when the newly licensed graduate nurse begins employment, the expectation is that the individual will transition into the professional work environment within a designated orientation period. Newly licensed nurses are expected to transfer generic nursing knowledge and skills attained in school,

acquire new knowledge, and be accountable for professional practice responsibilities. The transfer of knowledge and clinical skills between academia and the workplace has implications for nursing practice, particularly when the novice nurse transitions into professional practice (Delle Site, C. 2019).

The modern healthcare system is complex. The World Health Organization (WHO) emphasized that excessive-quality care needs to be "safe, effective, people-centered, timely, efficient, equitable and integrated". Likewise, quality health care entails doing the proper thing at the proper time in the proper manner for the proper patient or the proper individual to perform the excellent possible results. Globally, there's additionally a need to enhance the quality of healthcare for attaining and maintaining healthy populations and enhancing safe patient outcomes (Byrd & Asunda., 2020).

One of the life skills exceedingly required in globalization Critical Thinking was emphasized as an essential component of the nursing process, numerous nursing scholars have attempted to define the concept of CT for nursing as intellectual or cognitive skills were mostly emphasized. Affective disposition was also noted as an important component of CT in the context of a caring relationship, emotional involvement enables nurses to genuinely feel the suffering and pain that patients experience. In recent years, nurses have been increasingly expected to develop both CT affective dispositions and CT cognitive skills. Affective dispositions such as being open-minded, inquisitive, and cognitive skills may help nurses analyze their inferences, explain their interpretations, and evaluate their analyses (Lee, et al; 2020).

A culture of critical thinking and ongoing learning creates an environment where the evidence supports clinical and administrative decisions,

ensuring the highest quality of care by using evidence to promote optimal outcomes, reduce inappropriate variation in care, and promote patient and staff satisfaction. Working in an EBP environment changes the way healthcare team members think about and approach that work. As the staff develops expertise in the evidence-based practice (EBP) process, their professional growth and engagement begin a personal and organizational trajectory leading to evidence-based decisions, a higher level of critical review of the evidence, and engagement as valued contributors in the interprofessional team (Dang et al., 2021).

Nurses spend extensive time with patients during hospitalization, there are reports they feel challenged to engage in specific types of conversations and respond to prognostic questions (Kerr et al., 2021).

Nurses use critical thinking every day to assess, plan for and provide quality care for patients, a critical thinker works to develop the following nine attitudes or traits: independence, fair-mindedness, insight, intellectual humility, intellectual courage, integrity, perseverance, confidence, and curiosity, Certain attitudes are crucial to critical thinking. These attitudes are based on the assumption that a rational individual is motivated to develop, learn, grow, and be concerned with what to do or believe (Berman et al., 2021).

Critical thinking is a featured procedure of nurses' work as the evolving role of the professional nurse from the traditional function of being task-oriented - such as reporting and recording - to the oriented-function one – a nurse who solves problems makes decisions, acts as an educator and change agent - requires nurses to be critical thinkers (Mahmoud et al., 2017).

As the healthcare environment has become more complicated and detail-oriented and health professions have become more advanced, more nursing professionalism has been expected in recent years. Especially during the

COVID-19 pandemic, the nursing workforce has demonstrated courage and perseverance in the face of challenges. To be more competent, nurses should be critical thinkers who can effectively cope with advancing technologies, human resource limitations, and the high level of acuity required in diverse healthcare settings. Critical thinking (CT) is considered to be a crucial element for clinical decision-making by nurses, and improved empowerment (Lee et al., 2020).

According to Benner's nursing theory, the novice is characterized by newly graduated registered nurses (NGRNs) difficulties in handling new situations due to a lack of experience. This means that NGRNs need regulations, such as task lists and clear guidelines, that can guide their decisions and actions regarding the provision of nursing care, Clinical competence in nursing is a holistic and dynamic process that requires individual characteristics such as motivation, critical thinking, experience, attitudes, pedagogical factors, knowledge, skills and functional tasks, which leads to overall competence in nursing (Willman et al., 2021).

According to the World Health Organization (WHO, 2013), it is imperative to not only increase the number of health professionals but to ensure that they have the appropriate knowledge, skills, and competencies relevant to the needs of the population, Professional nurses have the ethical responsibility to safeguard individuals when care is endangered by health care personnel or any other person (Immonen, et al., 2019).

The nurse must assess the client and identify interventions that will improve the client's health-related outcomes. Changes in a client's condition can occur in an instant. It is the responsibility of the nurse to detect these changes, implement nursing assessments and interventions, notify members of the healthcare team, and evaluate the client's response (Benner et al., 2010).

Healthcare complexity and patient acuity necessitate competent nurses with critical thinking. However, these are less developed among newly graduated nurses, as an increasing number of complex patients are admitted to hospitals, the importance of nurses recognizing changes in health status and picking up on deterioration is more important. Detecting early signs of complications requires to pose critical thinking. Nurses are expected to commence their clinical careers with the necessary critical thinking skills to ensure safe nursing practice. (Kaya et al., 2018 & Jacob et al., 2017).

Problem-solving ability is a nursing care provider's proficiency in quickly and accurately mediating the health problems a patient faces, even if it is the nursing care provider's first patient this is because problem-solving ability can improve individual critical and creative thinking; it is a core skill to identify and solve the health problems of patients in the complex nursing environment. Moreover, problem-solving ability has been reported to be an effective factor in nursing performance (Kim and Sohn 2019).

Critical thinking involves the differentiation of statements of fact, judgment, and opinion. Critical thinking requires the nurse to think ahead, apply thinking while acting and think back, known as reflective thinking. Critical thinking cognitively fuels the intellectual, artistic activity of creativity. When nurses incorporate creativity, they can find unique solutions to unique problems. Creativity is thinking that results in the development of new ideas and products. Creativity in problem-solving and decision-making is the ability to develop and implement new and better solutions for healthcare outcomes. (Alfaro-LeFevre, R., 2017).

1.2. Importance of the Study:

The skill of critical thinking is required in every organization across the world. It is becoming a must to have than just should or have to have a skill. Leaders, managers, directors, supervisors, employees, and students require critical thinking skills. It must be a skill of everyday use. There is a lack of it in today's organizations and the reason is that there aren't enough training programs addressing such a topic. Adding to the fact that there are only a few people who can deliver top-notch training in the world. If they are asked to deliver such, then mastering such a topic would happen (Jones, A., 2019).

Nurses work in many different roles and settings either directly or indirectly related to patient care, critical thinking has drawn special attention to quality improvement. Besides the need for patient-centered care accompanied by evidence-based practice, the complicated and dynamic nature of the healthcare workplace combines to spotlight critical thinking (CT) as a very important proficiency in education and professional practice. Critical thinking is a crucial factor in ensuring safe, competent patient care and is also related to the success of graduate nurses in their transition to clinical practice (Mahmoud et al, 2017).

It was reported that as many as 88% of novice nurses commit medication errors with 30% of these errors due to a lack of critical thinking, Internationally, this lack of preparedness and critical thinking attributes to the reported 35–60% attrition rate of new graduate nurses in their first two years of practice. The high attrition rate of new nurses has expensive professional and economic costs of $82,000 or more per nurse and negatively affects patient care, the failure to utilize critical thinking skills interferes with poor decision-

making and unclear communication between healthcare professionals, which ultimately leads to patient deaths (Gonzalez, et al, 2020).

The review revealed that new graduate nurses' self-assessed deficiencies included advanced technical skills, critical thinking, communication, teamwork, helping role, and professionalism, most of which were associated with “soft” skills. New graduate nurses possess “hard” nursing skills within the cognitive and psychomotor domains and soft skills that mostly lie within the affective domain, which is vital to achieving higher retention rates (Song, et al, 2020).

Critical thinking is vital in every step of the nursing process. It represents a skill and at the same time an ability because it is a type of strategy that can be learned and acquired. Critical thinking is especially important in nursing, where data is interpreted, categorized, and processed. Furthermore, it is a thought process, where different elements are applied, for example, logical thinking, reflectivity, or prioritizing. By thinking critically, a nurse can attain a nursing diagnosis that is accurate and specific to the patient's needs. Therefore, nursing interventions are more precise and effective, and improved health and nursing quality are the results (Archer, E; 2015).

In analyzing the concept of critical thinking in clinical nursing, found six features of this concept, including the use of the nursing process in dealing with clinical scenarios, holistic and comprehensive practice, the application of emotional intelligence skills in dealing with situations, the use of various models for cognition, the factors conducive to critical thinking and the elements and components of critical thinking. Acquiring critical thinking skills will lead to positive outcomes such as patient-oriented and effective nursing care, creativity, evidence-based practice, and professionalism in nursing (Bahmanpour et al., 2017).

Nursing actions performed on patients require critical thinking because critical thinking when performing nursing actions can provide a rapid response to changes that occur. When performing nursing actions, nurses with critical thinking skills will show a confident, conceptual, creative, flexible, curious, open-mindedness, diligence, and reflective attitude (Ingram, M., 2008).

Insufficient clinical competence in nursing care in complex situations among newly graduated registered nurses' (NGRNs) will threaten the quality of care and patient safety. If NGRNs are made solely responsible for the nursing care of multiple complex situations is considered to compromise patient safety (Willman, et al; 2021).

A nurse's inability to recognize clinical deterioration can significantly impact patient care and outcomes. Lack of knowledge, poor communication, and low confidence contribute to delay and inability to appropriately intervene. The simulation provided an environment that allowed general medicine nurses the opportunity to explore and critically think through situations of deterioration, resulting in increased knowledge and confidence for responding to deteriorating patients (Crowe, et al., 2018).

1.3. Study Hypothesis:

- **H_0:** significant effect of Critical Thinking Educational Program on Nurses' Knowledge in Al-Hillah Teaching Hospitals.
- **H_1:** Non-Significant effect of Critical Thinking Educational Program on Nurses' Knowledge in Al-Hillah Teaching Hospitals.

1.4. Statement of the Study:

Effect of Critical Thinking Educational Program on Nurses' Knowledge in Al-Hillah Teaching Hospitals.

1.5. Objectives of the Study

1. To assess the needs of the nurses for critical thinking educational programs in Al-Hillah teaching hospitals.

2. To evaluate nurses' knowledge related to critical thinking concepts (post-test).

3. Identify the demographical characteristics of the study sample.

4. Find out the relationship between nurses' knowledge and other different variables such as (age, gender, and years of experience).

1.6. Definition of Terms:

1. Effect: Theoretical Definition; is assessed alongside research outputs and environment to provide an evaluation of research taking place within an institution. As such research outputs, for example, knowledge generated and publications can be translated into outcomes (Penfield, et al., 2014).

- **Effect: Operational Definition;** having an effect, benefit, or contribution of the educational program focused on critical thinking of the nursing knowledge.

2. Critical thinking: **Theoretical Definition;** defined as the art of thinking, that is structured by behavioral and cognitive skills, which become essential

habits. It is a complex, dynamic process formed by attitudes and strategic skills, to achieve a specific goal or objective. The ability to use higher-order thinking to make informed judgments and decisions constitutes an important part of the idea of good care, of the good professional (Falcó-Pegueroles. et al., 2021).

- **Critical thinking**: **Operational Definition;** The process includes self-monitored, self-directive, self-disciplined, and self-corrective thinking. CT will vary in individuals according to their motivation, and analysis, furthermore evaluating thinking to make decisions. This exposes assumptions, biases, and beliefs that influence clinical reasoning and decision-making, proving the accuracy and assertiveness in the priority diagnoses selection that makes sense for the nurses who are involved in the care process.

3. Educational Program: Theoretical Definition; Systematic plans for the development of special or general abilities of behavior carry out to health, and any combination of learning experiences made to facilitate adaptation, in addition, provides educational and services meant to meet public needs (Dawood., 2018).

- **Educational Program: Operational Definition;** Refer to a systematically organized teaching plan to provide information for nurses and staff concerning critical thinking, formal lectures are submitted in an organized manner to educate nurses and give them further skills or knowledge to be applied in line with work.

4. Nurses' Knowledge: Theoretical Definition; Information, understanding, or skills that are acquired through education, or learning furthermore experience help nurses to be qualified present standardized health care, and management to individuals, families, and the community, and needs to improve their abilities regarding practice (Dawood., 2018).

- **Nurses' Knowledge: Operational Definition;** The fact or condition concerning nurses' knowledge regarding critical thinking, following a sequence to complete a skill, process, or procedure; the ability to apply concepts to improve the quality of patient care by applying proper problem-solving approach.

Chapter Two Literature Review

Literature Review

2.1. Literatures Review for Historical-Critical Thinking:

Critical thinking is the ability to transfer knowledge learned from certain disciplines to other cognitive areas. Critical thinking was connected with supporting suspicious thoughts along with developing individual thinking skills, such as logical reasoning and personal judgment. “Critical”, “Criticism”, and “Critic” all come from the age-old Greek word “Kritikos”, meaning able to authorize, discern, or decide. In contemporary English, a “Critic” is someone whose job is to make appraise judgments giving a fair and unprejudiced opinion of something. According to John Dewey, “thinking is the natural propensity of mind, daydreaming, the building of acropolis in the air are the thinking examples”, in a random sense. John Dewy further says to become an analytical thinker or to think critically that “reflections” is more important (Santos, L. F., 2017).

Piaget says “Thinking is based on experience”. “Intelligence is the product of the innate potential interacting with the environment” and young children know more than they can verbalize. Development has to do with general mechanisms of action and thinking. Vygotsky suggests that social interaction plays a fundamental role in the process of cognitive development. “Critical thinking” is needed for critical analysis, while “critical pedagogy” goes beyond claiming that societal instructions produce and implement knowledge, and related ideologies have to be questioned and transformed. Paul argues that an ample conception of critical thinking must go away from skills, including the dispositions and personality traits relevant to the use and appreciation of those skills (Padmanabha, P., 2018).

Critical thinking dates back to 2,500 years ago. Socrates, a Greek philosopher, discovered that people were unable to rationally justify the claims and stereotypes they proclaimed to be true. According to Paul, Elder, and Bartell (1997), Socrates established the importance of asking deep questions that probe profound thinking before accepting ideas as worthy of belief. Socrates laid the foundation for reflectively questioning common beliefs and explanations, as well as carefully distinguishing views that are reasonable and logical from those which lack concrete evidence or a rational foundation. He also established the importance of seeking evidence, closely examining reasoning and assumptions, analyzing basic concepts, and tracing out the implications of what is said and what is done (Paul et al., 1997). Socrates' method of inquiry is known as "Socratic Questioning." Socrates's practice was followed by Plato and Aristotle, both of whom emphasized that things are often very different from what they appear to be (Smith, M., 2020).

The 21st century, with its global, social, economic, environmental, educational, and technological challenges, does not demand the teaching of obsolete facts. Rather, it fosters critical thinking skills at all levels of education (Facione & Facione, 1994). The changing nature of jobs due to technological advancements requires employees capable of thinking critically and possessing transferable, therefore, the ability to learn effectively and think critically is essential for students at every level (Sternberg., 2013).

Critical thinking is defined as a collection of skills that analyze and evaluate the accuracy of information to determine its authenticity, best solutions are found through the active use of critical thinking. The desirable outcome is achieved through the use of cognitive skills, it is the actual

involvement of knowledge and experience to exercise rational decision-making and come up with the best solutions to problems. Therefore, it requires a higher level of thinking and reasoning using prior information, knowledge, and experience, Critical thinking is an important life skill; It can be learned over time with training in place, and a significant part of this learning is happening through the college years, distinguishing relevant from irrelevant information, claims, or reasons, detecting bias, identifying unstated assumptions, identifying ambiguous or equivocal claims or arguments, recognizing logical inconsistencies or fallacies in a line of reasoning, distinguishing between warranted or unwarranted claims, and determining the strength of an argument (Jones, A., 2019).

Also; most definitions acknowledge that critical thinking is a process by which individuals form a solution and evaluate their thought process by demonstrating the reasoning they used to support their conclusions, stating that the fundamental skill underlying all critical thinking definitions is the ability of the thinker to "acquire, develop, and exercise the facility to grasp inferential connections holding between statements". The definition, therefore, incorporates thinking critically about the course material through an assessment of the question with the application of evidence to support or evaluate the argument. This involves several skills that are necessary for critical thinking such as interpretation, analysis, inference, decision-making (i.e., evaluating your reasoning), and problem-solving. These skills correspond with the higher levels of Bloom's taxonomy, which emphasize higher-order thinking versus rote skills, such as factual recall of course material at Bloom's lower levels **(**Fukuzawa, S., & deBraga, M. (2019).

Scholars addressed critical thinking since the 1940s put, but there's still confusion about what critical thinking is and how could it be used in schools, colleges, universities, business schools, and many others. Everyone assumes that thought is driven by human nature. Ennis (1987) defines critical thinking as reasonable and reflective thinking that is focused on deciding what to believe or do. Critical thinking focuses on problem identification and problem-solving. It is a rational response to questions that cannot be answered definitively and seeks to explore situations to arrive at an optimal and justifiable hypothesis or conclusion (Reinstein & Bayou, 1997). Elder (2002) goes on to state that it is self-directed, self-disciplined, self-monitored, and self-corrective thinking (Alwehaibi, H. U., 2012).

2.1.1. Overview of Critical Thinking in the 1980s:

A. Dumke (1980);

Critical thinking is the concept of analysis that enables learners to analyze and criticize logically. It requires the knowledge of evidence that can lead to advocating ideas and providing factual judgments. It is the language of logic that combines induction and deduction altogether. The main functionality of critical thinking is gathering information from unambiguous situations and statements. The main goal is that there is no conclusion drawn unless it is based on sound reasoning inductively and deductively. Therefore, conclusions are based on factual judgments. The concept itself is based on inferences that distinguish facts from judgments and beliefs from knowledge. Therefore, the design of instructions for critical thinking should be based on a comprehensive understanding of logic, thoughts, and formal and informal fallacies (Dumke, G. 1980).

B. Paul (1981);

The delivery of critical thinking requires a goal of a coherent relationship that mixes the fundamentals of approaches, definitions, classifications, and fallacies. Each is based on the inclusion of a "symbolic" versus a "non-symbolic" approach, debate, decisions, analysis, and extended and non-extended arguments. The most important of all is that when critical thinking is taught as an engine of technical skills addressed in a formal or informal approach. The latter can be mastered when given the attention of one-to-one attention. Learners of critical thinking should be taught daily the skills of questioning, making assumptions, contradicting, identifying, investigating, and making healthy skepticism. That eventually becomes the natural habit of one towards achieving nations of critical thinkers (Paul, R., 1981).

C. Lazere (1982);

Critical thinking was identified as one of the weak skills of students in the United States according to the reports of the National Assessment of Writing and the Commission on the Humanities. The development of such a skill encompasses the urgent responsibility of all: If literacy is defined, as it should be, in the larger sense of the breadth of knowledge and capacity for reason, then it is evident that the greatest threats to literacy in the twentieth century are mass-mediated political thought control and the reason-numbing effects of mass culture, and that English, as the discipline preeminently responsible for fostering literacy, must provide critical weapons for combatting these antirational forces. Critical thinking should be delivered through a standalone course and integrated into other disciplines of business, economics, politics, media, English, literature, and entertainment. It should be a service

course delivering the basics of its components through active daily discussion in class and fewer writing practices instead. Thus, it is a humanistic discipline and should be distinctive addressing the humanistic sensibility characteristics addressing the practicality more than its theoretical aspects. All are based on analytical skills, knowledge assimilation, and intellectual growth (Lazere, D., 1982).

D. Christenbury & Kelly (1983);

The soul of critical thinking is asking questions. It should be based on assumptions that add value when doubts are raised. The goal of such questions should be based on skill reinforcement. The main objectivity of questions is discovery, exploration, argument, interaction, and sharpening critical thinking skills. All of which lead to overcoming students' anxiety and difficulties. The use of questions is an art. It is a process that focuses on skills enhancement built strategically to reflect the attitude of its users eventually. All of these contribute to participants' interactions reflecting their own experiences on a particular topic. The process includes a balance of teacher-initiated and student-initiated questions‖. Therefore, the mixture of both approaches is considered the ultimate healthy balance. Therefore, questioning should focus on the what, why, and how the aim of which fostering exploration, motivation, and critical thinking (Christenbury, L., & Kelly, P. P., 1983).

E. Ennis (1984);

Critical thinking refers to reasoning and the use of informal logic. It is a cognitive process associated with the use of the brain. It is the value judgment that is based on the logic of open-mindedness. It is the process of agreement

and disagreement. It is the identification of a problem that leads to assumption creation and testing of its consistency and validity. All of which rely on a belief and have a certain level of sophistication. Each assumption should be based on clarity and logic behind it filling the gap of uncertainty. It has two aspects: induction and deductive arguments. Therefore, it is based on practicality, consistency, and reliability. A few of the important philosophical questions should be considered foundational when talking about critical thinking:

- what is critical thinking?
- In what way are value judgments different from empirical judgments?
- Can there be rules for induction, the application of which does not depend on unspecific outside knowledge?
- Is "probably" a degree-of-endorsement specifier?
- What is the role of deduction in real arguments?
- How do you tell what is assumed?
- Is critical thinking ability a homogeneous trait?
- How does one judge the fittingness of a test into an array of information and beliefs?
- What does effect explaining causal claims mean?
- what constitutes a check on testability?
- Overall, critical thinking is not a homogeneous concept (Ennis, R. H., (1984).

F. Presseisen (1984);

Critical thinking is a mental act that is cognitive in nature. The aim of this is to acquire knowledge through the use of the brain, perception, intuition, and cognitive focus. It is a behavioral approach based on thoughts, knowledge,

reasons, judging, and evidence. It is a complex and reflective endeavor and a creative experience for the individual involved. It is an organized structure of thinking that is based on complexity, problem-solving, judgment, productivity, and creativity. The concept is based on four main principles: Problem Solving: using basic thinking processes to resolve a known or defined difficulty; assembling facts about the difficulty and determining additional information needed; inferring to suggest alternate solutions and treating the more appropriateness; potentially reducing to simpler levels of explanation and eliminate discrepancies; provide solution checks for generalizable value. Decision Making: using a basic thinking process to choose the best response among several options; assembling the information needed in a topic area; comparing advantages and disadvantages of alternative approaches; determining what additional information is required; judging the most effective response and being able to justify it. Critical Thinking: using basic thinking processes to analyze arguments and generate insight into particular meanings and interpretations; developing cohesive logical reasoning patterns and understanding assumptions and biases underlying particular positions; to attain a credible, concise, and convincing style of presentation. Creative Thinking: using basic thinking processes to develop or invent novel aesthetics, constructive ideas, and products, related to percepts as well as concepts, and stressing the intuitive aspects of thinking as much as the rational. Emphasis is placed on known information or material to generate the possible and elaborate on the thinker's original perspective (Presseisen, B. Z., (1984).

G. Beyer (1985) & Ennis (1985);

Critical thinking combines a set of skills in analyzing and evaluating information. There are 10 skills of critical thinking that are the core basis of it. They are: -

(1) Distinguishing between verifiable facts and value claims.
(2) Determining the reliability of a source.
(3) Determining the factual accuracy of a statement.
(4) Distinguishing relevant from irrelevant information, claims, or reasons.
(5) Detecting bias.
(6) Identifying unstated assumptions.
(7) Identifying ambiguous or equivocal claims or arguments.
(8) Recognizing logical inconsistencies or fallacies in a line of reasoning.
(9) Distinguishing between warranted or unwarranted claims.
(10) Determining the strength of an argument.

Critical thinking is "a practical reflective activity that has reasonable belief or action as its goal," that is, "the process of reflectively and reasonably deciding what to believe in doing." Critical thinking skills include the skills of analyzing, asking appropriate questions, focusing, clarity of information, making inferences, and making sound decisions. He added that: Critical thinking is not equivalent to higher-order thinking skills, in part because that idea is so vague. However, critical thinking, a practical activity, includes most or all of the directly practical higher-order thinking skills. Furthermore, critical thinking includes dispositions, which would not be included in a listing of skills (Presseisen, B. Z., 1984 & Ennis, R. H., 1985).

H. Capella, L. M., & Robin, D. P. (1986);

Critical thinking is a characteristic that differentiates between the graduates who are trained to be critical thinkers and those who are not. It is the heart of the intellectual process. It is an important skill that has to be developed in business students and practitioners. The key factor of success in day-to-day activities is critical thinking. The term itself deals with and cultivates around the following questions:

- How do we know? Why do we believe it?

- What is the evidence?

Critical thinking deals with problem-solving and thinking critically. It requires the evaluation of a particular relevant situation with a focus on the input and output of the process. Critical thinking skills are the major measure of output quality (Capella, L. M., & Robin, D. P. (1986).

I. Scriven, M., & Paul, R. (1987)

Critical thinking has been developing for 2500 years. It is a rich concept and its roots belong to the mid-late 20th century. It is an intellectual process that is disciplined in nature. It involves, in a skilled active manner, gathering information, conceptualizing information, evaluating such information, and analyzing and synthesizing them. Such information can be gathered, collected from actual observation, coming from real-life experience, as a result of communication with others or one reflection of situations. All serve as a guide to our beliefs and actions. Critical thinking is a self-guided discipline of thinking at the highest level of reasoning. The reasoning of things is based on a way of quality that is fair-minded. The values of critical thinking are universal.

They are intellectual values that involve clarification and accuracy as the foundation of it. It also involves other traits, such as consistency of evidence, the precision of the information, the relevance of information, sound evidence, good reasons for things, depth of knowledge, breadth of knowledge, and fairness. The elements of critical thinking that serve as its structure are based on implicit reasoning. It entails purpose behind things, an exhibition of problems, made assumptions, concepts of thinking, other viewpoints and the relevant objections to them, initial implications and related consequences as a result of that implication or decisions, empirical grounding and their relevant frame of references, and the reasoning that leads to the conclusion. However, critical thinking itself is not universal based on the individual level. Everyone has a different kind of thought that can be rational or irrational as well-disciplined or undisciplined reflected in one type of episode or several episodes that vary based on individual experiences. There are several modes of thinking about critical thinking. These are represented by scientific thinking, mathematical thinking, historical thinking, anthropological thinking, economic thinking, moral thinking, and philosophical thinking. Besides, there are two components of critical thinking. These are: -

1) a set of information and belief-generating and processing skills.

2) the habit, based on intellectual commitment, of using those skills to guide behavior.

Furthermore, critical thinking has modes of thinking. The modes are reflected in any subject matter or problems that occur which require the responsibility of standardized intellectual thinking that will lead to an improvement in one's thinking. Therefore, critical thinking is an endeavor for

the lifelong development of skills. It can be vested for one individual's interests or a group's benefit. This depends on the motivation that manipulates motives whether is it selfish or non-selfish. The first benefits one individual while the latter benefits all (Scriven, M., & Paul, R., 1987).

J. Lipmann, 1988;

Critical thinking is the criteria principle. The terms criteria and critical thinking share a common ground. The first employs judgments as to its basic rule or principle per se. The second employs thinking that is assessed through appeal to criteria and the latter serves as its main function. Criteria are considered the main instrument for judgment. Critical thinking, as a result of such, is considered reinforced thinking that is well-grounded and structured. This is definitely in contrast with the term uncritical thinking. The latter is away from reinforcement of thinking, random, vague, and unstructured. A criterion is a reliable kind of reason. Therefore, our thinking is relying mostly on well-structured reliable, and sound criteria. Examples of specific kinds of criteria are: standards; laws, bylaws, rules, regulations; precepts, requirements, specifications; conventions, norms, regularities; principles, assumptions, presuppositions, definitions; ideals, goals, objectives; tests, credentials, experimental findings; methods, procedures, policies.‖ If we examine each of the previously mentioned criteria carefully we find that our thinking is relying mostly on most parts of it when it comes to specific relevant situations. It is a skill that can be taught and is considered a form of intelligence. Most of our thinking relies on cognitive skills. Critical thinking is the utilization of those skills that are classified into a smaller group of families. The skills are reasoning skills, concept-formation skills, and inquiry skills. These skills

contribute tremendously to our understanding of things around us and the way we relate different meanings to different situations. The main objective of educators and leaders in higher education should be on creating students who are equipped with these skills and can do more than merely think. They should be able to think creatively and be able to practice good judgments. We want a student who can think outside the box and go beyond what other people have thought or created. We want students who will be able to identify reasons for things around them and be able to make sound judgments. This is what we call a shift from ordinary thinking to extraordinary thinking. The improvement of critical thinking skills to the level of extraordinary thinking, however, depends primarily on students' abilities and skills (Lipman, M., 1988).

K. Ennis, R. H. (1989);

Critical thinking is the reflective thinking of being reasonable in making decisions about our actions or beliefs as the main focus (Ennis, 1985, 1987). Whether teaching critical thinking skills separately or as integrated within curricula is an unresolved and inconclusive issue up to date. There seems to be a continuous disagreement about which is the best method that can be more effective than others. However, critical thinking requires logic. It is a process of purposeful reflection. It is not a fixed entity. It is rather a form of intelligence. It is a skill that can be learned and taught (Ennis, R. H., 1989).

2.2. Definitions: Critical thinking can be defined as follows:

Dewey in 1934, defined critical thinking as "Active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of grounds which support it and the consequences to which it leads" (Jiang, 2017).

Paul in 1988 found that “Critical thinking is the ability to reach a sound conclusion based on observation and information” (O’Donnell et al., 2011).

Facione in 1990 saw “Critical thinking to be purposeful, self-regulatory judgment, which results in understanding, investigation, evaluation, and inference, as well as an explanation of the evidential, abstract methodological, soteriological, or contextual considerations upon which that judgment is based....” (Mentor, 2016).

Ennis 2002 defined it as “Critical thinking is meditative and sensible thinking that is focused on deciding what to believe or do” (Fisher, 2011).

Glaser in 1941 thought “Critical thinking as an attitude of being disposed to consider thoughtfully the problems on subjects that come within the range of one's experiences” (Lin, 2018).

Mulnix is in 2010 critical thinking includes a commitment to using reason in the formulation of our beliefs (Han, 2015).

All the above definitions indicate that critical thinking gives due thought to proving the situation of judgment, the appropriate criterion for making the relevant methods or techniques for forming the judgment, and the applicable theoretical construct for understanding the problem and the question at hand. Critical thinking employs not the only reason, but also broad intellectual conditions, such as precision of thought, sincerity, accuracy, precision, relevance, and significance. Most human decisions are associated with either acceptability or denial of a particular argument, idea, or concept based upon inferences. The human mind infers deductive, inductive, and evaluative thinking. For critical thinking skills, three cognitive skills are basic; people who

think critically, again and again, attempt to live rationally, reasonably, and emphatically (Padmanabha, P., 2018).

However, much of the thinking is left to itself. It can be biased, distorted, partial, uninformed, or downright prejudiced, Paul and Elder (2002) go on to state, "The quality of our lives and that of what we produce, make, or build depends precisely on the quality of our thought. Shoddy thinking is costly, both in money and in quality of life. Excellence in thought, however, must be systematically cultivated". Alwehaibi (2012) summarized critical thinking as the ability to acquire knowledge and make sense of new information.

2.3. Aspects of critical thinking:

Critical thinking is a productive and positive activity, and is a process, not an outcome. Manifestations of critical thinking vary according to the contexts in which it occurs. Critical thinking is triggered by positive as well as negative events, and emotive as well as rational.

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Four Aspects of Critical Thinking

- ✓ **Abstract Thinking:** thinking past what your senses tell you
- ✓ **Creative Thinking:** thinking "out of the box," innovating
- ✓ **Systematic Thinking:** organizing your thoughts into logical steps
- ✓ **Communicative Thinking:** being precise in giving your ideas to others. (Al-Ghadouni, A., 2021).

2.4. Components of critical thinking:

Critical thinking is an interconnected process that includes five interrelated components, as indicated by (Al-Sayed, 1995), namely:

1. The knowledge base: It is what the individual knows and believes in. It is necessary for the feeling of contradiction to occur.

2. External events: These are the stimuli that evoke a sense of contradiction.

3. Personal theory: it is the personal character that the individual has derived from the cognitive base so that it is a characteristic of him/her.

4. Feeling of contradiction or divergence: Feeling represents a motivating factor that entails the rest of the critical thinking steps.

5. Resolving the contradiction: It is a stage that includes all the constituent aspects of critical thinking, as the individual seeks to solve the contradiction, including multiple steps.

The purpose of the critical thinking process can only be achieved through mental skills that are used during critical thinking. Suadah (2011, p. 105) pointed out several components of critical thinking, including:

1. Focusing on problems and questions.

2. Identifying various problems.

3. Focusing on related topics.

4. The ability to use important statistics and data.

5. The ability to check the strength of the proof by using re-application.

6. Avoid thinking based on self, hopes, and desires.

7. Identifying multiple assumptions.

8. Dealing with unreliable or unclear information with suspicion.

9. Understanding both induction deduction skills.

10. Avoiding logical fallacies.

(Al-Ghadouni, A., 2021).

These components or elements of critical thinking, as called by Saadeh (2011), when contemplating, it becomes clear that they are the closest to introductions or directives for carrying out the process of critical thinking, Given the components of critical thinking that have been reviewed, the components of the critical thinking process can be presented as follows:

1. The knowledge base and what the individual possesses of previous knowledge that serves as his/her assumptions.

2. The tendency to critical thinking as a result of an exciting stimulus through which an individual feels to stimulate critical thinking.

3. Using critical thinking skills.

4. Conclusion, so that the outcome of the critical thinking process is reached through the issuance of judgments, decisions, and the like.

(Saadeh, Jawdat., 2011).

The Six Thinking Hats method was developed by Dr. de Bono as a proactive process to facilitate collaborative teamwork. Teams are encouraged to use parallel thought to promote equality in all ideas and demonstrate that all perspectives are valuable. Teams comprise at least one of the following types of thinkers: White hat thinkers, Red hat thinkers, Black hat thinkers, Green hat thinkers, Blue hat thinkers, and Yellow hat thinkers. The colors of the hat signify mental processes and mental orientations (de Bono,1999).

- White Hat: is objective and neutral. The white hat is preoccupied with goals and facts.
- Blue Hat: is cool, as well as the color of the sky, which is superior to all other colors. The blue hat focuses on control, the organization of the thought process, and the utilization of the other hats.
- Black Hat: is solemn and grave. The black hat represents prudence and caution. It identifies the flaws in an idea.
- Red Hat: implies anger (red vision), rage, and emotions. The red hat offers an emotional perspective.
- Green Hat: represents grass, vegetation, and fertile, abundant growth. The green hat signifies originality and innovation.
- Yellow Hat: is optimistic and sunny. The yellow hat represents optimism and positive thinking.

(Mahoney, J., et al., 2022).

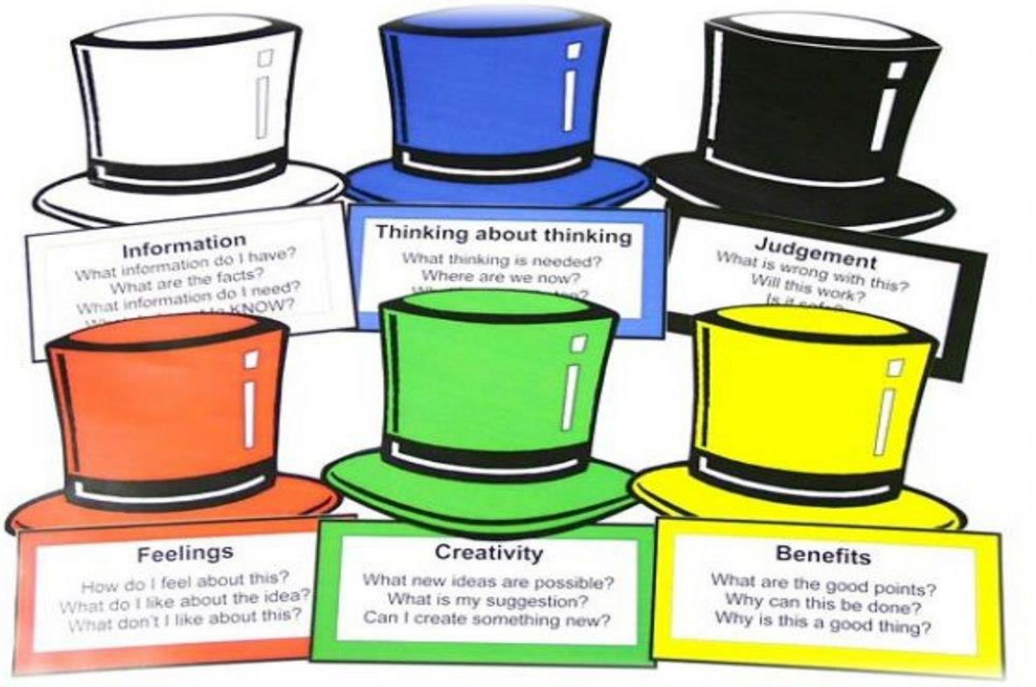


Figure (2.1): De Bono's Six Thinking Hats Technique:

Mahoney, J., et al., 2022

✓ **Develop thinking critically:**

a) Develop a critical-thinking character. Hold yourself to high standards. Commit to developing critical thinking characteristics such as; honesty, fair-mindedness, creativity, patience, and confidence.

b) Take responsibility and seek out learning experiences to help you get the theoretical and experiential knowledge to think critically. Practice intellectual skills such as assessing systematically and comprehensively. Just as practicing physical skills improves your ability to perform physically, practicing thinking skills improves your ability to perform intellectually.

c) Gain interpersonal skills such as teamwork, resolving conflict, and being an advocate. Keep in mind that "being too nice" problems (e.g., not giving

constructive criticism because of concerns of not offending someone) can be as bad as "not being very nice" problems (e.g., demonstrating arrogance, sarcasm, and or intolerance of other ways of doing things). Learn how to give and take feedback. To improve you must get through the negative aspects of criticism.

d) Practice related technical skills (e.g., using computers, managing IVs). Until these skills become like second nature, they create a "brain drain" making it difficult to focus on other important things such as monitoring patient responses to care (Berman, A, et al, 2016).

2.5. Problem Solving:

In recent years, there has been more emphasis on developing higher-order thinking (e.g., critical thinking and clinical reasoning) processes to tackle the recent trends and challenges in medical education. Critical thinking and clinical reasoning are considered to be the cornerstones for teaching and training tomorrow's doctors. Lack of training in critical thinking and clinical reasoning in medical curricula causes medical students and physicians to use cognitive biases in problem-solving which ultimately leads to diagnostic errors later in their professional practice. Moreover, there is no consensus on the most effective teaching model to teach critical thinking and clinical reasoning skills, and even the skill is not effectively tested in medical schools. This chapter will focus on concepts, contemporary theories, implications, issues and challenges, characteristics, various steps, teaching models and strategies, measuring and intervention tools, and assessment modalities of critical thinking and clinical reasoning in medical education settings (Majumder, et al., 2019)

Cognitive skills are mental abilities used to tackle and accomplish tasks. the application of cognitive skills such as interpretation, analysis, reason, and judgment; and, the consideration of context, and disposition to critical thinking is characterized by a consistent internal motivation to engage in problems and make decisions by using critical thinking (Raymond-Seniuk & Profetto-McGrath, 2011).

The application of life skills in the Sunnah of the Prophet is based on the life skills recommended by WHO such as problem-solving, decision-making, creative thinking, critical thinking, self-awareness, empathy, interpersonal relationship, effective communication, coping with stress, coping with emotions (Abdullah, et al., 2021).

Decision-making refers to a systematic cognitive process of identifying alternatives, evaluating those alternatives, arriving at a conclusion, and selecting an option. Baron described further that decision-making involves weighing up the potential costs and benefits associated with each option before deciding on a course of action (Baron, J., 2000).

Since many decisions are made, problems are solved, and strategies are developed using critical thinking, the nurse should, as a primary responsibility, employ critical thinking effectively. Nurses' critical thinking skills and inclination to use these skills influence their decision-making and problem-solving abilities. How nurses engage in decision-making and problem-solving influences the establishment of workflow and structure for patients on a delivery unit, nurses are compelled to manage the dynamic healthcare system and advance excellence at every level of the organization. To foster the culture and climate of positive outcomes in health care, the nurse must continue to

embrace critical thinking as a very salient component of the decision-making process (Roussel, L., 2009).

So; the definition of problem-solving is a mental activity in which a problem is identified that represents an unsteady state. It requires the nurse to obtain information that clarifies the nature of the problem and suggests possible solutions. Throughout the problem-solving process, the implementation of critical thought may or may not be required in working toward a solution (Wilkinson, 2012).

Critical thinking is a required component in making critical decisions in nursing care. Clinical reasoning in decision-making is an essential part of safe patient care (American Association of Colleges of Nursing, 2015).

Clinical Decision Making. A process involving the collection of data and analysis of the patient's information to make a judgment regarding what intervention to implement and when to implement it, and it is a part of critical thinking development that involves identifying, prioritizing, and continuously evaluating complicated, rapidly changing patient problems and solutions, a process used by healthcare professionals begin to recognize a problem, collect information about the problem, develop a plan resolve to the problem, implement a plan, and evaluate to see if the intervention worked to resolve the problem, if not they must revise the plan (Goldberg, 2015).

The nurse carefully evaluates the possible solutions and chooses the best one to implement. The situation is carefully monitored over time to ensure that its initial and continued effectiveness returns the client to a steady state. The nurse does not discard the other solutions but holds them in reserve if the first

solution is not effective. Therefore, problem-solving for one situation contributes to the nurse's body of knowledge for problem-solving in similar situations. Commonly used approaches to problem-solving include trial and error, intuition, and the research process Critical thinking requires the ability to recognize a problem. The nurse must use clinical reasoning to think through possible solutions to the problem and gather evidence to support the solution while evaluating possible alternatives, building on the fact, that the nurse must make important clinical decisions and be able to communicate to others on his/her team and implement a solution all within minutes if not seconds (Jeong, 2015).

One way to solve problems is through trial and error, in which several approaches are tried until a solution is found. However, without considering alternatives systematically, one cannot know why the solution works. The use of trial-and-error methods in nursing care can be dangerous because the client might suffer harm if an approach is inappropriate. However, nurses often use trial and error in the home setting due to logistics, equipment, and client lifestyle. For example, when teaching a client to perform colostomy irrigation, a bent coat hanger hung on the shower curtain rod provides an appropriate height to perform the irrigation. In the hospital setting a lowered intravenous (IV), polite is more likely utilized.

Clinical decision-making incorporates critical thinking, reflective practice, problem-solving, judgment, ethical values, professional accountability, and scientific, evidence-based practice. Nurses must make rapid decisions and they may not be consciously aware when making clinical decisions. So, they may have to decide unconsciously. This unconscious

process called intuition relies on an individual's perception of the situation rather than scientific, evidence-based knowledge. It can be described as 'knowing without knowing how or 'understanding but without a rationale'. Intuitional decisions are made in real-time based on the environment and the situation involving instinctive judgment rather than an analytical thinking process. Intuition bridges conscious and unconscious decision-making processes (Price & Norman, 2008).

Intuition is a problem-solving approach that relies on a nurse's inner sense. It is a legitimate aspect of a nursing judgment in the implementation of care, intuition is the understanding or learning of things without the conscious use of reasoning. It is also known as the sixth sense, hunch, instinct, feeling, or suspicion. As a problem-solving approach, intuition is viewed by some people as a form of guessing and, as such, an inappropriate basis for nursing decisions. The cognitive institution is the result of the combination of knowledge and experience among nurses which can occur on both conscious and unconscious levels. Experienced nurses use cognition so expertly that the clinical activities do not necessarily correspond to the stereotypical measures (Karki, N., et al., 2018).

However, others view intuition as an essential and legitimate aspect of clinical judgment acquired through knowledge and experience. Clinical judgment in nursing is a decision-making process to ascertain the right nursing action to be implemented at the appropriate time in the client's care. The nurse must first have the knowledge base necessary to practice in the clinical area and then use that knowledge in clinical practice. Clinical experience allows the nurse to recognize cues and patterns and begin to reach correct conclusions.

Experience is important in improving intuition because the rapidity of the judgment depends on the nurse having seen similar client situations many times before. Sometimes nurses use the words "I had a feeling" to describe the critical thinking element of considering the evidence. These nurses can judge quickly which evidence is most important and act on that limited evidence. Nurses in critical care often pay closer attention than usual to a client when they sense that the client's condition could change suddenly (Berman, A, et al, 2016).

2.6. Critical Thinking in Nursing Practice:

Soft skills are becoming among the most required skills in the 21st century and for even centuries to come. Employers across the world are becoming more focused on obtaining talented graduates that possess many skills among which are critical thinking skills and problem-solving skills. Critical thinking is the use of cognitive skills (Cottrell, S., 2011).

When nurses begin employment, the expectation is that the individual will transition into the professional work environment within a designated orientation period, nurses are expected to transfer generic nursing knowledge and skills attained in school, acquire new knowledge, and be accountable for the responsibilities of professional practice. The transfer of knowledge and clinical skills between academia and the workplace has implications for nursing practice, particularly when the novice nurse transitions into professional practice. How the newly licensed nurse transitions into the professional role from the student role have logical implications for the delivery of patient care. Many factors may influence the ability of the newly licensed nurse to acclimate to the role transition and have been identified as including previous experience and diversity (Kurmaran & Carney, 2014).

When faced with a complex situation, critical thinking is categorized as the use of the best thinking skills in situations that require the use of the brain, therefore, it is referred to as a disciplined art that is based on rational and analytical thinking, The demand for the workplace is on the rise globally. The quest for logical thinkers is even more in-demand than ever, requiring active thinkers who can gather information, analyze it, make an assumption based on solid evidence, and make a final decision. Therefore, critical thinking is referred to as a reflective logical process that requires the logic of the mind, The main components of it are continuous analysis, reasoning, and argumentation. It is a rigorous approach to thinking that is based on interpretations, inferences, arguments, explanations, evaluations, analyzing, judging, and making informed decisions (Paul, R., & Elder, L., 2019).

In clinical practice, Alfaro- LeFevre (2016) put forward the idea of 4-Circle Critical Thinking, a theoretical model that offers a definition of critical thinking applied in this context. The 4-Circle CT Model describes the construct of critical thinking as the integration of four components: personal characteristics, intellectual and cognitive abilities, interpersonal abilities, self-management, and technical abilities (Zuriguel-pérez, E, et al, 2018).

A thought requires various skills regarding the intellectual process. This process is examined under three aspects as thinking, emotion, and desire. The main purpose of thinking is to assign meanings to our life events, classify these events, and create an identity for them in a subjective way. Our actions such as judgment, analysis, explanation, comprehension, identification, comparison, and making synthesis occur within the scope of thinking, Critical thinking is an elusive process that is not clearly understood in nursing and has been defined in multiple ways. “Critical thinking is not one, monolithic thing” so, capturing the

essence of what it means to think critically requires an in-depth exploration, (Elkoca, A., 2019).

Nurses who have the skills of critical thinking and problem-solving can cope with negative feelings and thoughts and produce suitable solutions, and in this way, they can raise the quality of health care service, moreover; Critical thinking allows nurses to use problem-solving skills correctly, and problem-solving skills are directly related to cognitive processes, to correctly determine priorities when solving problems, and to pay attention to ethical rules when making decisions. In the formation of clinical road maps, which are a clinical management method covering all clinical care and treatment of patients, nurses can reach a correct decision in clinical problem-solving by thinking critically (Altas, G., 2020).

Knowledge and skills can be measured between these three dimensions, but this is challenging to review and value, which makes it less common to achieve coverage. When formative assessment is used in the assessment of learning upon competence development, The dimensions of clinical competence can be roughly divided into formal, objective, and subjectively experienced competence (Almalkawi et al., 2018).

Critical thinking is an indispensable reasoning process bearing some characteristics such as gathering information from the resources and analyzing them, deciding on the needs in the light of this analysis and selecting and applying the possible approaches, and evaluating the results. Critical thinking is a multifaceted process involving many mental activities. A critical thinker attempts to identify the main point by explaining the cause of the problem, reaching reliable sources, and handling it as a whole to determine the main point, and is open to innovations. A critical thinker respects others' opinions,

pays attention to others, and bases his opinions on scientific knowledge (Colln-Appling, & Giuliano, 2017).

Critical thinking involves the differentiation of statements of fact, judgment, and opinion. The process of critical thinking requires the nurse to think creatively, use reflection, and engage in analytical thinking (Alfaro-LeFevre, 2013). Alfaro-LeFevre's 4-Circle Critical Thinking Model provides a visual representation of critical thinking abilities and promotes making meaningful connections between nursing research and critical thinking and practice (Figure) (Berman, A, et al, 2016).

Critical thinking is an essential skill needed for the identification of client problems and the implementation of interventions to promote effective care outcomes (Bettencourt & Crossetti, 2012). The process of providing feedback and reflection is vital to the improvement of nursing practice. A study by Asselin (2011) revealed that persons who reflected on new knowledge developed new insights regarding practice. The insights nurses acquired led to changes in their approach to practice (Berman, A, et al, 2016).

When a nurse uses intentional thinking, a relationship develops between the knowledge, skills, and attitudes that are described in critical thinking and clinical reasoning, the nursing process, and the problem-solving process, implementation of the nursing process provides nurses with a creative approach to thinking and doing to obtain, categorizing, and analyzing client data and planning actions that will meet the client's needs. The nursing process is a systematic, rational method of planning and providing individualized nursing care. It begins with assessment Statement Description Example Facts Can be verified through investigation Blood pressure is affected by blood volume. Inferences Conclusions are drawn from the facts; going beyond facts to make a

statement about something not currently known If blood volume is decreased (e.g., in hemorrhagic shock), the blood pressure will drop. Judgments Evaluation of facts or information that reflects values or other criteria; a type of opinion It is harmful to the client's health if the blood pressure drops too low. Opinions and Beliefs formed over time; include judgments that may fit facts or be erroneous Nursing interventions can assist in maintaining the client's blood pressure within normal limits (Berman, A, et al, 2016).

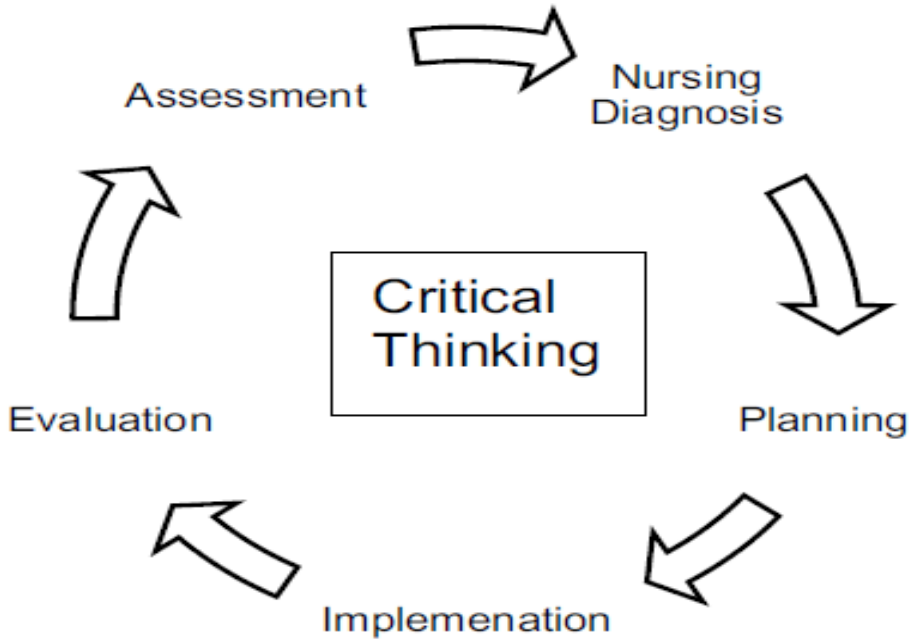


Figure (2.1): Critical Thinking Core of Nursing Practice (Miller, M. L. (2018).

2. 7. Theories and Viewpoints of Critical Thinking in Nursing:

Theories are the foundation for all professions. It provides a set of concepts that make the basic knowledge of the specific discipline. Similarly,

nursing theories define the basic concepts and principles of the nursing profession in a scientific manner (Arif, S., et al., 2019).

There are different types of theories. In literature, all levels of nursing theories exist, such as meta-theory, grand theory, mid-range theory, and micro theory (Matney et al., 2016).

In meta-theories, the subject matter is another theory. It provides a critical exploration of the theoretical frameworks. Grand theories contribute a broad perspective to define the purpose and structure of nursing practice. Most of the grand theories are developed between the 1960s and the 1980s. These theories help to differentiate between nursing practice and medical practice, while middle-range theories are categorized as having a set of ideas and variables that are narrower, but testable. The middle-range theory proposes the specificity required for research and practice in a specific area. For this reason, it starts a concept analysis leading toward the development of a larger conceptual model (often called a construct). Micro theories develop specific concepts regarding nursing practices (Matney et al., 2016).

Researchers endorsed the importance of the implementation of nursing theories in clinical practice to achieve high-quality care. Nursing theories provide a medium to rationalize the care provided by nurses. Moreover, it provides an identity to nurses that differentiates the nursing practice from the medical practice (Meleis, 2012).

Nursing science is grounded in philosophies and theories that define the discipline. A dynamic construct, nursing knowledge is gleaned from diverse approaches. Today's nurses no longer depend solely on traditional positivist methods. Quite the contrary, nursing is accepting the value of contexts

(personal, historical, linguistic) for both the researcher and the researched in discovering knowledge structures (Chinn & Kramer, 2004).

This study applied Benjamin Bloom's Taxonomy in figure: (2.1) as a framework for developing critical thinking related to nurses' knowledge, it is a model produced in 1956 by the educational psychologist to foster higher-order thinking skills in education. In time, the original taxonomy was revisited by applying some changes, developed by Benjamin Bloom and his collaborators to represent the three domains of learning. These domains consist of Cognitive (thinking), Affective (feeling), and Psychomotor (physical skills) with the cognitive domain often used by nursing faculty to help students in the development of critical thinking skills, a classification system that is used to define & differentiate 3 different levels of human cognition: thinking, learning & understanding, and included six categories of cognitive processes, ranging from simple to complex: knowledge, comprehension, application, analysis, synthesis, and evaluation which designed as a step process: to achieve a higher objective or category, one must first master cognitive processes at a lower category. In other words, before comprehension, application, or analysis can take place (ULUM, Ö. G., 2021).

This up-to-date taxonomy mirrors a more active style of cognition and is possibly more precise. The revised one developed the practicality of the taxonomy by employing action words, On the other hand, "lower order" learning requiring recognition, memory, and comprehension fall under the remember and understand categories. Thinking critically involves comparing and contrasting and synthesizing what one has learned. And a great deal of knowledge is necessary before one can begin to reflect on its meaning and look for alternative explanations (Agarwal, P. K., 2019).

The nursing process's phases are similar to Bloom's application levels where apply or use the knowledge they have gained. The nurses, using Bloom's theory, are asked to go beyond knowledge during gathering information while analysis and synthesis come after application in Bloom's taxonomy, nurses must analyze and synthesize during the diagnostic and planning phases of the nursing process, to find out problem-solving to come up with a theory or predict an outcome. Evaluation is the final phase of both the nursing process and Bloom's taxonomy (Miller, M. L. (2018).

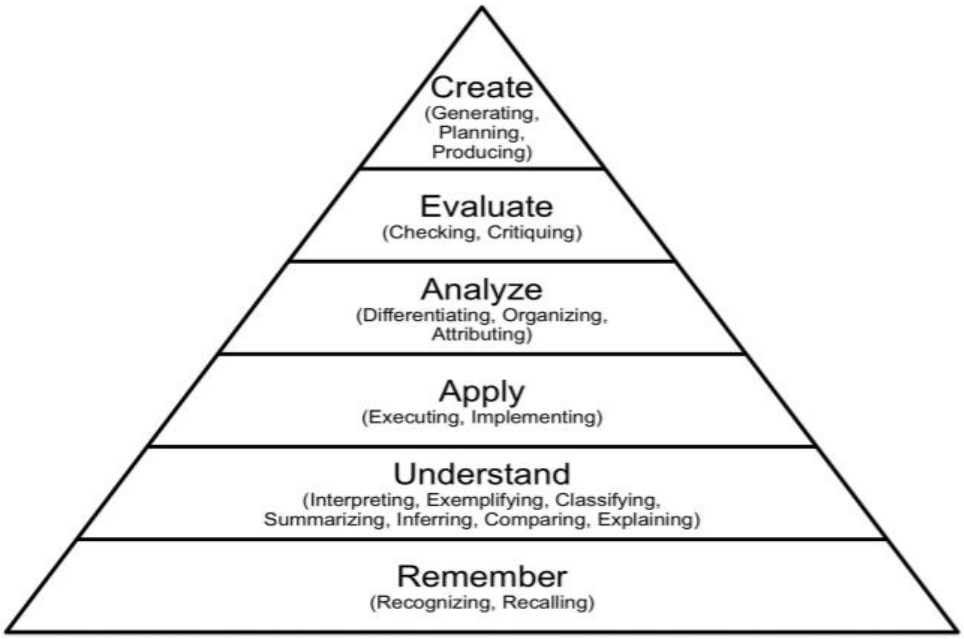


Figure (2.1): Benjamin Bloom's Taxonomy Model to Develop Nurse's Knowledge about Critical Thinking (Anderson, Krathwohl, & Bloom, 2001).

Table (2.1): Models and Theories which Focused on Critical Thinking in Nursing.

No.	Model or Theory	Briefly Description
1.	Alfaro-LeFevre's 4-Circle Critical Thinking Model.	The 4-Circle CT Model is: • Develop CT characteristics and behaviors, when someone has CT characteristics, the skills in the other circles come readily. • Acquire theoretical and experiential knowledge, as well as intellectual skills. • Gain interpersonal skills. • Technical skills. (Reji, et al., 2022).
2.	Facione's Critical Thinking Model.	Based on the Critical Thinking Model, the critical thinking process involves six (6) strategies. The strategies are; interpretation, analysis, evaluation, inference, explanation, and self-regulation. The first step involves an individual evaluating information or data through the process of interpretation, analysis, evaluation, and inference. Next, the person applies critical thinking and states the results, justifies the procedures, and presents the arguments to reach his conclusions. Finally, the process is refined by self-examination and self-correction. The six core critical thinking skills as described by the panel of experts (Quraishah, et al., 2022).
3.	Paul & Elder Critical Thinking Model.	This model believes critical thinking begins with an element of reasoning or part of thoughts. This part of the model indicates the process of critical thinking starts with a purpose, a question, a problem to solve, an assumption, or a point of view (Miller, M. L., 2018).

4.	Benner's theory.	From novice to expert (Patricia Benner), describe nursing knowledge as embedded in nursing practice. she referred to this approach as a "hybrid of theory and experience", by bringing these meanings, skills, and knowledge into public discourse, new knowledge and understanding are constituted" (Butts, et a., 2021).
	Manthey & Koloroutis Model.	RELATIONSHIP-BASED CARE (RBC) model: • Critical thinking: systematic; multidimensional; see what is there and what is not; includes critical feeling; involves humility in choosing what to do. • Creative thinking: questions what the day will look like; encourages tolerance of ambiguity • Reflective thinking: time and space to pause; silence for reflection and to rejuvenate (Quesea, et al., 2019).

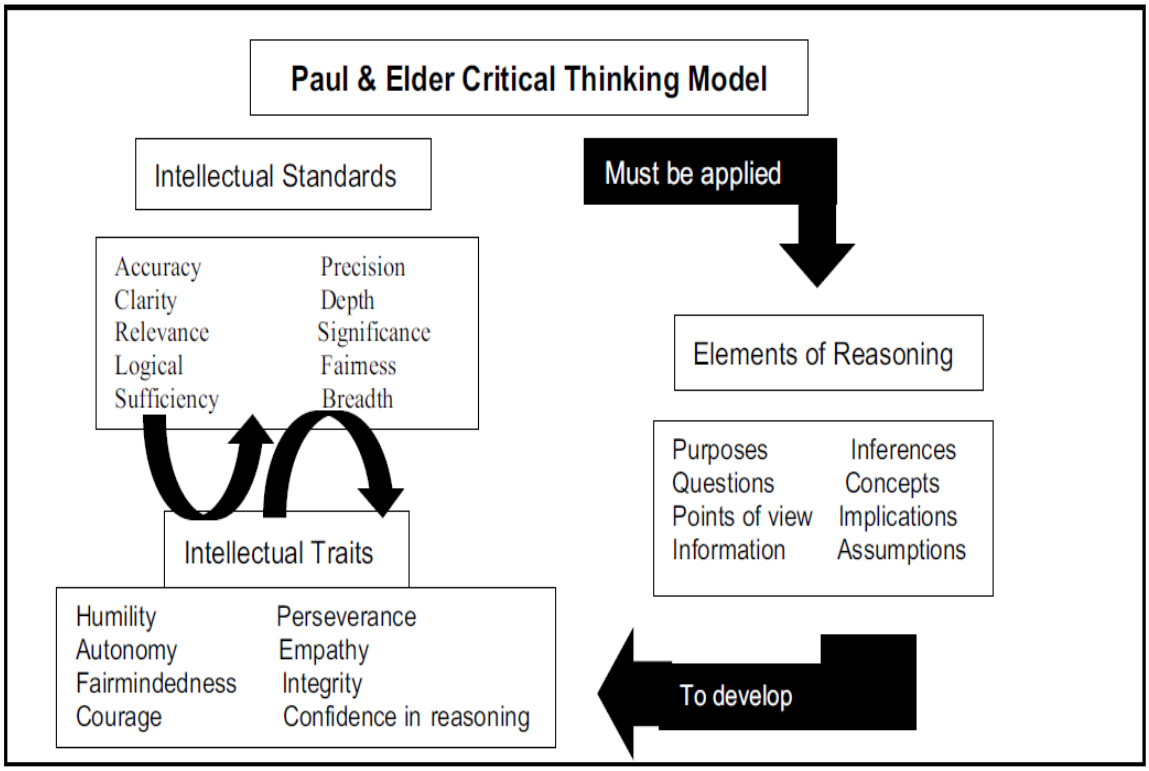


Figure (2.2): Paul & Elder Critical Thinking Model (Paul & Elder, 2009)

Watson-Glaser Critical-thinking Appraisal (WGCTA; Watson and Glaser, 1991) and the California Critical thinking Disposition Inventory (CCTDI; Facione et al., 1992) are instruments based on general critical-thinking ability isolated from the application of nursing knowledge. Zuriguel-Pérez (2016) reviewed nine tools for validity and feasibility, including these, and this author found that the tools with more validity included performance-oriented assessment with detailed content, but there was not a single instrument that ranked high in both validity and feasibility in the clinic context (Zuriguel-pérez, E, et al, 2018).

2.8. Previous Studies:

1. Kelly, G., et al, 2013: performed a study **on "Critical thinking skills in the nursing diagnosis process".**

This study aimed to identify the critical thinking skills utilized in the nursing diagnosis process. This was an exploratory descriptive study conducted with seven nursing students on the application of a clinical case to identify critical thinking skills, as well as their justifications in the nursing diagnosis process. Content analysis was performed to evaluate descriptive data. Six participants reported that analysis, scientific and technical knowledge, and logical reasoning skills are important in identifying priority nursing diagnoses; clinical experience was cited by five participants, and knowledge about the patient and application of standards were mentioned by three participants; Furthermore, discernment and contextual perspective were skills noted by two participants. Based on these results, the use of critical thinking skills related to the steps of the nursing diagnosis process was observed. Therefore, the application of this process may constitute a strategy that enables the development of critical thinking skills.

2. Douglass. K 2014: performed a study **"The Effect of the Developing Nurses' Thinking Model on Clinical Judgment in Nursing Students".**

Critical thinking and clinical judgment are essential competencies for professional nursing practice. These abilities are used continually, enabling nurses to provide safe nursing care to increasingly complex patients in a variety of healthcare settings. The challenge that faces baccalaureate nursing programs as they prepare nursing students to function competently upon graduation, is how best to facilitate the development of these skills in our students. This

capstone project aimed to test the effect of the middle range theory of the Developing Nurses' Thinking (DNT) Model on clinical judgment in nursing students. Tanner's Clinical Judgment Model formed the conceptual framework for this project. An experimental, pretest/post-test study was conducted using a convenience sample of 44 senior students at one southeastern baccalaureate nursing program. Two clinical groups received the intervention in post-conferences, while three groups served as the control group. Student clinical judgment was measured in high-fidelity patient simulation, using the Lasater Clinical Judgment Rubric. Paired t-tests evaluated the differences between clinical judgment scores and an independent t-test was utilized to evaluate the difference between groups. Both groups showed statistically significant improvements on the post-test, but there was no statistically significant difference between the groups. Therefore, the findings of this study did not support the use of the DNT Model to facilitate the development of clinical judgment in nursing students. However, the small sample size and inadequate exposure to the intervention were likely contributors to these outcomes.

3. Archerrer, E. 2015: performed a study **"Critical Thinking in the Diagnostic Process of Nursing".**

Background: Critical thinking is vital in every step of the nursing process. It represents a skill and at the same time an ability because it is a type of strategy that can be learned and acquired. Critical thinking is especially important in the nursing process, where data is interpreted, categorized, and processed. Furthermore, it is a thought process, where different elements are applied, for example, logical thinking, reflectivity, or prioritizing. By thinking critically, a nurse can attain a nursing diagnosis that is accurate and specific to the patient's needs. The nursing interventions are therefore more precise and

effective and improved health and nursing quality are the result. Aim: This thesis aims to point out why the application of critical thinking in nursing is of great importance. Additionally, the most vital elements when using this thinking strategy should be emphasized. Method: The thorough literature search took place from October 2014 until January 1015 and was conducted in different databases, libraries, and search engines. English and German sources were included and the publication dates were set to not be older than ten years. Furthermore, the respective studies were then chosen based on a fitting and adequate title and abstract and evaluated critically. Results: The six studies in this thesis underline the importance of critical thinking in nursing care and point out that it improves the precision and correctness of nursing diagnoses. By comparing the studies with a preceding study, it became apparent that not all elements of critical thinking have the same significance and some are applied more often than others. Nevertheless, nurses need to master all aspects of this thinking strategy, so that treatment is more effective. Conclusion: This strategy's elements and steps must be taught and applied in nursing practice. Critical thinking can be practiced by implementing it in education and training so that it becomes a natural part of the nursing process. The overall aim should be that every nurse can apply critical thinking in everyday working life. As a result, health care becomes more efficient and nursing diagnoses are better adjusted to the patients.

4. Tyne, S. L. 2018: performed a study **"Critical Thinking and Clinical Judgment in Novice Registered Nurses".**

The healthcare field has become increasingly more complex, requiring new nurses to be prepared upon graduation to respond to a variety of complex situations. Unfortunately, many graduates from associate degree nursing

(ADN) programs are not able to think critically upon entering the workforce. This workforce major problem for the nurse and the employer. The purpose of the study, therefore, was to gain a deeper understanding of the graduates' perceptions of their ability to critically think during their first year of clinical practice, and if they believed their program prepared them to be critical thinkers. The key research questions focused on how the novice nurses reconciled their performance on a critical thinking, online assessment, the Health Sciences Reasoning Test (HSRT), with their perception of their critical thinking skills, and if they felt prepared, during their first year of clinical practice, to critically think. The conceptual framework applied was Bloom's Taxonomy and Tanner's clinical judgment model. A purposeful sampling of 7 novice nurses from 3 ADN programs was chosen. After completing the HSRT, audio-taped phone interviews were conducted. The data indicated that the participants felt unprepared to respond to emergent patient situations, thus undermining their self-worth and clinical competency. The participants agreed there was a need for a critical thinking course in the ADN curriculum. A project was created for a 9-week critical thinking course, incorporating theory, clinical practice, and simulation exercises. Social change is expected to occur when student nurses can critically think upon graduation, resulting in positive patient outcomes, both of which will benefit patients, their families, and their communities.

5. Zuriguel-pérez, E, et al, 2018: performed a study **"Clinical nurses' critical thinking level according to sociodemographic and professional variables (Phase II): A correlational study".**

Critical thinking ability is one of the basic competencies of clinical nurses and is widely accepted as being associated with the provision of quality

care, however, few evidence-based data related to the relationship between the level of critical thinking ability and nurses' sociodemographic and professional characteristics study aimed was to identify the level of critical thinking among nurses in clinical practice according to sociodemographic and professional variables. A descriptive cross-sectional and correlational study was carried out on a sample of 339 nurses from medical, surgical, and critical care units at a tertiary care hospital. This study is related to a previous publication that presents a psychometric analysis. Data were compiled using the Nursing Critical Thinking in Clinical Practice Questionnaire and ad hoc form for the recording of sociodemographic and professional characteristics. The statistical analysis of the data was performed using frequency, Mann-Whitney U Test, Kruskal-Wallis Test, and Pearson's correlation coefficients. Nurses reported moderate levels of critical thinking. Older nurses, with 11–15 years of experience in the actual unit, with continuous shift work, a permanent contract, and a master's degree indicated a higher level of critical thinking. Critical thinking skills are related to certain socio-demographic and professional variables, particularly age, years of experience, shift work, type of contract, and educational level.

6. Delle Site, C. (2019). Investigating metacognition in new graduates transitioning to professional nursing practice.

Annually, large numbers of new nurses are entering the professional practice environment. To function effectively in practice, nurses must reflect on identifying how they learn, be skillful thinkers, and know when to retrieve and apply previously learned information or skills to clinical situations for effective decision-making. There is a lack of nursing literature measuring the transfer of knowledge during the nursing student experience and upon attaining nursing

licensure, from academia into clinical practice. As minimal nursing research has examined metacognition and metacognitive abilities, it was important to conduct this study to establish a foundation. The intent of this quantitative descriptive study, guided by the 3P Model of Teaching and Learning (Biggs, 2003), was to explore the variables and factors influencing metacognition and what facilitates the transfer of academic knowledge and skills of the newly licensed nurse into professional clinical practice. Using the 52-item Metacognitive Awareness Inventory (MAI) developed by Schraw and Dennison, 1994, and researcher developed demographic instrument, the study's results suggest that newly licensed nurses have metacognitive abilities as measured by the MAI. Metacognition should be assessed and fostered throughout the continuum from academia to professional nursing practice, nurturing reflection on one's learning, and making adjustments according to a given topic or clinical situation. Although there were limitations to the present study, based on the correlational findings of this study that show that the application of knowledge or skills and experiential learning, particularly in simulation, significantly influence metacognitive abilities, further research is warranted and should be considered by nurse educators.

7. Seman, N., & Yeap, W. L. (2021). Critical thinking skills among nurses at a private hospital in Penang: a quantitative study. ESTEEM Journal of Social Sciences and Humanities, 5(1), 48-55.

Nurses face a great challenge in making significant and crucial decisions that will impact the outcome of a patient's overall health status. Therefore, critical thinking skills are crucial for nurses to make sound clinical decisions to assure the provision of high-quality nursing care. Thus, this study is aimed to provide the current evidence of the critical thinking level of registered nurses

and identify the factors that affect critical thinking skills among the nurses. The quantitative study design with a cross-sectional survey was implemented in this study. Registered nurses from various clinical backgrounds at a private hospital in Penang were selected by using stratified random sampling (N=169). Watson-Glaser Critical Thinking Appraisal (WGCTA) questionnaire was adopted to measure the critical thinking abilities of the participants. An average level of critical thinking skills was found in this study. The senior nurses scored lower on the critical thinking scale compared to the junior nurses. Besides, there is a relationship between the nurses' educational level and critical thinking abilities. This study concludes that there is a difference in critical thinking abilities among nurses. Therefore, future research is suggested to further investigate this issue as this skill of thinking leaves a profound impact on the patient's outcome.

Chapter Three

Methodology

Methodology

This chapter introduces the methods used to measure and determine educational programs. It was organized to comprehensively describe how the research was systematically carried out. This chapter was offering the study design used in this research. It also comprises the formal arrangement, locale of the study, the subject of the research, criteria of the subject, the research tools, the validity of the questionnaire, a pilot study, data analysis, reliability of instruments, data gathering, and limitations of the study.

3.1. Study Design:

A quantitative study, utilizing a pre-test and post-test design, a quasi-experimental study was conducted; to determine the effect of an educational program of critical thinking on nurses' knowledge from the period between 10th October 2020 to 30th August 2022.

3.2. Administrative Permissions:

Initially, the proposal was approved by the Higher studies Committee, University of Babylon/ College of Nursing. Throughout a seminar presentation, the researcher explained the study's statement of problem, objectives, and importance of the study and data collection form. After the Research Ethics Committee reviewed the dissertation proposal, ethical approval was issued in the appendix (A). The authorized permission was gained from the College of Nursing at the University of Babylon to conduct the study appendix (B). The Ministry of Health/Babylon Health Directorate also provided an official permit, then Al-Hillah Teaching Hospitals (Morjan Medical City, Al-Emam Al-Sadiq Teaching Hospital, Al-Hillah teaching hospital), and all permission listed in (Appendix: C).

3.3. Setting of the Study:

The study was conducted in Al-Hillah City, a city located 100 kilometers (62 miles) south of Baghdad on the Hilla branch of the Euphrates. It is the capital of Babylon Province and is located close to the ancient cities of Borsippa and Kish, as well as the ancient metropolis of Babylon. It is situated in a primarily agricultural region that is intensively irrigated with water from the Hilla canal and produces a wide range of crops, fruits, and textiles.

The data were collected from Al-Hillah Teaching Hospitals, critical care departments involve: (emergency departments, intensive care units, coronary care units, postoperative units' surgical units", and medical units) in the following Hospitals:

1. Morjan Medical City: which included (12) nurses participating in a pilot study.

2. Al-Emam Al-Sadiq Teaching Hospital: (36) nurses participating in an interventional group.

3. Al-Hilla teaching hospital, Critical Care Units included (36) nurses participating in a control group

3.4. The Sample of the Study:

A non-probability purposive sample was chosen for this study's sample according to the crucial role of nurses in the critical care units in Al-Hillah Teaching Hospitals.

A. Target population

In Al-Emam Alsadiq teaching hospital, a total of (217) nurses working in the critical care units, and (10) nurses who shared in the preliminary assessment

need were excluded from the study, furthermore in Morjan Medical City a total of nurses were (64) male nurses and (76) female nurses, while (12) also excluded from the study were nurses who participated in the pilot study, and(18) nurses did not meet an inclusion criterion from all hospitals; the remaining study subjects were divided into two groups, each group included (36) Nurses, total nurses Al-Hillah teaching hospital were (172) of total graduated nurses, participated were (36) nurses in the control group; while total nurses in Al-Emam Alsadiq hospital were (217) of total graduated nurses, and participated were (36) interventional group.

B. Inclusion Criteria

1. Nurses who work in critical care units in Al-Hilla Teaching Hospitals.

2. Bachelor holders who have different periods of experience in critical care units.

3. Nurses who voluntarily agree to participate in the research.

4. All age groups included.

5. Nurses were getting fail during a preliminary assessment of the study.

The nurses in the sample were (72), and are divided into two groups (36) nurses considered an interventional group, and (36) nurses considered a control group. The control group was not exposed to an educational program, whereas the educational program was introduced to the interventional group.

Table (3.1): Distribution of (36) nurses who participated in the interventional group & (36) nurses who participated in the control group

Directorate	Site of sample	F.	P%
Al-Emam Al-Sadiq Teaching Hospital	Emergency Departments	8	22.2%
	Intensive care unit	5	14%
	Coronary care unit	7	19.4%
	Postoperative unit (medical unit)	9	25%
	Medical unit	7	19.4%
Total of sample		36	100%
Al-Hillah teaching hospital	Emergency Departments	3	8.3%
	Intensive care unit	20	55.5%
	Nuro intensive care unit	5	14%
	Postoperative unit (medical unit)	4	11.1%
	Medical unit	4	11.1%
Total of sample		36	100%

F= frequency, P= Percentage

3.5. The Steps of Study Conducting:

The research is carried out through five main steps as follows:

3.5.1. Step One: Preliminary Assessment Need of Nurses' Knowledge about Critical Thinking:

Data were collected from (10) nurses who work in critical care units at Al-Emam Alsadiq Teaching Hospital. The preliminary study included (10) close-ended questions (Appendix: D) based on related literature. These close-ended questions were administered to know nurses' knowledge about critical thinking and help construct the program and the questionnaire. The format contents reviewed relevant literature and subjective experiences. The study's objective of these assessment as to assess Knowledge nurses of critical thinking before the study. The assessment need was applied from the period between 10th to 25th August 2021.

Under the researcher's supervision, 20 to 25 minutes were given to each nurse to respond to the questions. The assessment findings revealed that the critical thinking knowledge deficit was in the majority of the nurses; these findings have revealed the requirement for educational program construct in this nursing population to knowledge enhancement regarding critical thinking, which contributes to their decision-making and problem-solving which leads to improving quality of care to the patients that it is an essential and crucial issue of severe health problems.

Table (3.2): Assessment of Nurses Needs Participant.

No.	Degree	Evaluation
1.	20	**Fail**
2.	10	**Fail**
3.	10	**Fail**
4.	Zero	**Fail**
5.	20	**Fail**
6.	20	**Fail**
7.	50	**Fail**
8.	20	**Fail**
9.	30	**Fail**
10.	20	**Fail**
Total	170	**Fail**
Total mean	17.0	**Fail**

3.5.2. Step Two: Construction of Educational Program:

According to the finding presented on the assessment need, the information obtained from reviewing the related scientific literature, and previous studies the content of this program was constructed. It comprised of (4) sessions that focus to achieve the following objectives:

1. Organize nurses' knowledge about critical thinking.

2. Enhance the cognition functioning of nurses.

3. Improving the quality of critical thinking for nurses.

4. Applying interpretation and analysis by nurses in different situations.

5. Encourage nurses to take ethical issues under consideration during decision-making and problem-solving in any situation.

6. Find out suitable decisions and the best solutions for critical issues.

The program was created from 3rd September 2021 to 5th December 2021 (Appendix: E).

3.5.2. Step Three: Study Tools:

The researcher prepared a special questionnaire form that presented MCQ questions through an extensive review of related literature, books, previous studies, and the information gained by assessing nurses' needs based on the study objectives. For the collection of data, a questionnaire was utilized; it was composed of four main parts:

Part I: Nurses' agreements: This part includes a cover letter to obtain the nurses' agreements (written consent) to participate in this study.

Part II: Demographical characteristics: This part involves basic information about the demographic of nurses' characteristics (age, gender, marital status).

Part III: Employment characteristics: (hospital name, years of experience as a nurse, units that nurse worked in.

Part IV: Nurses' Knowledge Related to Critical Thinking Concepts; which Included Five Domains: The multiple-choice questions about nurses' Knowledge related to critical thinking concepts were used in this part:

✓ First domain: content nurses' knowledge of its content (10) items.

✓ Second domain is intellectual and cognitive and consists of (10) items.

✓ Third domain is the application in this domain (6) items.

✓ Fourth domain analysis which consists of (7) items.

✓ Fifth one; the ethical domain involves (12) items, and (4) options to answer each question (Appendix: F) Arabic version and (Appendix: F) English version.

3.5.3. Rating and scoring:

All items were constructed by using MCQs with one correct answer. In addition, the questionnaire is designed using (2) level type Likert Scale (right and wrong) to assess nurses' knowledge about critical thinking. The scoring system of the scale consists of (2) types of scores; (2) for the correct answer and (1) for incorrect answer. So that the cutoff point calculated to determine the level of knowledge is presented as the following: (1-1.49) = poor;(1.5-2) good. Cut-off points for nurses' scores for total knowledge: poor = (45-67), Good = (68-90).

3.5.4. Validity of the Educational Program and the questionnaire:

The validity of research refers to whether the instrument measures what it is supposed to measure, and reflects not only the fact that the design will measure those factors of importance but also the fact that the method chosen for the study will be appropriate. The validation of content for the educational program and the questionnaire is a critical and vital process to establish measurement reliability.

Face validity, through a panel of (15) experts in nursing in (Appendix: G)., who specialized in nursing works as faculty members in different

educational institutions were asked to determine the adequacy and content clarity of the educational program in the Arabic version and the questionnaire Arabic and English versions, distributed among them for this purpose. The final changes were performed according to the experts' suggestions and opinions.

3.5.5. Pilot Study:

A pilot study is conducted in Morjan Medical City from the period between 5th January to 5th February 2022, (with 12) nurses. Those individuals were not included in the research. The subjects possessed the same characteristics as the sample for the final study. Then they were excluded from the original study sample. Test re-test performed within different times (15) days takes place.

✓ **The purposes of the Pilot Study are:**

1. To assess the adequacy, relevancy, and clarity of the questionnaire.

2. To clarify the obstacles that may be met through the study process.

3. To determine the reliability of the study's questionnaire.

4. To determine the required time to follow the questionnaire completely.

3.5.6. Reliability of the Study Questionnaire:

Consistency refers to whether the tool conveys consistent and reproducible data, when researchers obtain consistent measurements over time, it is determined that an instrument is reliable.

Pearson (*r)* correlation which considers a type of correlation coefficient is *used* as a statistical method to test for stability equivalence of the questionnaire items by using version 26 of SPSS.

Table 3.3: Reliability of the Questionnaire.

The results of the pilot study indicate that the questionnaire is valid and trustworthy for future studies of the phenomena in the same demographic (LoBiondo-Wood, G., & Haber, J. 2014).

Items	**Value of correlation coefficient**	**Evaluation**
Overall items related to questionnaire 45	**0.90**	Acceptable (Good reliability)

This table is statistically constructed to display the instrument's reliability coefficient for the present study. The results indicate that the questionnaire is reliable.

The results found that the coefficient of correlation was (r = 0.90%) for nurses' knowledge; such estimations have been statistically adequate and significant. This is statistically acceptable compared with the standard lower bound of the reliability coefficient, so the questionnaire shows strong positive correlations that indicate good reliability.

Acceptable reliability coefficients for well-established instruments are 0.80 or above. for newly developed instruments, dependability values of 0.70 and above are acceptable.

3.6. Ethical consideration:

Under ethical considerations, this research implemented procedures at several stages to limit the likelihood of unethical difficulties. During the interview with participants and before they signed a consent form, face-to-face used to explain the purpose of the study, ensuring the participants' that the collected data was kept secret and only used for research purposes, in addition,

to ensuring the study subjects can use their right to withdraw at any time they decide to maintain the autonomy concept, the necessity of attendance at lecture time as possible.

Furthermore, the time and place to perform educational sessions are assigned to maintain a proper physical environment to keep the subjects feeling comfortable. Throughout the research procedure, the confidentiality of the study's information and data was maintained during data analysis by employing transcripts and related documents with secure access.

Codes were assigned to each nurse and questionnaire item to preserve the confidentiality of the data, furthermore not including their names in any documents or transcripts of the study. No physical, psychological, social, or economic harm or danger was presented to the participants, a self-report method was used during the data collection process and primarily relied on MCQ invasive techniques not needed. Their personal information was recorded on a separate form from the other documents. After the study's conclusion, all transcripts and related documents were discarded (De Chesnay, M.; 2015, Kim, & t al; 2019).

3.7. Data Collection process:

The study's data collection was carried out from 10th August 2021 to 12th June 2022;

1. Baseline data collection was meeting each nurse staff member to explain the program's objectives for both groups (interventional and control).

2. The subjects filled out a consent form to engage in the study. In addition, participants were informed that they could withdraw from the study at any moment, even after providing informed consent.

3. The interventional group (36) and the control group (36), were submitted to a pretest to identify their knowledge and critical thinking concept.

4. All interventional groups participated in the educational program implemented in a seminar hall at Al-Emam Al-Sadiq Hospitals.

5. All the nursing staff (participants) of both groups (interventional and control) are submitted to the post-test after implementing the educational program session for proximately two weeks to find out the improvement in their knowledge.

The nurses received the questionnaire in hospitals with a simple explanation of the study and the goals. The nurses answer the questionnaire and keep the participants anonymous so that no names would be revealed in the study's writing up for anyone.

The researcher prepared nurses to "conduct" research to improve nurses' knowledge, of this educational program by separating the sample into interventional and control groups. The educational program sessions were introduced to the interventional group only. The program was composed of four main significant sessions.

It has been an intervention for (36) nurses. The pretest was conducted before the intervention of the educational program by the final drafts of the data collection instrument. Each session was designed and scheduled for at least (60-80) minutes for each session, every 8th day dealing with the CT concept. All sessions were introduced in a hospital seminar room. An intervention of the educational program started on 5th April 2022 and until 12th June 2022.

All nurses who participated in interventional and control groups were included in the criteria of study selection and consented to discuss accomplishing the educational program and ensure agreement to participate in the research.

The total number of participants was 45 per group for the control group 5 of the participants did not complete the questionnaire information and 4 of them did not want to complete the study participation. As for the study group, 6 of the participants obtained a passing score of more than 60 and which is within the excluded criteria for the study while 3 of them liked to complete the participation due to special circumstances.

All the participating nurses in the study accepted the steps of program implementation, which are as follows:

1. Obtained demographical and employment characteristics from both the interventional and control groups.

2. The pre-test knowledge was conducted at the same time for the two groups.

3. Intervention of the educational program was designed and introduced through one session weekly.

4. The pot-test knowledge was after the end of the education program conducted.

- **Each session was presented as follows:**

1. Session subject and outline.

2. Session objectives.

3. Session Content.

4. Session feedback.

The researcher used PowerPoint presentations, in addition to other specific session techniques, and plans in a particular combination of brainstorming and audience feedback discussed by the participant (nurse) in each session.

- **General objectives:**

When you finish the educational program for critical thinking nurses will be able to:

1. learn about the concept of critical thinking.

2. Describe the two formulas for critical thinking.

3. Understand the characteristics of a thinker who is characterized by critical thinking.

4. Develop self-insight by developing personal skills.

5. Distinguish the skills of critical thinking.

6. Identify large cognitive and small abilities.

7. Self-regulation and proper management of time.

8. Discusses health problems in an organized manner.

9. Compares emergency health problems with others.

10. Find the right solutions to the problems he faces.

The details and content of each session consist of the following:

1- First session (Morning Shift):

- **Session Title:** The definition of critical thinking and the characteristics of a thinker who has critical thinking.

- **Topics:**

- Introduction.
- Objectives.
- definition of critical thinking
- Characteristics of a thinker who is characterized by critical thinking

- **The lecture aims to:**

Creation of a relationship between the interventional group and the researcher.

1- Providing nurses with information on critical thinking.

2- Highlight the characteristics of a critical-thinking thinker

3- Explain the stages of bloom's pyramid and its association with thinking.

- **Education strategies:**

- Session Duration: 60 minutes.
- Session Time and date: 10:30 – 11:30 A.M, on 5th April 2022
- Location: Seminar Hall at Imam Sadiq Teaching Hospital.
- Presentation methods: Lectures, discussion, computer, and data showing (PowerPoint).

2- First session (Evening Shift):

- Session Duration: 60 minutes.
- Session Time and date: 10:30 – 11:30 A.M, on 26th April 2022
- Location: Seminar Hall at Imam Sadiq Teaching Hospital.
- Presentation methods: Lectures, discussion, computer, and data showing (PowerPoint).

3- Second session (Morning Shift):

- **Title:** Skills included in Critical Thinking: (1) First Dimension: Emotional Strategies consisting of developing an individual's self-insight by developing personal skills

- **Topics:**

- Personal skills at work
- Planning for self-development in a variety of ways and a series.

- **The lecture aims to:**

- Nurses will be able to develop their insight by developing their skills.
- Nurses will apply methods that contribute to self-development.

- **Education strategies:**

- Session Duration: 60 minutes.
- Session Time and date: 10:30 – 11:30 A.M, on 12th April 2022
- Location: Seminar Hall at Imam Sadiq Teaching Hospital.

- Presentation methods: Lectures, discussion, computer, and data showing (PowerPoint).

4- Second session (Evening Shift):

- **Education strategies:**

- Session Duration: 60 minutes.

- Session Time and date: 10:30 – 11:30 A.M, on 3ed May 2022

- Location: Seminar Hall at Imam Sadiq Teaching Hospital.

- Presentation methods: Lectures, discussion, computer, and data showing (PowerPoint).

5- Third session (Morning Shift):

- **Title:** The steps taken by the learner to have critical thinking skills are as follows.

- **Topics:**

- Productive/innovative skills.

- Supra-cognitive thinking skills.

- Information collection and organization skills.

- Information processing and analysis skills.

- Inference skills

- **The lecture aims to:**

- Nurses will learn about the steps a learner can take to have critical thinking skills.

- Nurses identify skills that require the production or innovation of new solutions.

- **Education strategies:**

- Session Duration: 80 minutes.

- Session Time and date: 10:30 – 11:30 A.M, on 19th April 2022

- Location: Seminar Hall at Imam Sadiq Teaching Hospital.

- Presentation methods: Lectures, discussion, computer, and data showing (PowerPoint).

6- Third session (Evening Shift):

- **Education strategies:**

- Session Duration: 80 minutes.

- Session Time and date: 10:30 – 11:30 A.M, on 11th May 2022

- Location: Seminar Hall at Imam Sadiq Teaching Hospital.

- Presentation methods: Lectures, discussion, computer, and data showing (PowerPoint).

7- Fourth session (Morning Shift):

- **Title:** Skills included in critical thinking: (3) Third dimension: strategies for dealing with others and self-regulation.

- **Topics:**

- Personal relationship and communication skills.
- Self-regulation skills.
- Personal leadership skills.
- Time management skills.

- **The lecture aims to:**

- Nurses will be able to develop their insight by developing their skills.
- Nurses will apply methods that contribute to self-development.

- **Education strategies:**

8- Session Duration: 80 minutes.

9- Session Time and date: 10:30 – 11:30 A.M, on 26th April 2022

10- Location: Seminar Hall at Imam Sadiq Teaching Hospital.

11- Methods of presentation: Lectures, discussion, computer, and data showing (PowerPoint).

4- Fourth session (Evening Shift):

- **Education strategies:**

5- Session Duration: 80 minutes.

6- Session Time and date: 10:30 – 11:30 A.M, on 19th May 2022.

7- Location: Seminar Hall at Imam Sadiq Teaching Hospital.

8- Methods of presentation: Lectures, discussion, computer, and data showing (PowerPoint).

These sessions were also concerned with the assessment of all previous sessions:

1. Listening to each participant's experiences.
2. Asking the participants about what they have achieved during the period of the program.
3. Furthermore, the researcher asked the participants their opinion about the whole program sessions.

A study evaluating the acquisition of nurses' knowledge. This process is done by the intervention of a post-test after two weeks of finishing the educational program. Data collection maps for the interventional Group are illustrated in figures (3-1), and figures (3-2) for the control group.

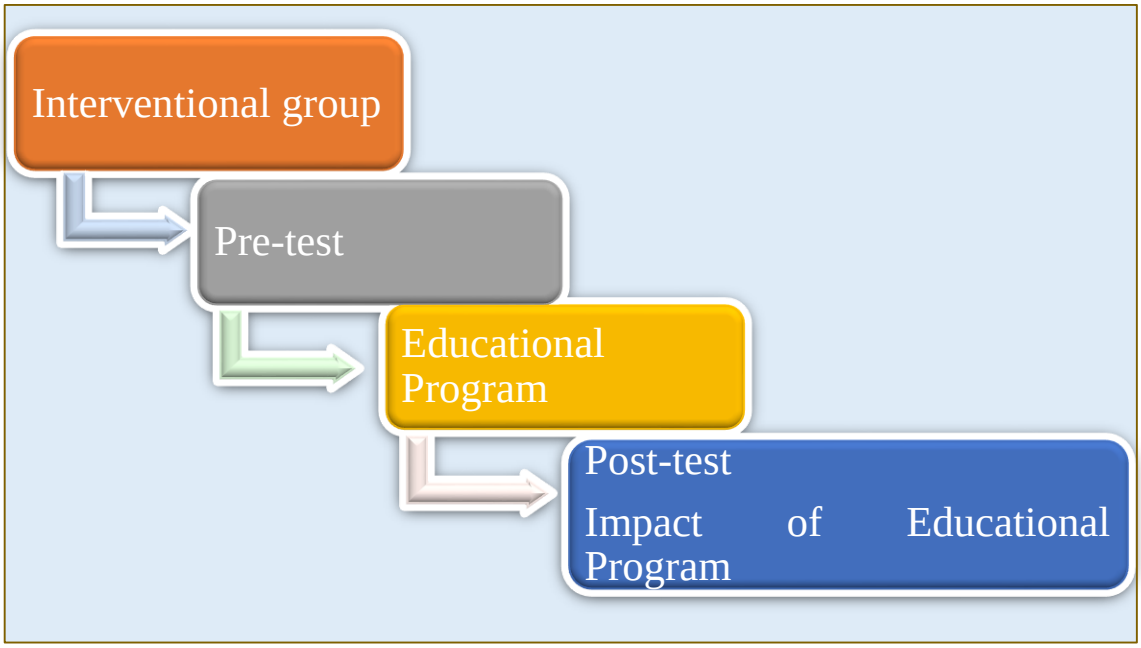


Figure (3-1): Data Collection Maps for Interventional Group.

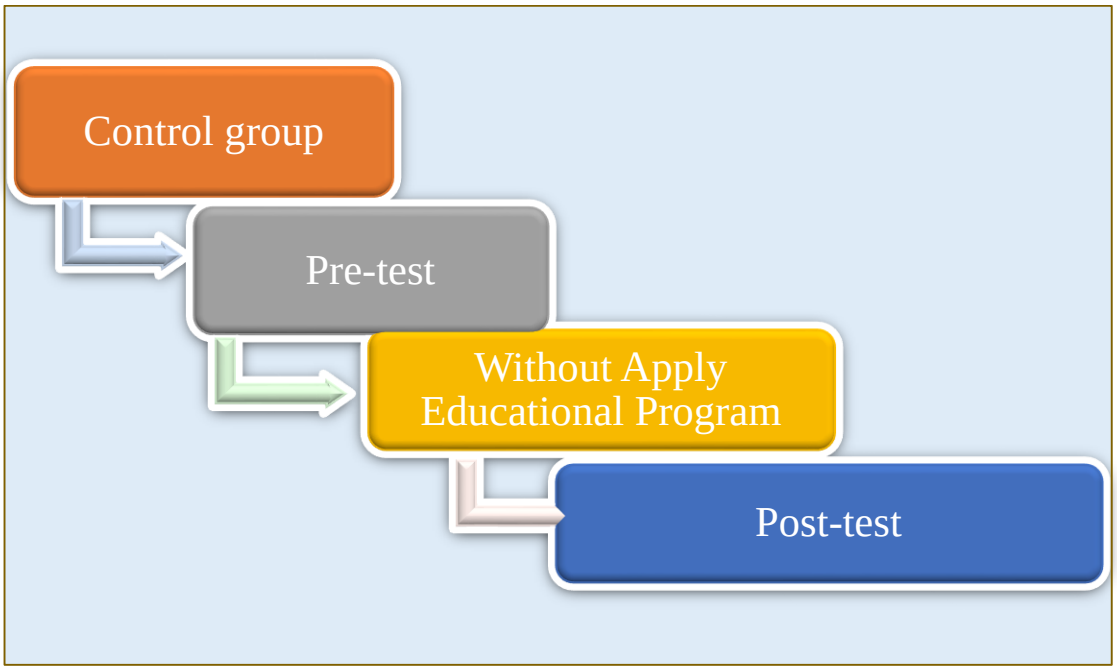


Figure (3-2): Data Collection Maps for Control group.

3.8. Statistical Design that is used to find out the results:

Data were investigated using Statistical Package for Social Science (SPSS) software designed for Windows Version 26. This study was measured by descriptive statistical data analysis (which calculated frequency, percentage, mean, and standard deviation, Chi-square (X2) Value used to compare the nurses' adequate knowledge related to critical thinking, to describe the study participants). Moreover, inferential statistical data analysis (Pearson (*r)* correlation which considers a type of correlation coefficient was used to assess the reliability of this study, T-test, Paired T-test, and Independent T-test) were utilized to explore the homogeneity of characteristics between interventional and control groups at the baseline pretest. The significant differences are divided into high significant differences ($P < 0.01$), significant differences ($0.01 > P > 0.05$), and non-significant differences ($P > 0.05$).

3.8. A. Descriptive Statistical Data Analysis:

This approach was applied through the measurement of the following:

3.8. A.1. Frequencies and percentages: These are used to calculate the description of demographic characteristics.

Percent (%) = $\frac{F}{n}$

Where:

% = percent.

F = frequency. (Healey, 2014)

3.8. A.2. Mean: It is used to estimate the value of the data. [Mean $(\bar{X}) = \frac{\boldsymbol{\Sigma\, Xi}}{\boldsymbol{n}}$]

Where:

3.8. A.3. Mean of scores: It is used to compute the items of nurses' knowledge before and after the educational program.

$$MS = \frac{\sum_{i=1} Fi\ X\ Si}{\sum_{i=1} Fi}$$

3.8. A.4. Standard deviation: The standard deviation (SD) is calculated according to the following formula

$$\textbf{Standard Deviation} = \sqrt{\frac{\sum_{i=1}^{n}(Xi-\bar{X})^{2}}{N-1}}$$

3.8. B. Inferential Statistical Data Analysis: This analysis indicated a significant association. This approach is performed through the application of the following:

3.8. B.1. Chi-square: The Pearson chi-square is computed through the following formula:

$$\text{Chi-square } \chi^2 = \frac{\boldsymbol{\Sigma(O-E)^2}}{\boldsymbol{E}}$$

Where:

χ^2= Chi-square.

Σ= Sigma, the statistical symbol for summation.

O = Observed frequencies.

E = Expected frequencies

3.8. B.2. The t-test is utilized to determine differences and compare (2) means (x a and x b) of the two groups, interventional and control groups. The independent sample t-test has been used for demographic characteristics: age, gender, marital status, and years of experience. Furthermore, the t-test was computed according to the following formula:

$$t\text{-test } (t) = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n1} + \frac{s_2^2}{n2}}}$$

Whereas:

$\bar{X}_1$ = the interventional group mean.

$\bar{X}_2$ = the control group mean.

S^2_1= the interventional group variance.

S^2_2= the control group variance.

n_1 = the experimental group sample.

n_2 = the control group sample.

3.8. B.3. Correlation Coefficient procedures: It was used to deermine the association between socio-demographic characteristics and the nurses' knowledge. The correlation coefficient was computed according to the following formula:

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

Chapter Four Results

Results

In this chapter order to evaluate the effect of educational programs on Nurse's Knowledge about Critical Thinking in Al-Hillah Teaching Hospitals, data were collected from those nurses by using a specific instrument that was prepared, for the mentioned purpose. Many statistical methods were used to find out the outcome and detect if there are significant differences between nurses' knowledge variables after applying an educational program prepared for this reason among the participants.

Table 1: Distribution of Demographic Characteristics of the Study Sample for both Interventional and Control groups.

Items	Rating and intervals	Control group		Interventional Group	
		Frequency	Percent	Frequency	Percent
Age / Years	20-24	15	41.7	9	25.0
	25-29	20	55.6	24	66.7
	30-34	1	2.8	3	8.3
	Total	36	100.0	36	100.0
Gender	Male	8	22.2	12	33.3
	Female	28	77.8	24	66.7
	Total	36	100.0	36	100.0
Marital Status	Single	18	50.0	23	63.9
	Married	18	50.0	13	36.1
	Separated	0	0	0	0
	Divorced	0	0	0	0
	Widow	0	0	0	0
	Total	36	100.0	36	100.0
Years of experience	3or less	32	88.9	24	66.7
	4-6	3	8.3	9	25.0
	7-9	1	2.8	3	8.3
	Total	36	100.0	36	100.0
	Total	36	100.0	36	100.0

This table presents the distribution of demographical data for (72) nurses who agree to participate in the study and are divided into two groups: (36) nurses as the interventional group and (36) nurses as the control group related to age. The table shows that the higher percentage of age 24 (66.7%), and 20 (55.6%) of the interventional and control group were between (24-29) years age group. Concerning gender high percentage of 24 (66.7%), and 28 (77.8%) of both groups were female. The Control group recorded 18 (50%) were married, while the interventional group recorded 23(63.9%) were single. related to years of experience the results shows that the high percentage for both group 32 (88.9%), and 24 (66.7) was 3 or less years.

Table 2: Assessment of Nurses' Knowledge of Critical Thinking Responses Regarding the Interventional and Control Groups.

M.S (mean of score =2), cut-off point (0.5), poor knowledge (M. S 1-1.49). good knowledge (M.S 1.5-2) P= 0.05 (P= probability.

The current table provides the statistical analysis of nurses' knowledge and demonstrates that there were no significant changes in the control group's overall mean (1.453) throughout the Pre-test and the Post-test after four weeks, (1.446) is conducted. While the interventional group's findings of nurses who attended the educational sessions demonstrated that the average compared to their pre-test, (1.503) shows a significant improvement. After they took their Post-Test after were exposed to the educational program.

Table 3: Assessment of Cognitive and Intellectual Dimensions Regarding Interventional and Control Groups.

No	Items	Control			Interventional		
		Pre-test	Post-test	p-value	Pre-test	Post-test	p-value
		Mean ± SD	Mean ± SD		Mean ± SD	Mean ± SD	
1	A nursing instructor needs to evaluate students' abilities to synthesize data and identify relationships between nursing diagnoses. Which learning assignment is best suited for this instructor's needs?	1.17± .378	1.14± .351	0.417	1.17± .378	1.64± .487	0.01
2	When using the critical thinking process, which step may use to identify the problem	1.03± .167	1.03± .167		1.14± .351	1.64± .487	

3	A nurse has seen many cancer patients struggle with pain management because they are afraid of becoming addicted to the meds. By helping patients to correct their beliefs about pain control, the nurse carries out which responsibilities:	1.25± .439	1.25± .439		1.22± .422	1.53± .506	
4	A nurse prepares to insert a Foley. The procedure manual calls for the patient to lie in the dorsal recumbent position. The patient complains of back pain when lying on her back. Despite this, the nurse positions the patient in dorsal recumbent as the manual recommends and begins to insert the foley. this is an example:	1.28± .454	1.28± .454		1.36± .487	1.64± .487	
5	An aspect of clinical decision-making is knowing the patient. Which of the following is the most critical aspect of developing the ability to know the patient?	1.28± .454	1.28± .454		1.14± .351	1.58± .500	
6	A patient who lost her sister 2 weeks ago reported that she has sleeping disturbances, and fatigue, she explains that she loses her ability to concentrate and even solve simple problems. The nurses identify the patient's problem as ineffective coping. This is an example:	1.47± .506	1.42± .500		1.72± .454	1.89± .319	
7	A nurse has been working in a surgical unit for 3 weeks. A patient requires a Foley catheter to	1.19± .401	1.19± .401		1.44± .504	1.69± .467	

	be inserted, so the nurse reads the procedure manual for the institution to review how to insert it. The level of critical thinking the nurse is using is						
8	The nurse asks a patient how she feels about her impending surgery for breast cancer. Before the discussion, the nurse reviewed the description of loss and grief and therapeutic communication principles in his textbook. The critical thinking component involved in the nurse's review of the literature is:	1.39± .494	1.42± .500		1.33± .478	1.50± .507	
9	Which of the following is unique to the commitment level of critical thinking?	1.11± .319	1.17± .378		1.08± .280	1.42± .500	
10	Which statement about the nursing process is correct?	1.69± .467	1.50± .507		1.78± .422	1.75± .439	
		1.286± 0.407	1.268± 0.4151		1.338± 0.412	1.628± 0.469	
		Poor	Poor		Poor	Good	
		36	36		36	36	

M.S (mean of score =2), cut-off point (0.5), poor knowledge (M. S 1-1.49). good knowledge (M.S 1.5-2) P= 0.05, P= probability.

The statistical analysis of the intellectual dimension is shown in this table. The control group's pre-test general mean and SD (1.286±0.407) are

shown in this table, with no discernible change. demonstrates that there were no significant changes in the next Post-test (1.268±0.4151).

whereas the interventional group's results were recorded as a mean and SD (1.338±0.412) in the pre-test, there are noticeable variations in the level of intellectual dimension initially Post-test (1.628±0.469).

Table 4: Assessment of Responses of The Interventional and Control Groups Regarding the Application Domain.

No	Items	Control			Interventional		
		Pre-test	Post-test	p-value	Pre-test	Post-test	p-value
		Mean ± SD	Mean ± SD		Mean ± SD	Mean ± SD	
1	Which of the following demonstrates a nurse utilizing self-reflection to improve clinical decision-making?	1.19± .401	1.19± .401	.091	1.39± .494	1.42± .500	0.04
2	The patient appears to be in no apparent distress, but vital signs taken by assistive personnel reveal an extremely low pulse. The nurse then auscultates an apical pulse and asks the patient whether he has any complaints or a history of	1.14± .351	1.14± .351		1.03± .167	1.58± .500	

	heart problems. The nurse is utilizing which critical thinking skill?						
3	What will be helpful to manage medical unit team members during stressful situations, when everyone feels pressured and gets into more arguments:	1.22± .422	1.19± .401		1.28± .454	1.61± .494	
4	By using known criteria in conducting an assessment such as reviewing with a patient the typical characteristics of pain, a nurse is demonstrating which critical thinking attitude?	1.19± .401	1.19± .401		1.31± .467	1.69± .467	
5	The surgical unit has initiated the use of a pain-rating scale to assess patients' pain severity during their postoperative recovery. The registered nurse (RN) looks at the pain flow sheet to see the pain scores recorded for a patient over the last 24 hours. The use of the pain scale is an example of which intellectual standard?	1.25± .439	1.22± .422		1.39± .494	1.47± .506	

6	During a home health visit, the nurse prepares to instruct a patient on how to perform range-of-motion (ROM) exercises for an injured shoulder. The nurse verifies that the patient took an analgesic 30 minutes before arrival at the patient's home. After discussing the purpose of the exercises and demonstrating each one, the nurse has the patient perform them. After two attempts with only the second of three exercises, the patient stops and says, "These hurt too much. I don't see why I have to do this so many times." The nurse applies the critical thinking attitude of integrity in which of the following actions?	1.44± .504	1.50± .507		1.64± .487	1.69± .467	
General mean and SD		1.238± 0.419	1.238± 0.413		1.34± 0.427	1.576± 0.489	
Evaluation		Poor	Poor		Poor	Good	
N		36	36		36	36	

M.S (mean of score =2), cut-off point (0.5), poor knowledge (M. S 1-1.49). Good knowledge (M.S 1.5-2) P= 0.05 (P= probability.

The current table depicts the statistical analysis related to the Application domain and shows that the general mean (1.23 ±0.41) at the pre-test for the control group recorded poor knowledge of all studied items, as well as the study result at the post-test recorded poor knowledge at all studied items except item number 6. while the finding demonstrates the assessment of the study sample responses at the pre-test for interventional group related application domain. The study results indicate that the intervention group at the pre-test is poor at all studied items, as well as, the study results indicate that the intervention group at the post-test is good at all studied items except, item number 5.

Table 5: Assessment of Responses of The Interventional and Control Groups Regarding the Analysis Domain.

No	Items	Control			Interventional		
		Pre-test	Post-test	p-value	Pre-test	Post-test	p-value
		Mean ± SD	Mean ± SD		Mean ± SD	Mean ± SD	
1	Which of these patient scenarios is most indicative of critical thinking?	1.39± .494	1.42± .500		1.56± .504	1.69± .467	
2	A nurse just started working in a well-baby clinic. One of her recent experiences was to help a mother learn	1.36± .487	1.33± .478	0.288	1.19± .401	1.53± .506	0.03

	the steps of breastfeeding. During the first clinic visit, the mother had difficulty positioning the baby during feeding. The nurse considers what affected the inability of the mother to breastfeed, including the mother's obesity and inexperience. The nurse's review of the situation is called						
3	A nurse enters a 72-year-old patient's home and begins to observe her behaviors and examine her physical condition. The nurse learns that the patient lives alone and notices bruising on the patient's leg. When watching the patient walk, the nurse notes that she has an unsteady gait and leans to one side. The patient	1.14± .351	1.17± .378		1.22± .422	1.67± .478	

	admits to having fallen in the past. The nurse identifies the patient as having the nursing diagnosis of Risk for Falls. This scenario is an example of:						
4	A patient in a surgical unit develops sudden shortness of breath and a drop in blood pressure. The staff responds, but the patient dies 30 minutes later. The manager of the nursing unit calls the staff involved in the emergency response together. The staff discusses what occurred over the 30-minute time frame, the actions taken, and whether other steps should have been implemented. The nurses in this situation :are	1.14± .351	1.17± .378		1.08± .280	1.61± .494	
5	In a patient with I.V.	1.31±	1.28±		1.22±	1.67±	

	fluid, the rate flow is noted as correct, because of the cannula, the nurse assesses the site of the cannula, and repositions the patient arm so the infusion continues to flow easily. This is a type of:	.467	.454		.422	.478	
6	A nurse has worked in an oncology unit for 3 years. One patient has become visibly weaker and states, "I feel funny." The nurse knows how patients often have behavior changes before developing sepsis when they have cancer. The nurse asks the patient questions to assess their thinking skills and notices the patient shivering. The nurse goes to the phone, calls the physician, and begins	1.17± .378	1.17± .378		1.22± .422	1.58± .500	

	the conversation by saying, "I believe that your patient is developing sepsis. I want to report symptoms I'm seeing." What examples of critical thinking concepts does the nurse show? (Select all that apply.						
7	A patient had hip surgery 16 hours ago. During the previous shift, the patient had 40 mL of drainage in the surgical drainage collection device for 8 hours. The nurse refers to the written plan of care, noting that the health care provider is to be notified when drainage in the device exceeds 100 mL for the day. On entering the room, the nurse looks at the device and carefully notes the	1.44± .504	1.42± .500		1.39± .494	1.81± .401	

	amount of drainage currently in it. This is :an example						
General mean and SD		1.278± 0.433	1.28± 0.438		1.268± 0.420	1.651± 0.474	
Evaluation		Poor	Poor		Poor	Good	
N		36	36		36	36	

M.S (mean of score =2), cut-off point (0.5), poor knowledge (M. S 1-1.49). good knowledge (M.S 1.5-2) P= 0.05 (P= probability.

The current table depicts the statistical analysis related to the analysis domain and shows that the general mean (1.27±0.43) at the pre-test and post-test for the control group recorded poor knowledge of all studied items. while the Findings demonstrated assessment of the study sample responses at the pre-test for the intervention group-related analysis domain. The study results indicate that the intervention group at the pre-test are poor at all studied items except, item number (1) the responses were good knowledge, as well as, the study results indicate that the intervention group at the post-test is good at all studied items.

Table 6: Assessment of Responses for The Interventional and Control Groups Regarding the Ethical Domain.

No	Items	Control			Interventional		
		Pre-test	Post-test	p-value	Pre-test	Post-test	p-value
		Mean ± SD	Mean ± SD		Mean ± SD	Mean ± SD	
1	All of these are Principles of Medical Ethics EXCEPT:	1.19± .401	1.19± .401		1.17± .378	1.58± .500	
2	Actions that can be taken to help prevent or remove harm or to simply improve the situation of others" are	1.22± .422	1.25± .439	0.670	1.08± .280	1.58± .500	0.03
3	The Virtues are habits formed by all of the following EXCEPT:	1.00± .000	1.03± .167		1.25± .439	1.61± .494	
4	All of these are true about the non-maleficence principle EXCEPT:	1.11± .319	1.14± .351		1.08± .280	1.72± .454	
5	Sometimes, there are good reasons for overriding the truth-telling principle. Such as:	1.28± .454	1.17± .378		1.19± .401	1.67± .478	
6	Physicians do have an obligation to:	1.61± .494	1.61± .494		1.75± .439	1.89± .319	
7	Stopping a medication that is shown to be harmful is an example of the:	1.42± .500	1.72± .454		1.92± .280	1.97± .167	
8	When there are two different ideas, it is important in resolving	1.50± .507	1.58± .500		1.94± .232	1.89± .319	

	the conflict to choose:						
9	"The capacity to think, decide and act on the bases of thought and decision freely & independently (without let or hindrance)" best describes:	1.25± .439	1.25± .439		1.67± .478	1.58± .500	
10	Practical Obstacles to the Practice of Confidentiality include:	1.50± .507	1.36± .487		1.61± .494	1.86± .351	
11	Double effect in medical ethics is usually regarded as the combined effect of:	1.19± .401	1.28± .454		1.36± .487	1.61± .494	
12	A nursing instructor is teaching nursing students about principles of ethics in health care, and she tells them that the utmost important principle to observe while taking care of the patient is no harm. The principle of ethics she described here:	1.42± .500	1.39± .494		1.28± .454	1.75± .439	
General mean and SD		1.307± 0.412	1.330± 0.421		1.441± 0.386	1.725± 0.417	
Evaluation		Poor	Poor		Poor	Good	
No		36	36		36	36	

M.S (mean of score =2), cut-off point (0.5), poor knowledge (M. S 1-1.49). Good knowledge (M.S 1.5-2) P= 0.05 (P= probability.

Findings demonstrated assessment of the study sample responses related to an ethical domain at the pre-test for the control group. The study results

indicate that the control group at the pre-test are poor at all studied items except, items number (6and 7) the responses were good knowledge, as well as, the result at thepost-test recorded poor knowledge of all items except items (6,7, and 8).

While Findings demonstrated assessment of the study sample responses at the pre-test for intervention group-related ethical domain. The study results indicate that the intervention group at the pre-test are poor at all studied items except items number (39,40,41,42and 43) the responses were good knowledge as well as the study results indicate that the intervention group at the post-test are good at all studied items.

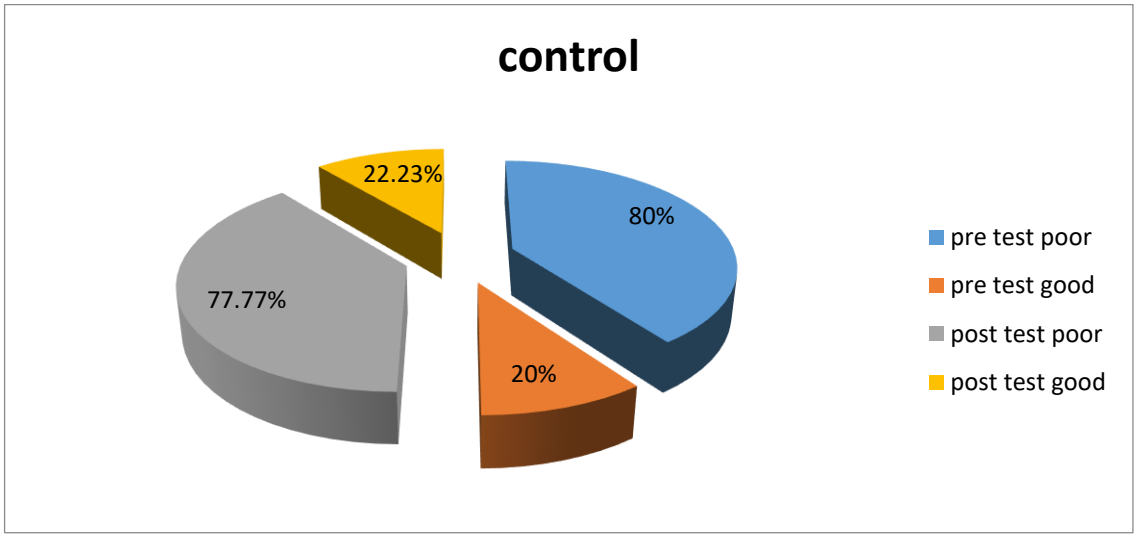


Figure 4.1: Overall Assessment of the Study Sample Responses at pre and Post-test for the Control Group.

Findings illustrated that the majority of the control group responses at the pre-test are poor knowledge with a statistical mean equal to (1.3125), and recorded the majority of the control group responses at the post-test are poor knowledge with a statistical mean equal to (1.3124).

Table 7: Difference between Pretest and Post-test Nurses' Knowledge of the Control Group.

Period	Paired T-test						
	Mean	N	Std. Deviation	d.f.	T	p.value	Significance
Pre-test	1.3216	36	0.8374	35	.000	1.000	NS
Post-test	1.3251	36	0.8817				

Std. = standard deviation; T = T. test; D.F = degree of freedom; NS = None significant. P.=probability.

Findings illustrated that there is no significant difference between the control group's overall responses in two periods of measurements (pretest and post-test) at a p-value of more than 0.05, concerning the statistical mean, the study results indicate that there is no improvement in the nurses' knowledge at the pre-test compared with post-test scores.

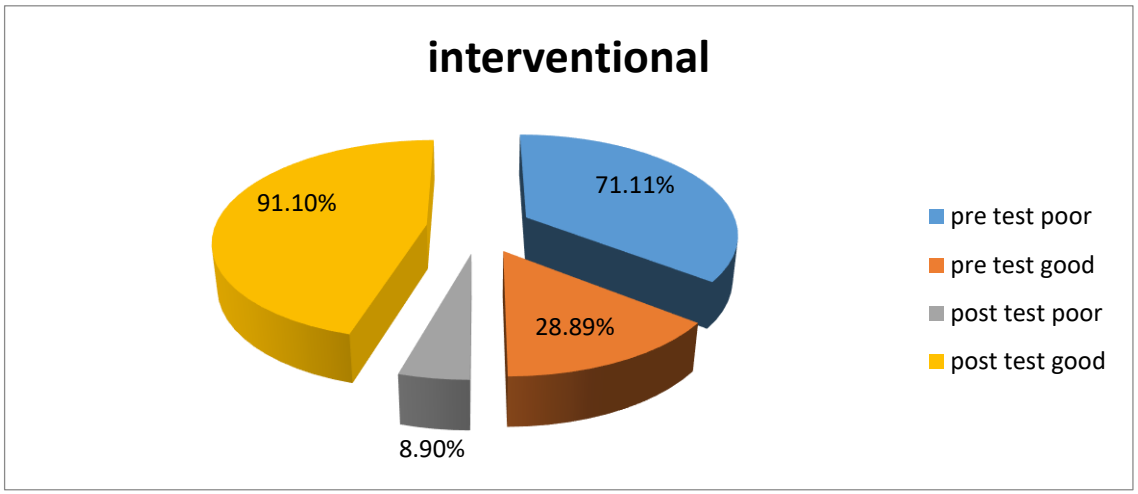


Figure 4.2: Overall Evaluation of The Study Sample Responses at Pre and Post-test for Intervention Group.

Findings illustrated that the majority of the intervention group responses at the pre-test are poor knowledge with a statistical mean equal to 1.378. and indicated that the majority of the intervention group responses at the post-test are good knowledge with a statistical mean equal to 1.654.

Table 8: Difference between pre-test and Post-Test Nurses' knowledge regarding critical thinking for an Interventional group.

Period	**Paired T-test**						
	Mean	N	SD	d.f.	T	p.value	Evaluation
Pre-test	1.392	36	0.0523	35	8.223	.000	HS
Post-test	1.665	36	0.1840				

Std. = standard deviation; T = T. test; D.F = degree of freedom; HS = High significant. p.=probability

This table shows that there is a high -significant difference between the pre-test and post-test for the interventional group at a p-value less than 0.05, Concerning the statistical mean the study results indicate that there is an improvement in the intervention group responses after the application of the program compared with the control group.

Table 9: Difference between Post-test Nurses' Knowledge of The Interventional and Control Group.

Group	Independent T-test						
	Mean	N	Std. Deviation	d.f.	p.value	t	Evaluation
Interventional	1.528	36	8.284	70	.000	10.107	HS
Control	1.321	36	3.968				

Std. = standard deviation; T = T. test; D.F = degree of freedom; HS = High significant. p.=probability.

This table shows the comparison between responses of the control group and interventional group to the post-test, there are highly significant differences between responses of the control group and interventional group (P value =.000).

Table 10: Relationship between Nurses' Knowledge Post-Test and Their Demographic Data.

Demographic data	Control				Intervention			
	Chi-square Value	**d.f.**	**P-Value**	**Ass**	**Chi-square Value**	**d.f.**	**P-Value**	**Ass**
Age	26.860	26	.417	N. S	32.750	34	.529	N. S
Gender	19.800	13	.051	N. S	17.667	17	.410	N. S
Marital status	8.400	13	.817	N. S	19.023	17	.633	N. S
Years of experience	**23.187**	**26**	**.056**	**S**	37.683	34	.051	**S**

Std. = standard deviation; T = T. test; D.F = degree of freedom; NS = None significant.

P.=probability.

Findings show that there is a non-significant relationship between the intervention group knowledge (pre-test) and their demographic data at a p-value more than 0.05 except for years of experience at a p-value equal to 0.05.

Chapter Five

Discussion

Discussion

This study finds out the critical thinking effect on the knowledge of nurses. The results are discussed in the following parts:

Part I: Table (4.1): Demographic in addition to Employment Characteristics of the Study Sample for both Interventional and Control groups.

The present study began by seeking an understanding of whom the participants are, and the demographical and employment characteristics of (72) nurses divided into interventional and control groups.

The present study confirmed the study's findings including the majority of nurses of both groups were in middle adulthood, The majority of the participants in the interventional and control group were female nurses, fifty percent of participant of the control group were married and sixty-three from the interventional group were single. Related to years of experience the results show that the high percentage in both groups were with 3 years or less.

Heidari and Shahbazi1 (2016) conducted a study entitled " Effect of training problem-solving skill on decision-making and critical thinking of personnel at medical emergencies ", and reported that all of the participants in this study were male nurses, the age ranged between 23 and 51 years, their minimum and maximum job experience was between (1-29) years.

Part II: Discussion of nurses' Knowledge related to critical thinking concepts.

Critical thinking has been identified as a vital element of evidence-based practice; the development of critical thinking prepares nurses in achieving the new EBP competencies for practicing nurses. It is an essential component in nursing practice for providing safe, competent care and is of particular relevance in the current healthcare context, furthermore, the need to implement EBP that will serve to help in the design of patient-centered care plans is a

factor contributing to increased attention on critical thinking as an educational and professional subject that is indispensable in current nursing. From this, the ability of the nursing profession to improve the quality of care depends in large measure on developing critical thinking skills, especially to improve diagnostic accuracy and to be able to contribute favorably to more positive results in the health of the patient (Zuriguel-Pérez, et al., 2017).

These findings were consistent go with a study carried out by Tang et al. (2020), who conducted their study on clinical nurses in China and revealed a statistically significant improvement regarding critical thinking disposition dimensions and total critical thinking disposition.

The consideration of knowledge is an essential component of critical decisions and is a key component of the quality of clinical decision-making When comparing the pre-test and post-test of the study sample (interventional and control), the findings show that the pre-test recorded low a level, while post-test recorded significant change for the interventional group which indicated strongly the effectiveness of the educational program content which presented for participants during the data collection period. The pre-test and post-test scores were compared immediately after implementing the educational program.

These findings show the strong relationship between basic knowledge as the first step in Bloom's Taxonomy and their ongoing process of understanding, decision-making, and analysis which prepare the nurses to face any situation during their daily care.

A. Table (4.2): Interventional and Control Groups Responses for Knowledge Domain:

According to the data analysis, the results of the current study have proven that there is a difference found in the statistical analysis of nurses' knowledge demonstrating that there were no significant changes in the control group's overall mean (1.453) throughout their pre-test when compared with

their post-test which collected after four weeks, (1.446) is conducted. While the findings of the interventional group members who attended the educational sessions demonstrated the average mean (1.503) in their pre-test, a significant improvement in clearly recognized in their mean score of the post-test (1.692).

Due to the vulnerability of the population for which nurses are caring, researching the patient safety knowledge, understanding, and behaviors of our new graduate nurses will benefit the nursing profession as a whole as it will allow for the strengthening of any areas of deficit, or reinforcement of an enhancement in other areas. It may also provide a basis for universities' patient safety curricula. Exploring NGRNs (newly graduated registered nurses) knowledge of medical errors and patient safety during their transition may influence the current trends in nursing as we push toward safer and more positive patient outcomes (Murray, et al., 2018).

Durmaz Edeer & Dicle, (2015) stated that "proficiency in thinking skills is an essential requirement of today's nurses who are having to make knowledgeable, confident, and effective decisions regarding health in a complex and changing environment".

Alternatively, the results further confirmed that well-implemented educational programs may effectively promote positive nurses' knowledge. which compared the impact of critical thinking on nurses' knowledge, and suggests that nurses' performance may be improved by applying great effort to increase their confidence (Alamrani, et al., 2018).

The present findings are consistent with a study published in (2022), which directed to study the Effect of a Self-Learning Package on Critical Thinking on Intern-Nurses' Knowledge, Disposition, and Skills, the results revealed general improvement in the intern nurses' critical thinking total knowledge level throughout the post and follow-up phases after three months of the program implementation from the pre-program phase. The highest percentage of the study and control group had an adequate total knowledge

level in the immediate post and follow-up program but the improvement in the study group was better and more than in the control group. Additionally, there were highly statistically significant improvements in the study group's knowledge regarding critical thinking concepts, critical thinking disposition, and skills in the immediate post-program and slightly declined in the follow-up program but still more than pre-program (Towfik, et al., 2022).

In addition, this result could be explained in light of total critical thinking disposition improvement. Indeed, the critical thinking disposition dimensions were interdependent and total critical thinking disposition, and vice versa. Also, with the improvement of intern-nurses critical thinking knowledge, critical thinking disposition improved. Also, the control group received a traditional learning experience and this resulted in an improvement in their knowledge regarding critical thinking and a subsequent increase in their critical thinking disposition (Towfik, et al., 2022).

B. Table (4.3): Interventional and Control Groups Responses for cognitive and intellectual Domain:

According to this study's findings, an intellectual dimension analysis is shown in this table. The control group's pre-test general mean and SD (1.286±0.407) are shown in this table, with no discernible change. demonstrates that there were no significant changes in the next post-test (1.268±0.4151).

Whereas the interventional group's results were recorded as a mean and SD (1.338±0.412) in the pre-test, there are noticeable variations in the level of intellectual dimension initially post-test (1.628±0.469).

Bloom's taxonomy differentiates cognitive skill levels and clarifies objectives that require higher levels of cognitive skills, the six levels, in the order of increasing cognitive skills, are remembering, understanding, applying, analyzing, evaluating, and creating. The lower levels represent recall and recognizing (remembering), summarizing (understanding), and implementing

(applying). Differentiating and organizing (analyzing), critiquing (evaluating), and producing (creating) make up the higher-level thinking skills (Hanshaw, et al., 2020).

This result goes in the same line as Nascimento, and his colleagues (2021), regarding the development of clinical competence in nursing in simulation: the perspective of Bloom's taxonomy, a total of 871 studies were identified; four composed the sample. The development of clinical competence occurred through the coordination of knowledge, skills, and attitudes. To develop the cognitive domain, the objectives of knowledge and comprehension of Bloom's taxonomy were mobilized. The psychomotor domain required the development of the skills demanded by the proposed clinical care. The affective domain was developed through will and motivation to learn.

While; Drexler (2020) described the project evaluated changes in participants' knowledge of performance improvement methodology and attitudes and perceptions of shared governance, nurses to be problem solvers within an evidence-based framework, increasing effectiveness and outcomes, involving staff nurses in the development and evaluation of policies and procedures: improved by 18% (36% pre-intervention; 54% post-intervention) and involving staff nurses in the development of staff-level professional and educational programs: when calculating the percentage of improvement its recorded 60% (pre-intervention 18%, and 78% post-intervention), while staff nurses having access to nursing department goals and objectives improvement calculated as 17% (45% pre-intervention; 62% post-intervention).

Riegel et al., 2018; revealed that professional nurses must be qualified for nursing practice based on scientific and intellectual rigor and based on ethical principles, being able to know and intervene in the most prevalent health-disease problems or situations in the national epidemiological profile, with emphasis on the region of performance, identifying the bio-psycho-social dimensions of its determinants. Consequently, the nurse must be able to act

with social responsibility and commitment to citizenship, promoting the integral health of humans.

When reviewing these studies, we can recognize the importance of the holistic nursing model which makes nurses perform their practice under high recognition of the legal and ethical issues plus the professionality in the practices of this model allows them to carry out their responsibility toward individuals family members, and community.

C. Table (4.4): Interventional and Control Groups Responses for the application domain:

The current study depicts the statistical analysis related to the application domain and shows that the general mean (1.23 ±0.41) at the pre-test for the control group recorded poor knowledge of all studied items, as well as the study result at the post-test recorded poor knowledge at all studied items except item number 6. while the finding demonstrates the assessment of the study sample responses at the pre-test for interventional group related application domain. The study results indicate that the intervention group at the pre-test is poor at all studied items, as well as, the study results indicate that the intervention group at the post-test is good at all studied items except, item number 5.

In general, scores between post-test after the educational intervention; the mean of the score for the pre-test was (1.34± 0.427), in post-test was (1.576± 0.489) indicating, that to match the outcomes of the pre-test and post-test (directly following the educational intervention), table (4-5).

This result was in agreement with Farmer, et al., (2021), who conducted a study entitled Questioning Aid for Rich, Real-Time Discussion (QARRD): A Tool to Improve Critical Thinking in Clinical Settings, reported that the majority (71%) of preworkshop prompts were lower-order thinking skills (remembering/understanding). After the workshop, the complexity of

participants' discussion prompts increased significantly. Most postworkshop prompts (69%) reflected higher-level thinking skills (apply/analyze/evaluate/create). Many participants reported that, despite previously knowing about Bloom's taxonomy, they need to implement this framework in clinical instruction.

Nursing competence assessed during clinical practice focused on clinical competence in nursing, communication, ethical decision-making, collaboration, and critical thinking, nursing competence is not the only learning outcome that is being assessed during clinical practice. Nurses also need to develop critical thinking, ethical decision-making, and multi-professional collaboration (Immonen, et al., 2019).

Critical thinking skills applied during the nursing process provide a decision-making framework to develop and guide a plan of care for the patient incorporating evidence-based practice concepts. This concept of precision education to tailor care based on an individual's unique cultural, spiritual, and physical needs, rather than a error-by-altri, one size fits all approach results in a more favorable outcome (Toney-Butler, et al., 2018).

Sutriyanti, et al., (2019). Conducted a study aimed to apply the critical thinking model of nurses in carrying out nursing care to assess, diagnose, intervene, implement, and evaluate nursing. The research method was used similarly in the control group with pre and post-test designs. The intervention was training about knowledge and applying critical thinking models in implementing nursing care for patients for five days. The sample was 30 nurses who provide directed care for patients undergoing surgical intervention. The data was analyzed using a dependent test and multiple linear regression. The results showed there was a significant difference between the nurse's knowledge before and after being trained (p-value 0.001) whereas there was a significant difference between the application for nurses and their critical thinking ability when caring for patients before and after being trained (p-value

0.004). A slight difference was found in the diagnosis, nursing intervention, and evaluation. The characteristics of nurses that can influence the knowledge of nurses are about 0.59% and which can affect the application of about 15.2%, the rest is influenced by other factors. Nurses who are trained can improve their critical thinking skills by 14.95. The application of critical thinking skills models can improve nursing care for post-operative patients.

The study also found a significant relationship between nurses' critical thinking on the implementation of documentation of integrated patient development records (p=0.003). The use of integrated documentation records for nurses is proof that nurses can think critically understand and can fulfill obligations in the implementation of care, where nurses ensure effective service throughout the patient care room. Nurses who think critically can perform nursing care well when compared to nurses who lack critical thinking, nurses who can think critically consistently can produce useful insights and are the basis of rational thinking (Deniati et al., 2018).

For this reason, nursing practices require skills moved by reason, mental habits, and emotional aspects that involve human relations facing the need to make immediate clinical decisions, affecting the quality of the provided care.

D. Table (4.5): Interventional and Control Groups Responses for analysis domain:

The study found statistically significant changes in the analysis domain in the interventional group based on their nurses' knowledge of the post-test and pre-test. Meanwhile, no significant variations between the post-test and pre-test in the control group's analysis domain based on nurses' knowledge.

The statistical analysis related to the analysis domain shows that the general mean (1.27±0.43) at the pre-test and post-test for the control group recorded poor knowledge of all studied items. While the Findings demonstrated

assessment of the study sample responses at the pre-test for theintervention group-related analysis domain. The study results indicate that the intervention group at the pre-test are poor at all studied items except, item number (1) the responses were good knowledge, as well as, the study results indicate that the intervention group at the post-test is good at all studied items.

Concerning nurses' knowledge regarding analysis skills, the result of the present study revealed a highly statistically significant improvement in analysis skills to improve problem-solving through practice. This might be due to nurses being excited to know about problem-solving skills and they were able to acquire knowledge easily. Moreover, the program was effective as it influenced and increased their knowledge related to critical thinking concepts, identifying and analyzing the problem implementing and evaluating the solution.

The skills of nurses in the 21st century enable effective and safe care in a complex relationship between critical thinking and the current health system. Critical thinking is targeted and analytical thinking which is necessary for clinical decision-making processes in nursing, concept relating to critical thinking is problem-solving (Hung, Tang & Ko 2015).

These findings were similar to Altas, G. (2020). Conducted a study about; The Relationship between Critical Thinking Disposition and Problem-Solving Skills in Nurses. The results it was determined that the total mean score of Critical Thinking Disposition nurses was 195.77±25,70, average total problem-solving skills scores were 111.76±16.52. It was determined that there was a significantly moderate relationship between the nurses' critical thinking disposition and their problem-solving skills (r=0.414, p 0.05).

From this point of view, the nursing process considers a problem-solving approach that allows the nurses to identify the client's needs according to data analysis, putting a plan and intervention need judgment and decision-making

this kind of performance needs a critical thinking process to provide the clients with proper care which produce a positive outcome and client's satisfaction.

E. Table (4.6): Interventional and Control Groups Responses for the ethical domain:

Nursing practice is surrounded by legal and ethical aspects. The legal and ethical context of care focuses concern on the rights of patients and the quality of care they receive. Hence knowledge of the legal and ethical aspects is now regarded as an important component of nursing practice.

Findings demonstrated assessment of this study sample response related to an ethical domain at the pre-test for the control group. The study results indicate that the control group at the pre-test are poor at all studied items except, items number (6and 7) the responses were good knowledge, as well as, the result at thepost-test recorded poor knowledge of all items except items (6,7, and 8).

While the findings demonstrated that the assessment of the study sample responses at the pre-test for intervention group-related ethical domain, was poor for all items (12) except items number (39,40,41,42and 43) the responses which recorded good knowledge, as well as the results, indicate that the intervention group members show good responses in their post-test.

Dias, A. M. (2022). A quantitative, non-experimental survey approach was used, for knowledge regarding legal and ethical aspects of patient care among registered nurses, the findings revealed that 64% of registered nurses had good knowledge regarding ethical aspects, 34.5% had average knowledge, and 1.5% had poor knowledge. No significant association was found between the level of knowledge and demographical variables. Study findings revealed the need to raise awareness of legal and ethical aspects of patient care among registered nurses and to improve their critical thinking ability and decision-making during legal and ethical issues. In-service education should be provided

for registered nurses to raise awareness of legal and ethical aspects related to patient care.

Jia, and his colleagues (2021). conducted a study about; Nurses' ethical challenges in caring for people with COVID-19: a qualitative study. The findings revealed three main themes and 10 categories. The themes were the following: (1) ethical challenges (people with COVID-19, inequality, professional ethics, and job competency); (2) coping styles (active control and planning, seeking support as well as catharsis, and staying focused); and (3) impacts on career (specialized nursing skills, scientific research ability, and management skills). The nursing ethics component; concur completely with the current study's findings, which revealed that in data collection (1), the -highest scored self-assessed components were "direct clinical practice" (mean = 6.93) and the lowest in "ethical decision-making" (mean = 5.8In. In data collection (2), the highest scored component was "direct clinical practice" (mean = 6.81) the and lowest in "clinical leadership" (mean = 5.48). In data collection (3), the need for further training had increased when compared with data collection (2) in the following three components: "professional development," "ethical decision-making" and "critical thinking." The highest scores were found in "direct clinical practice" (mean = 6.40) and the lowest in "cooperation and consultation" (mean = 4.66). At data collection 4, all mean scores for the need for further training had decreased; however, the highest mean scores were still found in the component "direct clinical practice" (mean = 4.30) and the lowest in "clinical leadership" (mean = 2.87). The lowest self-assessed mean scores in the data collections in the B scale need for further training was in the component "ethical decision-making" (mean = 5.85, SD = 1.88) in data collection 1. The lowest score was "clinical leadership" (mean = 5.48, SD = 1.06) in data collection 2 and the lowest score "cooperation and consultation" (mean = 4.66, SD = 2.36) in data collection 3 and "clinical leadership" (mean = 2.87, SD = 1.89) in data collection 4.

Immonen, et al., 2019; achieved similar results to the current study findings they found that nursing competence is not the learning outcome that is being assessed during clinical practice, but it's extended the need to develop critical thinking, ethical making-decision, and multi-professional collaboration.

Part III: Table (4.7): Overall Assessment of the Study Sample Responses at Pre and Post-test for Control Group:

Findings illustrated that the majority of the control group responses at the pre-test are poor knowledge with a statistical mean equal to (1.3125), and recorded the majority of the control group responses at the post-test are poor knowledge with a statistical mean equal to (1.3124).

Study Effects of ASQ (Annotation, Summarizing, and Questioning)-based on flipped learning on nurse practitioner learners' nursing skills, learning achievement, and learning perceptions, an experiment was conducted to evaluate the effects of the proposed approach on nursing skills, self-efficacy, cognitive load, and critical thinking tendency. The experimental results showed that the approach not only improved nurse practitioners (NPs') nursing skills but also significantly increased their self-efficacy and critical thinking tendency (Lin, et al., 2019).

The concept of critical thinking for nursing to solve complex clinical problems and provides quality patient care, critical thinking (CT) is described as a purposeful, self-regulatory judgment that makes use of a cognitive technique to interpret, analyze, evaluate, and derive meaning through reasoning.

Part IV: Table (4.8): Difference between pretest and post-test nurses' knowledge of the control group:

Findings illustrated that there is no significant difference between the control group's overall responses in two periods of measurements (pre-test and post-test) at a p-value of more than 0.05, concerning the statistical mean, the

study results indicate that there is no improvement in the nurses' knowledge at the pre-test compared with post-test scores.

<u>Part V:</u> Table (4.9): Overall Evaluation of the Study Sample nurses' knowledge at pre and Post-test for theInterventional Group:

The impact of the educational interventional program concerning critical thinking was to evaluate nurses' knowledge. According to the findings, the majority of nurses in the interventional group had a poor evaluation of knowledge regarding critical thinking in the pre-test, with significant variances between the post-test and pre-test in comparison based on their educational achievement.

After the intervention, the mean scores of critical thinking were the majority of the interventional group responses at the pre-test are poor knowledge with a statistical mean equal to (1.378) and indicated that the majority of the intervention group responses at the post-test are good knowledge with a statistical mean equal to (1.654).

When comparing the present findings to an earlier study carried out by Van Nguyen, and his colleagues (2021). Select a cross-sectional study, the total sample included 420 professional nurses. Most of the participants reported a low (48.3%) or moderate (45.5%) level of critical thinking. Although critical thinking is a relatively new issue in Vietnamese professional nurses, it is not a brand-new concept. Certain elements have been included in the nursing curriculum and clinical practice (e.g., the nursing process, problem-based learning, andevidence-based practice). Therefore, up to 66.7% of participants had never heard the term "critical thinking," but 45.5% still reported a moderate level when measured using the N-CT-4 Practice (V-v).

Part VI: Table (4.9): Discuss the Difference between pretest and post-test regarding nurses' knowledge for an Interventional group:

Nurses' retained knowledge and skills, particularly in safety and critical thinking, directly impact performance at the bedside. In the classroom, new graduate nurses share that the opportunity to learn in a non-threatening and engaging way provides them with opportunities to become more dynamic learners and embrace new learning experiences. At the bedside, both novice and experienced nurses appreciate the opportunity to learn through time-sensitive rounding huddles, product reviews, and engaging clinical practice updates that advance their knowledge and understanding, developing unique, creative, and engaging content that builds upon previous experience is key to captivating the attention and improving knowledge retention of adult learners. Considering the different learning styles, this article presents diverse active and experiential learning strategies that can be replicated in healthcare practice settings to improve nurses' skills and ensure high-quality patient care (Ward, L. A., 2022).

The study found significant variances between the pre-test and post-test in the interventional group, and there is a high -significant changes at a p-value less than 0.05, concerning the statistical mean the study results indicate that there is an improvement in the intervention group responses after the application of the program compared with the control group

In response to the significant demand for nurses' knowledge regarding critical thinking, there was a poor evaluation related to the main domain of critical thinking concept before the intervention.

These findings are consistent with a cross-sectional study conducted on 120 medical-surgical and ICU nurses (60 per group). Data were collected using the California Critical Thinking Skills Test. The mean critical thinking score was 8.68 ± 2.84 in the ICU nurses and 9.12 ± 2.99 in the medical-surgical

nurses. No significant differences were found between the two groups in terms of the critical thinking score and the scores of their domains. The regression analysis results showed that demographic variables explain only 8% of the variations in critical thinking scores, as only gender explains nurses' critical thinking scores. The results revealed poor critical thinking scores in the nurses working in medical-surgical wards. Investigating the reasons for the poor scores obtained and using educational strategies such as PBL, conceptual map, and participation in interdisciplinary rounds (Ali-Abadi, et al., 2020).

Part VII: Table (4.10): Paired t-test of the Nurses' knowledge in Pre and Post Application of the Critical Thinking Educational Program:

When comparing the pre-test and post-test after the educational intervention, there was a substantial improvement in nurse knowledge of critical thinking. Specifically, the results showed that the mean score improved in response from (1.5028) to (1.6917) a good evaluation regarding the knowledge domain, (13.3889) to (16.2778) regarding the Cognitive and Intellectual Domain, (1.3380) to (1.5787) for the application domain, and (1.2698) to (1.6508) for analysis domain, moreover; ethical domain result pre-test (1.4421) to (1.7269) post-test following the educational intervention, as measured by the pre-test and post-test.

The majority of the interventional participants, findings illustrated there is a high-significant difference between the intervention group’s overall responses in two periods of measurements (pre-test and post-test) at a p-value less than 0.01, concerning the statistical mean, the study results indicate that there is an improvement in the nurse’s knowledge at the post-test compared with pretest scores.

The findings of this study were compatible with another finding done by Urhan, et al., 2021). About critical thinking among clinical nurses and related factors: a cross-sectional study at five public hospitals. Data were collected

from 559 nurses through a survey consisting of a data form and the Turkish version of the Nursing Critical Thinking in Clinical Practice Questionnaire. Results reported that nurses' mean critical thinking scores were moderate level, andtotal critical thinking scores of the clinical nurses significantly differed according to education, hospital type, shift work, professional category, and role. There was a significant effect on the total critical thinking scores of the clinical nurses according to variables.

Other nursing studies supported the impact of the educational program to improve the knowledge of nurses, one of these studies conducted in Korea State by Kim and others in 2012, showed a significant improvement over the pre-test in nurses' knowledge in about 89% of the sample size after conducting an educational program (Kim et al., 2012).

A vast number of studies have found that education has a positive impact on the level of critical thinking (Chang et al., 2011; Gloudemans et al., 2013; Ludin, 2018; Yildirim et al., 2012; Zuriguel-Pérez et al., 2018).

Preceding, all previous studies confirmed the improvement of nurses' knowledge about the critical thinking concept after they were exposed to the educational program.

Furthermore, the results of the current study were consistent with those of a study conducted by Dale, (2020), who found that the overall level of participants' critical thinking improved in implementation.

Part VIII: Table (4.11): Association Between Critical Thinking and Demographic in addition to Employment Characteristics of the Study Sample for both Interventional and Control groups:

The results of the interventional and control-related demographic, and employment characteristics in responses to the pre-test and post-test, reported that non-significant changes related to the age variable were (21.950) Chi-square value, (0.234) P-value of control and (32.750) Chi-square, (0.529) P-value in interventional. Moreover; non-significant results related to gender

were (11.400) Chi-square, (0.083) P-value of the control group, and (17.667) Chi-square, (0.410) P-value of the interventional group. Furthermore; marital status results were (9.199) Chi-square, (0.308) P-value of control with (19.023) Chi-square, and (0.633) P-value of the interventional group. While the results in the interventional and control groups show results significantly related to years of experience were (28.700) Chi-square, (0.052) P-value of control and (37.683) Chi-square, (0.051) P-value for interventional.

However, this finding was supported by Numminen, Leino-Kilpi, Isoaho, and Meretoja (2017), who reported that the study aimed to explore and describe changes in self-assessed clinical competence and the need for further training among NGRNs during their first 15 months of work in acute care hospital settings. All six components of clinical competence's mean scores increased over time, with a statistically significant difference between 9–15 months of experience as NGRNs, except the component “critical thinking,” which dropped during that period. The results also showed that the NGRNs' need for further training decreased over time with a statistically significant change between 9–15 months of experience as NGRNs, and reported that competence development among NGRNs was modest at the beginning of their careers until the third year of working life when their competencies had been strengthened. However, they do not present data on clinical competence development during the NGRNs' first year of practice.

In contrast, Lima et al. (2016) found that NGRNs working in a pediatric hospital developed the most competence during the first 6 months of working as NGRNs, while the study conducted by Lima et al. (2016) used the Nurse Competence Scale (NCS). It is not easy to compare the results generated by these two instruments as they are constructed in different ways. However, there were some similarities such as critical thinking and reflection in the domain of “ensuring quality” in NCS and the component “critical thinking”. In the present

study, the component “critical thinking” did not increase as much as the other components and the score dropped in the last data collection between 9–15 months.

Another study carried out found that most nurses in the sample presented as older nurses, with 11–15 years of experience in the actual unit, with continuous shift work, a permanent contract, and a master's degree indicating a higher level of critical thinking (Zuriguel-Pérez, et al, 2019).

The experience of unpredictable and stressful environments might be more uncomfortable for novice nurses who have relatively insufficient education in the area. Nurses with little experience may be ill-equipped to handle emotional stress (Park et al., 2020).

Graduates may struggle to adapt to the role of a registered nurse as they feel unprepared for working as a part of a clinical team (Hezaveh, Rafii, & Seyedfatemi, 2014).

Experience in clinical practice can have a positive impact on critical thinking skills, as nurses gain more knowledge about their profession and become more experts. At the same time, however, certain factors in the working environment may act as barriers to the promotion of critical thinking including hours working, stability Laboral, limited time, understaffed units, fear of job loss, stress, technically focused care, automated, and increasing demands on nurses’ time and energy (Chao et al., 2013; Gloudemans et al., 2013; Zuriguel-Pérez et al., 2018).

While Linsley, and his colleagues (2019), perform a study setup on evidence-based practice (EBP) for nurses and healthcare professionals mention that nurses often make decisions about patient care based on their personal experiences. Although previous experience can help build confidence and hone skills, experiences are biased by perceptions and values frequently influenced by tradition, authority, and trial and error. Personal intuition has also

been identified as a source of evidence. It is not always clear what is meant by intuition and how it contributes to nursing practice.

According to previous studies, nurses with more work experience showed stronger EBP knowledge, practice, and perception (Heydari et al., 2014). These findings recommend that nurses with more exceptional experience in nursing were expected to feel self-assured in applying EBP, presumably due to increased contact with EBP methodology and enrollment in continuing nursing education (Griffiths et al., 2001). Ferguson and Day's findings back up, this finding demonstrating they novice nurses lacked confidence in applying EBP in clinical practice due to a lack of expertise (Ferguson & Day, 2007).

In critical situations. in particular, nurses need to develop their critical thinking skills, by using effective instructional strategies promotion, this is the first study on nurses' knowledge concerned with the critical thinking phenomenon. To date, the critical thinking of graduated nurses has not been studied closely in Al-Hillah Teaching Hospitals, and this makes it an important and unique study in Iraq\Babylon.

Chapter Six

Conclusions & Recommendations

Conclusions and Recommendations

6.1 . Conclusions:

Critical thinking is at the core of professional nurses, The study concluded that the critical thinking educational program for nurses was effective in improving nurses' knowledge, the finding is based on the results analysis of the information according to the study objectives; the conclusions are:

1. The nurses who have been exposed to the critical thinking educational program acquired improvement in knowledge after the program. implementation compared to their overall pre-intervention evaluation.
2. The nurses who were exposed to the critical thinking educational program had a good evaluation regarding the knowledge, cognitive and intellectual domains, application and analysis, and ethical domain after the educational program intervention compared to their pre-implementing evaluation.
3. There were statistically significant differences between the overall and percentile pre-test and post-test critical thinking scores following the completion of an educational program delivered.
4. This study shows positive significant changes presented in this study between years of experience for nurses and their critical thinking. While non-significant changes between the demographical data of nurses and their critical thinking.

6.2. Recommendations:

Based on the current study's findings, research, education, and healthcare providers will need to the following recommendations are proposed:

❖ Health Care Organizational Setting;

1. Nursing staff and nursing management need to work together to provide a conducive atmosphere for critical thinking and innovation, Further research can be conducted to Encourage critical thinking as a requirement for job promotion through healthcare organizations.

2. Building a positive work environment that enhances nursing staff critical thinking in healthcare organizations.

3. Enhance nurses' knowledge and skills using self-learning packages and online-learning courses and investigating the effect of this skills.

4. Conduct longitudinal research designs that will enable future researchers to track nurses' critical thinking developed over the course of their entire undergraduate careers.

❖ **Educational Setting:**

1. Adopting self-learning packages in the orientation program of nurses by nursing faculties.

2. Enhancing awareness of the faculty teaching staff and their assistants on the importance of critical thinking in improving nursing students' leadership skills.

3. Using self-learning packages as an active learning method for nurses' training and education.

4. The concept of critical thinking to college faculty requires well-planned, long-term professional development based explicitly on the multiple dimensions of a substantive concept of critical thinking.

References

المصادر العربية:

- Abdelmaksoud, S. H. E. (2014). برنامج تدريبي عن اتخاذ القرار لطلاب الفرقة الرابعة بكلية التمريض جامعة الزقازيق. *مجلة تمريض الزقازيق*, 19-33.
- Gamel, E. Z. (2017). التفكير الناقد بين المقاربة الفلسفية والمقاربة التعليمية" برتراند رسل" و" جون ديوي" نموذجًا. .Hermes Journal, 6(19)
- ابو الحصين, & محمد فرج الله مسلم. (2010). الضغوط النفسية لدى الممرضين والممرضات العاملين في المجال الحكومي وعلاقتها بكفاءة الذات.
- الأسدي، صلاح هاشم زغير وحسن هادي حسن. 2018. التوزيع المكاني للمستشفيات الحكومية في مدينة الحلة : دراسة في جغرافية المدن .*مجلة كلية التربية الأساسية للعلوم التربوية و الإنسانية*،مج. 2018، ع. 41، ص ص. 1216-1230.
- به جميل بوشي, & د. محمد سليمان صليبي. (2021). التفكير الناقد وعلاقته بالتفكير ما وراء المعرفي لدى عينة من طلبة جامعة دمشق. سلسلة العلوم التربوية, 43(18).
- بوقـــراف, المسعود, دومة, & عبد القادر. (2017). القيـــــم التنظيمية وعلاقتها بالالتزام التنظيـــمي .(Doctoral dissertation).
- عبد النبي عبد الله الطيب. (2016). مهارات الاتصال الفعال. .Al Manhal
- عيشاوي وهيبة, & عوفي مصطفى. (2020). مصادر الضغوط المهنية لدى فئة الممرضات وكيفية الحد منها. مجلة الباحث في العلوم الإنسانية و الإجتماعية, 12(7), 143-156.
- القران الكريم، سورة البقرة، الجزء الثالث، الآيه (269).
- ماهر محمد عواد العامري. (2019). التفكير الناقد. الجامعة المستنصرية كلية التربية البدنية وعلوم الرياضة.
- مهدي علوان عبود القريشي. (2014). فاعلية استراتيجية البيت الدائري في تنمية اتخاذ القرار ومهارات ما وراء المعرفة لدى طالبات الصف الخامس الأدبي بمادة مبادئ الفلسفة وعلم النفس. Journal of Education College Wasit University, 1(16), 276-353.

- مهدي محمد نصر, ف., & فتحي. (2018). برنامج إرشادي وقائي لتعزيز التنظيم الذاتي والتفاؤل المتعلم لدى عينة من طلاب جامعة الباحة المعرضين لخطر الإجهاد النفسي. *مجلة بحوث التربية النوعية*, *2018*(52), 297-351.
- ولاء اصبيرة. (2016). مهارات التفكير الناقد لرئيسات الشعب التمريضية في مشفى الأسد الجامعي والمشفى الوطني في اللاذقية. *Tishreen University Journal-Medical Sciences Series*,*37*(3).
- ويكري, فضيلة, زويكري, بوبكر, & هشام (مشرفا). (2017). الأخلاق المهنية و علاقتها بالأداء الوظيفي (.Doctoral dissertation)

References:

- Agarwal, P. K. (2019). Retrieval practice & Bloom's taxonomy: Do students need fact knowledge before higher order learning? *Journal of Educational Psychology*, *111*(2), 189.
- Alamrani, M. H., Alammar, K. A., Alqahtani, S. S., & Salem, O. A. (2018). Comparing the effects of simulation-based and traditional teaching methods on nursing students' critical thinking abilities and self-confidence. Journal of Nursing Research, 26(3), 152-157.
- Alfaro-LeFevre, R. (2017). Critical thinking, clinical reasoning, and clinical judgment: A practical approach (6th ed.). Philadelphia, PA: Elsevier.
- Al-Ghadouni, A. B. M. (2021). Critical Thinking: Components, Skills, and Strategies. Revista Argentina de Clínica Psicológica, 30(2), 1.
- Ali, A. Z. F., & Nageeb, S. M. (2020). Effect of Problem-Solving Educational Program on Decision-Making Skills among Nurses in critical care units. International Journal of Novel Research in Healthcare and Nursing, 7(1), 148-160.

- Ali-Abadi, T., Babamohamadi, H., & Nobahar, M. (2020). Critical thinking skills in intensive care and medical-surgical nurses and their explaining factors. Nurse education in practice, 45, 102783.
- Ali-Abadi, T., Babamohamadi, H., & Nobahar, M. (2020). Critical thinking skills in intensive care and medical-surgical nurses and their explaining factors. Nurse Education in Practice, 45, 102783.
- Altas, G. (2020). The Relationship between Critical Thinking Disposition and Problem-Solving Skills in Nurses. International Journal of Caring Sciences, 13(3), 1890-1897.
- Altas, G. (2020). The Relationship between Critical Thinking Disposition and Problem-Solving Skills in Nurses. International Journal of Caring Sciences, 13(3), 1890-1897.
- Alwehaibi, H. U. (2012). Novel program to promote critical thinking among higher education students: Empirical study from Saudi Arabia. Asian Social Science, 8(11), 193.
- American Association of Colleges of Nursing (2015). Retrieved from http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-faculty-shortage.
- Anderson, L. W., Krathwohl, D. R., & Bloom, B. S. (2001). A taxonomy for learning, teaching, and assessing: a revision of Bloom's taxonomy of educational objectives. Boston, MA: Allyn & Bacon.
- Arif, S., Ali, A., & Hussain, N. (2019). Nursing Theories: Foundation of Nursing Profession. i-Manager's Journal on Nursing, 9(4), 45.
- Aya, H., Şenyuva, E., & Bodur, G. (2018). The relationship between critical thinking and emotional intelligence in nursing students: A longitudinal study. Nurse education today, 68, 26-32.

- Babamohamadi, H., Safavi, A. S., Gholami, P., & Kahouei, M. (2017). Evaluation of critical thinking disposition among Iranian medical faculty members. Pharmacophore, 8(6), 1-8.
- Bagshaw, K. (2020). Student perceptions about critical thinking in online psychiatric nurse education (Doctoral dissertation, Walden University).
- Baron, J. (2000). Thinking and deciding 3rd edition. Cambridge University Press, Cambridge.
- Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). Educating nurses: A call for radical transformation. San Francisco, CA: Jossey-Bass.
- Berman, A. T., Frandsen, G., & Snyder, S. (2021). Kozier & Erb's Fundamentals of Nursing, eBook. Pearson Higher Ed. © 2021 Chauffeur Driven. All Rights Reserved. Corporate Offices 1002 Lincoln Drive West, Suite B Marlton, NJ 08053 | 856.334.1990
- Berman, A. T., Frandsen, G., & Snyder, S. (2021). Kozier & Erb's Fundamentals of Nursing, eBook. Pearson Higher Ed.
- Beyer, B. K. (1985). Critical thinking: What is it? Social education, 49(4), 270-276.
- Brookfield, S., (2020): Teaching for critical thinking. In Handbook of Research on Ethical Challenges in Higher Education Leadership and Administration, Pp: 229- 245). IGI Global.
- Butts, J. B., & Rich, K. L. (2021). *Philosophies and theories for advanced nursing practice*. Jones & Bartlett Learning.
- Byrd, V., & Asunda, P., (2020): Using Evidence-Based Practices and Learning to Enhance Critical Thinking Skills in Students Through Data Visualization. (In October 2020) IEEE Frontiers in Education Conference (FIE), Pp: 1-9. IEEE.
- Capella, L. M., & Robin, D. P. (1986). Critical thinking is important to marketing students. Marketing News, 20(15), 28-29.

- Chang, M. J., Chang, Y. J., Kuo, S. H., Yang, Y. H., & Chou, F. H. (2011). Relationships between critical thinking ability and nursing competence in clinical nurses. Journal of Clinical Nursing, 20(21–22), 3224–3232. https://doi.org/10.1111/j.1365-- 2702.2010.03593.x.
- Christenbury, L., & Kelly, P. P. (1983). Questioning: A path to critical thinking.
- Colln-Appling, V.C., & Giuliano, D. (2017). A concept analysis of critical thinking: A guide for nurse educators. Nurse Education Today, 49, 106-109.
- Cottrell, S. (2011). Critical thinking skills: Developing effective analysis and argument. New York: Palgrave Macmillan.
- Cox, C., & Zumstein-Shaha, M. (Eds.). (2017). *A theory of cancer care in healthcare settings*. Routledge.
- Crowe, S., Ewart, L., & Derman, S. (2018). The impact of simulation based on nursing confidence, knowledge, and patient outcomes in general medicine units. Nurse Education in Practice, 29, 70-75.
- D'Alessio, F. A., Avolio, B. E., & Charles, V. (2019). Studying the impact of critical thinking on the academic performance of executive MBA students. Thinking Skills and Creativity, 31, 275-283.
- Dahari, A. A., Suhid, A., & Fakhrudin, F. (2019). Implementation Critical Thinking in Teaching Islamic Education. International Journal of Academic Research in Progressive Education and Development, 8(4), 805-823.
- Dale, A., (2020): Using a Metacognition Scaffold to Improve Student Critical Thinking: A Qualitative Single Case Study of a Grade Twelve English Class (Doctoral dissertation, Northcentral University).

- Dang, D., Dearholt, S. L., Bissett, K., Ascenzi, J., & Whalen, M. (2021). Johns Hopkins evidence-based practice for nurses and healthcare professionals: model and guidelines. Sigma Theta Tau.
- De Chesnay, M. (Ed.). (2015). Nursing research using ground theory: qualitative designs and methods in nursing. Springer Publishing Company.
- Delle Site, C. (2019). Investigating metacognition in new graduates transitioning to professional nursing practice.
- Delle Site, C. (2019). Investigating metacognition in new graduates transitioning to professional nursing practice.
- Demirel, M., Derman, I., & CAN ARAN, O. (2017). Examining graduate dissertations in the field of Critical Thinking: A case from Turkey. Eurasian Journal of Educational Research (EJER), (67).
- Deniati, K., Anugrahwati, R., & Suminari, T. (2018). Pengaruh berpikir kritis terhadap kemampuan perawat pelaksaana dalam melakukan auhan keperawatan di rumah sakit Hermina Bekasi Tahun 2016. Jurnal Kesehatan Holisttik (The Journal of Holistic Healthcare), 12(1), 21–25.
- Dias, A. M. (2022). Knowledge regarding Legal and Ethical aspects of patient care among Registered Nurses in selected hospitals of Goa to prepare an Information Booklet. International Journal of Nursing Education and Research, 10(2), 147-152.
- Douglass. K., (2014) "The Effect of the Developing Nurses' Thinking Model on Clinical Judgment in Nursing Students".
- Drexler, D. (2020). Using a nursing professional governance approach to improve nurse satisfaction and participation with health information technology. Nurse Leader, 18(3), 276-280. https://doi.org/10.1016/j. mnl.2020.03.003.

- Dumitru, D. (2019). Creating meaning. The importance of Arts, Humanities, and Culture for critical thinking development. Studies in Higher Education, 44(5), 870-879.
- Dumke, G. (1980). Chancellor's executive order 338. California State University, Chancellor‘s Office, Long Beach.
- Durmaz Edeer, A., & Dicle, A. (2015). Adaptation of clinical decision making in nursing scale to undergraduate students of nursing: The study of reliability and validity. *International Journal of Psychology and Educational Studies*, *2*(3), 1-9. doi:10.17220/ijpes.2015.03.001.
- Elkeles, T., Phillips, J., & Phillips, P., (2017): Chief talent officer: The evolving role of the chief learning officer, 2nd edition, New York, NY: Routledge.
- Elkoca, A. (2019). Critical thinking skills of nursing candidates. International Journal of Caring Sciences, 12(3), 1600-1606.
- Ennis, R. H. (1984). Problems in testing informal logic critical thinking reasoning ability. Informal Logic, 6(1).
- Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. Educational leadership, 43(2), 44-48.
- Ennis, R. H. (1989). Critical thinking and subject specificity: Clarification and needed research. Educational Researcher, 18(3), 4-10.
- Fisher, A. (2011). Critical Thinking: An Introduction. Cambridge University Press.
- Fukuzawa, S., & deBraga, M. (2019). Graded Response Method: Does Question Type Influence the Assessment of Critical Thinking? *Journal of Curriculum and Teaching*, *8*(1), 1-10.
- Gloudemans, H. A., Schalk, R. M., & Reynaert, W. (2013). The relationship between critical thinking skills and self-efficacy beliefs in

mental health nurses. Nurse Education Today, 33(3), 275–280. https://doi.org/10.1016/j.nedt.2012.05.006.

- Goldberg, D. (2015). UCSD's practical guide to clinical medicine. Retrieved from https://meded.ucsd.edu/clinicalmed/thinking.htm.
- Gonzalez, H. C., Hsiao, E. L., Dees, D. C., Noviello, S. R., & Gerber, B. L. (2020). Promoting critical thinking through an evidence-based skills fair intervention. Journal of Research in Innovative Teaching & Learning.
- Han, M. (2015). On the cultivation of learners' competence of critical thinking in college english teaching. Studies in Literature and Language, 10(2), 85-89. Retrieved from http://docplayer.net/39488461-On-thecultivation-of-learners-competence-of-critical-thinking-incollege-english-teaching.html.
- Heidari, M and Shahbazi, S (2016). Effect of training problem-solving skills on decision-making and critical thinking of personnel at medical emergencies. Int J Crit Illn Inj Sci. Oct-Dec; 6(4): 182–187. doi: 10.4103/2229- 5151.195445.
- Hezaveh, M. S., Rafii, F., & Seyedfatemi, N. (2014). Novice nurses' experiences of unpreparedness at the beginning of the work. Global journal of health science, 6(1), 215.
- https://www.alroeya.com/210-0/219367. visited this page on 9/30/21.
- Hung TM., Tang LC. & Ko CJ. (2015). How mental health nurses improve their critical thinking through problem-based learning. Journal for Nurses in Professional Development, 31(3): 170- 175.
- Immonen, K., Oikarainen, A., Tomietto, M., Kääriäinen, M., Tuomikoski, A. M., Kaučič, B. M., ... & Mikkonen, K. (2019). Assessment of nursing students' competence in clinical practice: a systematic review of reviews. International journal of nursing studies, 100, 103414.

- Immonen, K., Oikarainen, A., Tomietto, M., Kääriäinen, M., Tuomikoski, A. M., Kaučič, B. M., ... & Mikkonen, K. (2019). Assessment of nursing students' competence in clinical practice: a systematic review of reviews.
- Ingram, M. (2008), Critical Thinking in Nursing: Experiences Education. A Dissertation. The University of Phoenix.
- International journal of nursing studies, 100, 103414.
- Jacob, E., Duffield, C., & Jacob, D. (2017). A protocol for the development of a critical thinking assessment tool for nurses using a Delphi technique. Journal of Advanced Nursing, 73(8), 1982-1988.
- Jeong, H. (2015). Critical thinking disposition, problem-solving process, and empathy among Nursing Students. Retrieved from http://www.researchgate.net doi:10.14257/astl.2015.103.10
- Jiang, Y. (2017). A Study on Professional Development of Teachers of English as a Foreign Language in Institutions of Higher Education in Western China. Springer Publication.
- Jiang, Y. (2017). A Study on Professional Development of Teachers of English as a Foreign Language in Institutions of Higher Education in Western China. Springer Publication.
- Jones, A. (2019). Critical thinking historical background of a decade of studies covering the era of the1980s. Int. J. Sci. Technol. Res, 8(12), 2721-2725.
- Karki, N., Luitel, N., & Dhakal, R. (2018). Intuition in Nursing Practice.
- Kaur, K. Enhancing. (2021) Sustainable Development through Critical Thinking in Education: A Multifaceted Collaborative Strategy. Journal homepage: www. ijrpr. com ISSN, 2582, 7421.
- Kaya, H., Şenyuva, E., & Bodur, G. (2018). The relationship between critical thinking and emotional intelligence in nursing students: A longitudinal study. Nurse education today, 68, 26-32.

- Kerr, D., Milnes, S., Martin, P., Ammentorp, J., Wolderslund, M., & Chiswell, M. (2021). Responding to nurses' communication challenges: Evaluating a blended learning program for communication knowledge and skills for nurses. Patient Education and Counseling.
- Kim, J. S., Gu, M. O., & Chang, H. (2019). Effects of an evidence-based practice education program using multifaceted interventions: a quasi-experimental study with undergraduate nursing students. BMC Medical Education, 19(1), 1-10.
- Kim, M.S. Sohn, S.K. (2019). Emotional Intelligence, Problem Solving Ability, Self-Efficacy, and Clinical Performance among Nursing Students: A Structural Equation Model. Korean Journal of Adult Nursing; Vol. 31 No. 4, 380-388, ISSN 2288-338X https://doi.org/10.7475/ kjan. 2019.31.4. 380.
- Kurmaran, S., & Carney, M. (2014). Role transition from student nurse to staff nurse: Facilitating the transition period. Nurse Education in Practice, 14, 605-611.
- Lai, E. R. (2011). Critical thinking: A literature review. Pearson's Research Reports, 6(1), 40-41.
- Lazere, D. (1982). Composition for Critical Thinking: A Course Description.
- Lee, D. S., Abdullah, K. L., Chinna, K., Subramanian, P., & Bachmann, R. T. (2020). Critical thinking skills of RNs: Exploring demographic determinants. The Journal of Continuing Education in Nursing, 51(3), 109-117.
- Lee, Y., & Oh, Y. (2020). Levels, antecedents, and consequences of critical thinking among clinical nurses: a quantitative literature review. Journal of Educational Evaluation for Health Professions, 17.

- Lima, S., Newall, F., Jordan, H. L., Hamilton, B., & Kinney, S. (2016). Development of competence in the first year of graduate nursing practice: A longitudinal study. Journal of Advanced Nursing, 72(4), 878–888. https://doi.org/10.1111/jan.12874.
- Lin, H. C., Hwang, G. J., & Hsu, Y. D. (2019). Effects of ASQ-based flipped learning on nurse practitioner learners' nursing skills, learning achievement, and learning perceptions. Computers & Education, 139, 207-221.
- Lin, Y. (2018). Developing Critical Thinking in EFL Classes: An Infusion Approach. Springer.
- Linsley, P., Kane, R., & Barker, J. H. (2019). *Evidence-based practice for nurses and healthcare professionals*. Sage.
- Linsley, P., Kane, R., & Barker, J. H. (2019). Evidence-based practice for nurses and healthcare professionals. Sage.
- Lipman, M. (1988). Critical thinking: What can it be? Educational Leadership, 46(1), 38-43.
- LoBiondo-Wood, G., & Haber, J. (2014). Reliability and validity. Nursing research. Methods and critical appraisal for evidence-based practice, 289-309.
- Ludin, S. M. (2018). Does good critical thinking equal effective decision-making among critical care nurses? A cross-sectional survey. Intensive and Critical Care Nursing, 44, 1-10.
- Ludin, S. M. (2018). Does good critical thinking equal effective decision-making among critical care nurses? A cross-sectional survey. Intensive & Critical Care Nursing, 44, 1–10. https://doi.org/10.1016/j.iccn.2017.06.002.

- Mahmoud, A. S., & Mohamed, H. A. (2017). Critical thinking disposition among nurses working in public hospitals at port-said governorate. International journal of nursing sciences, 4(2), 128-134.
- Mahoney, J., Patterson, L., & Hall, C. (2022). De Bono's Six Hats Thinking Strategy for All Content Areas. Kentucky Teacher Education Journal: The Journal of the Teacher Education Division of the Kentucky Council for Exceptional Children, 9(1), 4.
- Majumder, M. A. A., et al, (2019) "Teaching and Assessing Critical Thinking and Clinical Reasoning Skills in Medical Education".
- Marrapodi, J. (2003). Critical thinking and creativity: An overview and comparison of the theories. Unpublished ED7590 Critical thinking and adult, Providence, RI.
- Marshall, B. (Ed.). (2020). *Fast Facts to Loving Your Research Project: A Stress-free Guide for Novice Researchers in Nursing and Healthcare*. Springer Publishing Company.
- Matney, S. A., Avant, K., & Staggers, N. (2016). Toward an understanding of wisdom in nursing. The Online Journal of Issues in Nursing, 21(1), 9. https://doi.org/10.3912/OJIN. Vol21No01PPT02.
- Meleis, A. I. (2012). Theoretical Nursing: Development th and Progress (5 Ed.). Wolters Kluwer, Lippincott, Williams & Wilkins.
- Mentor, D. (2016). Handbook of Research Mobile Leaning in Contemporary Class Rooms (p. 142). IGI Global.
- Miller, M. L. (2018). High Fidelity Nursing Using Electronic Health Record Systems: Impact on Critical Thinking in Nursing Practice (Doctoral dissertation, Valdosta State University).
- Murray, M., Sundin, D., & Cope, V. (2018). New graduate registered nurses' knowledge of patient safety and practice: A literature review. Journal of clinical nursing, 27(1-2), 31-47.

- Nascimento, J. D. S. G., Siqueira, T. V., Oliveira, J. L. G. D., Alves, M. G., Regino, D. D. S. G., & Dalri, M. C. B. (2021). Development of clinical competence in nursing in simulation: the perspective of Bloom's taxonomy. Revista Brasileira de Enfermagem, 74.
- Nguyet Nguyen, M., & Robertson, M., (2020): International students enacting agency in their Ph.D. Journey. Journal of Teaching in Higher Education, 1- 17.
- Numminen, O., Leino-Kilpi, H., Isoaho, H., & Meretoja, R. (2017). Development of nurses' professional competence early in their career: A longitudinal study. Journal of Continuing Education in Nursing, 48(1), 29–39. https://doi.org/10.3928/00220124-20170110-08.
- O'Donnell, A. M., Reeve, J., & Smith, J. K. (2011). Educational Psychology: Reflection for Action. John Wiley & Sons.
- Padmanabha, P. (2018). Critical thinking: Conceptual framework. i-manager's Journal on Educational Psychology, 11(4), 45-53.
- Park, H.-J., Lee, Y.-M., Won, M. H., Lim, S.-J., & Son, Y.-J. (2020). Hospital Nurses' Perception of Death and Self-Reported Performance of End-of-Life Care: Mediating Role of Attitude towards End-of-Life Care. Healthcare, 8(2), 142.
- Paul, R. (1981). Teaching critical thinking in the" strong" sense: A focus on self-deception, world views, and a dialectical mode of analysis. Informal Logic, 4(2).
- Paul, R. (1981). Teaching critical thinking in the" strong" sense: A focus on self-deception, world views, and a dialectical mode of analysis. Informal Logic, 4(2).
- Paul, R., & Elder, L. (2009). Our conception of critical thinking. Retrieved from http://www.criticalthinking.org/pages/our-concept-and-definition-of-critical-thinking/41.

- Paul, R., & Elder, L. (2019). A guide for educators to critical thinking competency standards: Standards, principles, performance indicators, and outcomes with a critical thinking master rubric. Rowman & Littlefield.
- Presseisen, B. Z. (1984). Thinking Skills: Meanings, Models, and Materials.
- Price, Mark C., & Norman, E. (2008). Intuitive decisions on the fringes of consciousness: Are the conscious and does it matter? Judgment and Decision Making, 3(1), 28-41.
- Quesea, K. S. A. D., & Magnaye, B. P. (2019). Nursing Care Modalities Employed in Selected Hospitals in Batangas Province, Philippines. Asia Pacific Journal of Allied Health Sciences, 2.
- Raymond-Seniuk & Profetto-McGrath, (2011). Can one learn to think critically? – A philosophical exploration. The Open Nursing Journal, 5, 45-51. doi: 10.2174/1874434601105010 045.
- Reji, R. K., & Saini, S. K. (2022). Critical Thinking and Decision Making: Essential Skills in Nursing. *International Journal of Research in Pharmaceutical Sciences*, *13*(1), 61-67.
- Riegel, F., & Crossetti, M. D. G. O. (2020). A theoretical model to measure holistic critical thinking in teaching the diagnosis process in nursing. Pensamiento Actual, 20(34), 128-137.
- Riegel, F., Crossetti, M. D. G. O., & Siqueira, D. S. (2018). Contributions of Jean Watson's theory to holistic critical thinking of nurses. Revista Brasileira de Enfermagem, 71, 2072-2076.
- Roussel, L. (2009). Concepts and theories guiding professional practice. Jones and Bartlett Publishers, LLC.
- Saadeh, Jawdat. (2011). Teaching Critical Thinking. Jordan: Dar Al-Shorouk.

- Santos, L. F. (2017). The Role of Critical Thinking. Online Journal of Education & Practice, 8(20). Retrieved from http;//archive.org /stream/ERIC.
- Scriven, M., & Paul, R. (1987). Defining critical thinking. In 8th Annual International Conference on Critical Thinking and Education Reform, Summer.
- Seibert, S. A. (2021). Problem-based learning: A strategy to foster generation Z's critical thinking and perseverance. Teaching and Learning in Nursing, 16(1), 85-88.
- Seman, N., & Yeap, W. L. (2021). Critical thinking skills among nurses at a private hospital in Penang: a quantitative study. ESTEEM Journal of Social Sciences and Humanities, 5(1), 48-55.
- Setting of the Study Available At: https://dbpedia.org/page/Hillah. 1/8/2022
- Smith, M. (2020). Is critical thinking critical? A research study of the planning for the teaching of critical thinking in the middle grades
- Song, Y., & McCreary, L. L. (2020). New graduate nurses' self-assessed competencies: An integrative review. Nurse Education in Practice, 45, 102801.
- Staffileno, B. A., Murphy, M. P., & Buchholz, S. W. (Eds.). (2021). *Research for Advanced Practice Nurses: From Evidence to Practice*. Springer Publishing Company.
- Sternberg, R. J. (2013). Giving employers what they don't want. The Chronicle of Higher Education, 17.
- Sutriyanti, Y., Misniarti, M., & Utario, Y. (2019). The Application of the Nurse's Critical Thinking Model in Implementing Nursing Care of -Post Operative Patients.

- Tang, T., Vezzani, V., & Eriksson, V., (2020): Developing critical thinking, collective creativity skills and problem-solving through playful design jams. Thinking Skills and Creativity, 37: 100696.
- Toney-Butler, T. J., & Unison-Pace, W. J. (2018). Nursing admission assessment and examination.
- Towfik, A. F., Mostafa, G. M. A., Mahfouz, H. H. E. S., & Mohamed, S. A. (2022). Effect of Self-Learning Package about Critical Thinking on Intern-Nurses' Knowledge, Disposition and Skills. International Egyptian Journal of Nursing Sciences and Research, 2(2), 548-567.
- ULUM, Ö. G. (2021). A critical approach to the inclusion of the revised Bloom's Taxonomy in active skills for reading: Book 1. RumeliDE Dil ve Edebiyat Araştırmaları Dergisi, (25), 273-296.
- Urhan, E., Zuriguel-Perez, E., & Harmancı Seren, A. K. (2021). Critical thinking among clinical nurses and related factors: A survey study in public hospitals. Journal of Clinical Nursing.
- Van Nguyen, T., & Liu, H. E. (2021). Factors associated with the critical thinking ability of professional nurses: A cross-sectional study. Nursing Open, 8(4), 1970-1980.
- Ward, L. A. (2022). Engaging nurses through active and experiential learning. Nursing2022, 52(8), 31-35.
- Willman, A., Bjuresäter, K., & Nilsson, J. (2021). Insufficiently supported in handling responsibility and demands: Findings from a qualitative study of newly graduated nurses. Journal of clinical nursing, 30(1-2), 83-92.
- Yildirim, B., Özkahraman, Ş., & Ersoy, S. (2012). Investigation of critical thinking disposition in nurses working in public hospitals. International Journal of Business, Humanities, and Technology, 2, 61–67.
- Zaidi, N. L. B., Grob, K. L., Monrad, S. M., Kurtz, J. B., Tai, A., Ahmed, A. Z., ... & Santen, S. A. (2018). Pushing critical thinking skills with

multiple-choice questions: does Bloom's taxonomy work? Academic Medicine, 93(6), 856-859.

- Zuriguel-Pérez, E., Falcó-Pegueroles, A., Agustino-Rodríguez, S., del Carmen Gómez-Martín, M., Roldán-Merino, J., & Lluch-Canut, M. T. (2019). Clinical nurses' critical thinking level according to sociodemographic and professional variables (phase II): a correlational study. Nurse education in practice, 41, 102649.
- Zuriguel-Pérez, E., Falcó-Pegueroles, A., Agustino-Rodríguez, S., del Carmen Gómez-Martín, M., Roldán-Merino, J., & Lluch-Canut, M. T. (2019). Clinical nurses' critical thinking level according to sociodemographic and professional variables (phase II): a correlational study. Nurse education in practice, 41, 102649.
- Zuriguel-Pérez, E., Falcó-Pegueroles, A., Roldán-Merino, J., Agustino-Rodriguez, S., Gómez-Martín, M. D. C., & Lluch-Canut, M. T. (2017). Development and psychometric properties of the nursing critical thinking in clinical practice questionnaire. Worldviews on Evidence-Based Nursing, 14(4), 257-264.
- Zuriguel-Pérez, E., Lluch-Canut, M. T., Agustino-Rodríguez, S., GómezMartín, M. D. C., Roldán-Merino, J., & Falcó-Pegueroles, A. (2018). Critical thinking: A comparative analysis between nurse managers and registered nurses. Journal of Nursing Management, 26(8), 1083–1090.https://doi.org/10.1111/jonm.12640

.Appendix :A-

College Approval from College of Nursing/ University of Babylon:

University of Babylon
College of Nursing
Research Ethics Committee
Issue No: 60
Date: 31/05/2021

جامعة بابل
كلية التمريض
لجنة اخلاقيات البحث العلمي

Approval Letter

To,
AMENAH ABDUL ALHASSAN JEBUR

The Research Ethics committee at the **University of Babylon, College of Nursing** has reviewed and discussed your application to conduct the research study entitled "**Impact of Nursing Process Educational Program on Critical Thinking of Nurses in Al-Hillah Teaching Hospitals.**"

The Following documents have been reviewed and approved:

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

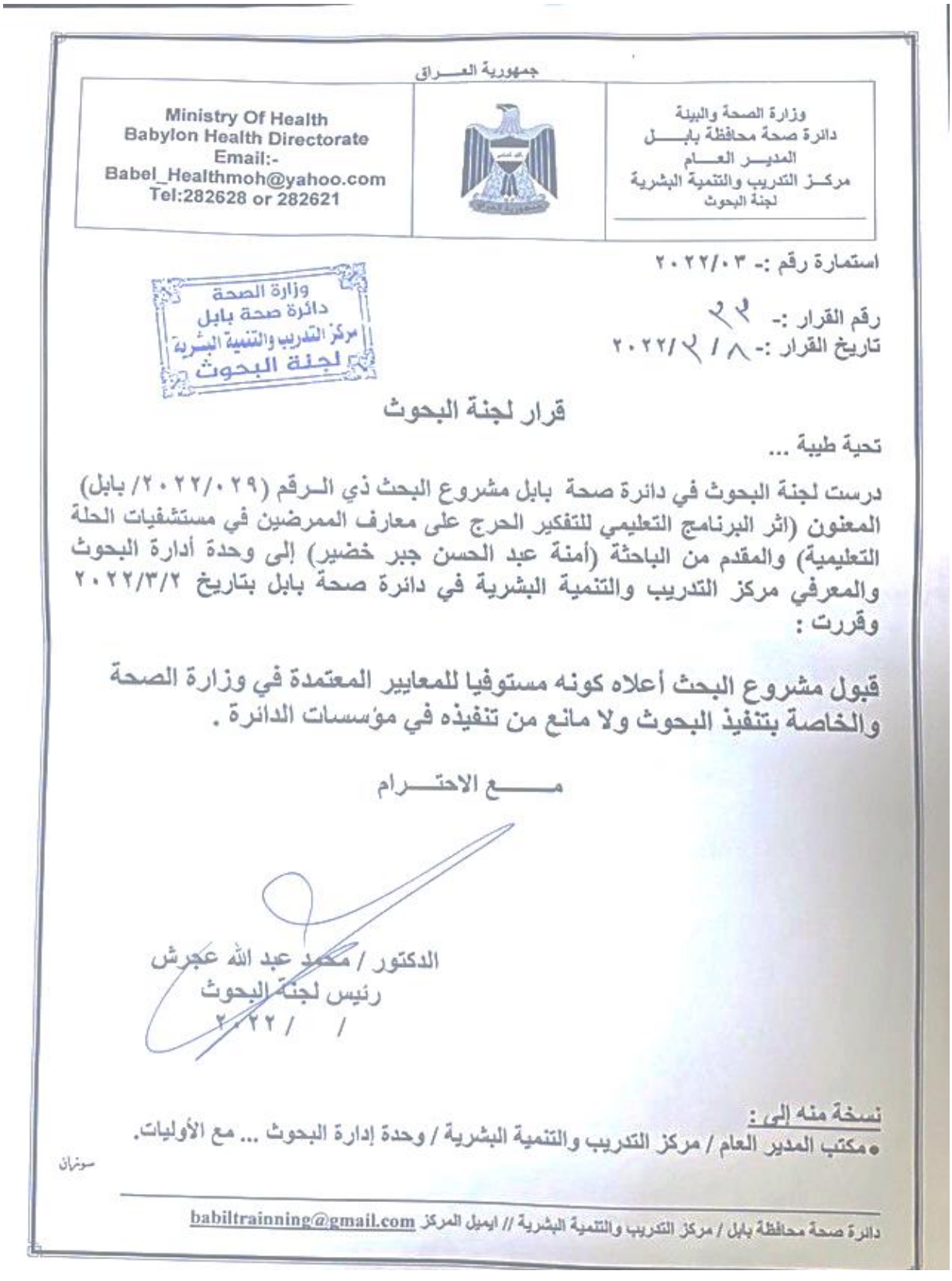
Committee Decision.

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
31 / 5 /2021

Appendix :B

The official Ethical approval from Ministry of health\ the Babylon Health Directorate Babylon:



جمهورية العـــراق

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 لجنة البحوث

استمارة رقم :- ٢٠٢٢/٠٣

رقم القرار :- ٢٩
تاريخ القرار :- ٢٨ / ٢ /٢٠٢٢

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية
لجنة البحوث

قرار لجنة البحوث

تحية طيبة ...

درست لجنة البحوث في دائرة صحة بابل مشروع البحث ذي الـرقم (٢٠٢٢/٠٢٩/ بابل) المعنون (اثر البرنامج التعليمي للتفكير الحرج على معارف الممرضين في مستشفيات الحلة التعليمية) والمقدم من الباحثة (أمنة عبد الحسن جبر خضير) إلى وحدة أدارة البحوث والمعرفي مركز التدريب والتنمية البشرية في دائرة صحة بابل بتاريخ ٢٠٢٢/٣/٢ وقررت :

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

مـــــع الاحتـــرام

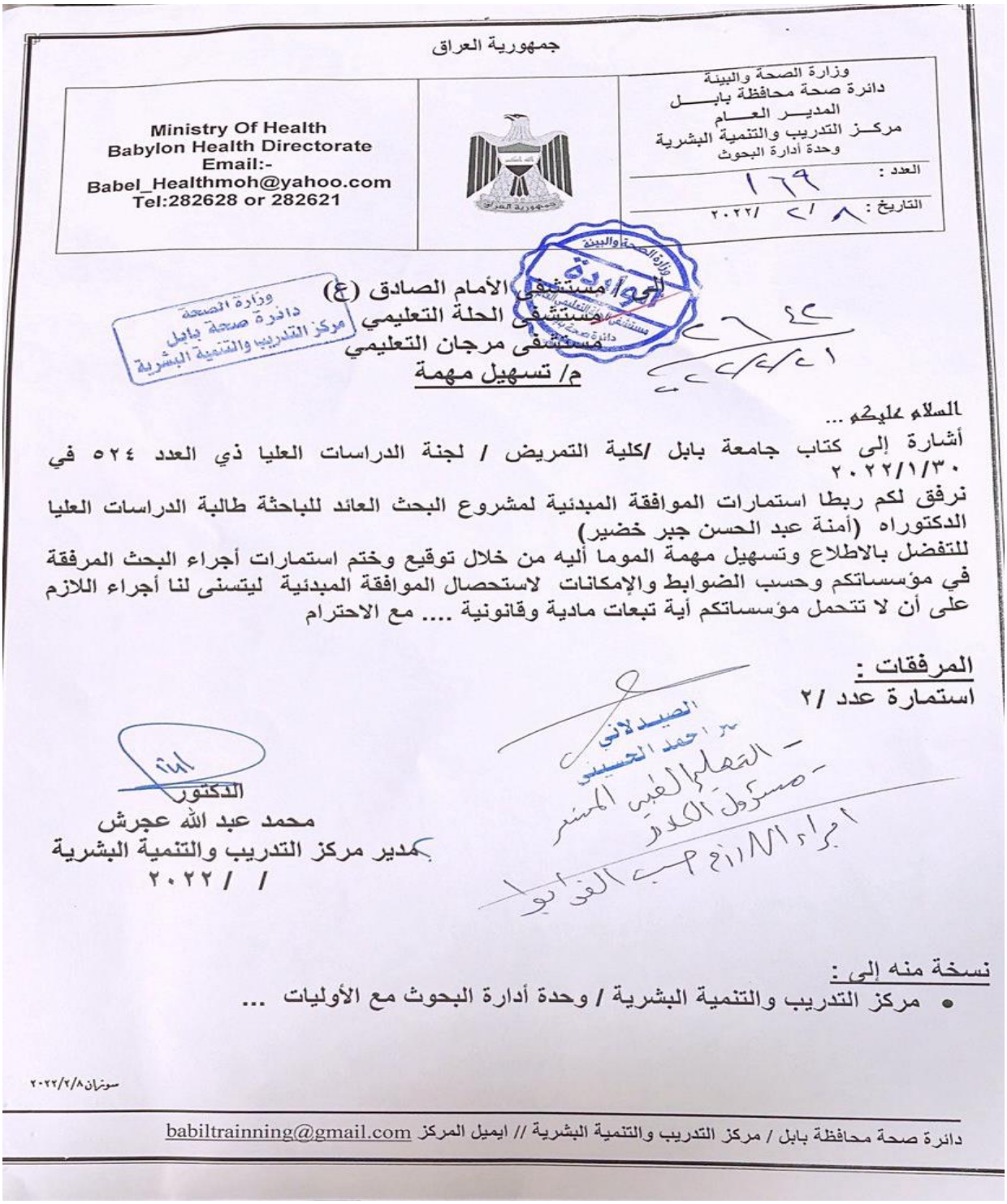
الدكتور / محمد عبد الله عجرش
رئيس لجنة البحوث
/ / ٢٠٢٢

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

سوزان

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltrainning@gmail.com

Appendix :C- Official Approval from the Nineveh Health Directorate to the teaching hospitals.



جمهورية العراق

وزارة الصحة والبيئة
دائرة صحة محافظة بابـــل
المديـــر العـــام
مركـــز التدريب والتنمية البشرية
وحدة أدارة البحوث

العدد : ١٦٩
التاريخ : ٢٠٢٢/ ١/ ٨

Ministry Of Health
Babylon Health Directorate
Email:-
Babel_Healthmoh@yahoo.com
Tel:282628 or 282621

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

الى / مستشفى الأمام الصادق (ع)
مستشفى الحلة التعليمي
مستشفى مرجان التعليمي
م/ تسهيل مهمة

السلام عليكم ...

أشارة إلى كتاب جامعة بابل /كلية التمريض / لجنة الدراسات العليا ذي العدد ٥٢٤ في ٢٠٢٢/١/٣٠

نرفق لكم ربطا استمارات الموافقة المبدئية لمشروع البحث العائد للباحثة طالبة الدراسات العليا الدكتوراه (أمنة عبد الحسن جبر خضير)

للتفضل بالاطلاع وتسهيل مهمة الموما أليه من خلال توقيع وختم استمارات أجراء 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
/ / ٢٠٢٢

الصيدلاني
سرا احمد الحسيني

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

سوران ٢٠٢٢/٢/٨

جمهورية العراق

Ministry Of Health
Babylon Health Directorate
Email:-
Babel_Healthmoh@yahoo.com
Tel:282628 or 282621

وزارة الصحة والبيئة
دائرة صحة محافظة بابل
المدير العام
مركز التدريب والتنمية البشرية
وحدة ادارة البحوث

العدد : ١٦٩
التاريخ : ٢٠٢٢/ ٢/ ٨

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

إلى / مستشفى الأمام الصادق (ع)
مستشفى الحلة التعليمي
مستشفى مرجان التعليمي
م/ تسهيل مهمة

السلام عليكم ...
أشارة إلى كتاب جامعة بابل /كلية التمريض / لجنة الدراسات العليا ذي العدد ٥٢٤ في ٢٠٢٢/١/٣٠
نرفق لكم ربطا استمارات الموافقة المبدئية لمشروع البحث العائد للباحثة طالبة الدراسات العليا الدكتوراه (أمنة عبد الحسن جبر خضير)
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على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية .... مع الاحترام

مستشفى مرجان
للأمراض الباطنية والقلبية التخصصي
(الواردة)
العدد :
التاريخ

المرفقات :
استمارة عدد /٢

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
/ / ٢٠٢٢

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

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 : ١٦٩ التاريخ : ٨ / ٢ / ٢٠٢٢

إلى / مستشفى الأمام الصادق (ع)
مستشفى الحلة التعليمي
مستشفى مرجان التعليمي
م/ تسهيل مهمة

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

السلام عليكم ...

أشارة إلى كتاب جامعة بابل /كلية التمريض / لجنة الدراسات العليا ذي العدد ٥٢٤ في ٢٠٢٢/١/٣٠

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دائرة صحة محافظة بابل
مستشفى الامام الصادق (ع)
الموازنة

المرفقات :
استمارة عدد /٢

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
٢٠٢٢/ /

نيدر محمد جهاد
MSC pharmacist

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

سوزان ٢٠٢٢/٢/٨

Appendix : D

وزارة التعليم العالي

كلية التمريض / جامعة بابل

استمارة تقييم حاجة الممرضين للبرنامج التعليمي

عزيزي الممرض .... عزيزتي الممرضه....

المعلومات والاجابات الي سوف تدون في هذه الاستبانة من قبلكم ستساعد في تقييم مستوى التفكير الحرج للممرضين ومدى تاثره بالعمليات التمريضية في مستشفيات الحلة التعليمية وبناءا على اجاباتكم سيتم اعداد برنامج تثقيفي لرفع مستوى المعلومات حول العمليات التمريضية والتفكير الحرج.

يوجد في الاستمارة مجموعة من الفقرات يرجى قرائتها بعنايه ووضع دائرة

امام الاختيار المقابل لكل فقره من الفقرات التي تراها مناسبه لك اكثر من غيرها، علما ان المعلومات ستكون سرية لغرض البحث العلمي فقط.

شكرا لتعاونكم معنا خدمة لاهداف الدراسه

:عنوان الاطروحة

أثر البرنامج التعليمي للتفكير الحرج على معارف الممرضين في مستشفيات الحلة التعليمية

طالبة الدكتوراه

امنه عبد الحسن

استمارة الاحتياجات التمريضية

1.	**الممرض/ه يبحث عن ردود ..... عندما يوجه احد غير راضي**
أ-	اشياء
ب-	بديله
ت-	مضمونه
ث-	موجهه
2.	**الممرض/ه .....متى تكون البيانات خارج الحدود الطبيعية وربما تكون اعراض او علامات مشاكل محدده.**
أ-	معضله
ب-	يقارن
ت-	يذهب
ث-	يقرر
3.	**الممرض/ه يعتبر المريض والاسرة او مقدم الرعاية شخصيات ..... عند اتخاذ القرارات المتعلقة بادارة صحة المريض**
أ-	غير مهمة
ب-	بارزة
ت-	محورية
ث-	مهووسة
4.	**الممرض/ه ..... استراتيجيات تهدف إلى تعزيز تمكين (زيادة القدرات والمشاركة) للمريض والأسرة / مقدم الرعاية في عملية الرعاية.**
أ-	يحاول
ب-	يستخدم
ت-	يهدف
ث-	يرفض
5.	**الممرض/ه يستخدم..... (تحديد الأولويات، وتنظيم الوقت، وتنظيم مكان العمل) من أجل إدارة الوقت بشكل أفضل.**
أ-	استراتيجيات
ب-	سياسات
ت-	اخفاقات
ث-	مكونات

6. الممرض/ه يمتلك..... في استخدام تكنولوجيا المعلومات والاتصالات اللازمة لتحقيق أفضل النتائج المهنية.

أ- ضعف

ب- انظمه

ت- المهارات

ث- سرعه

7. الممرض/ه يقوم بتنفيذ ..... المرتبطة بإعطاء الدواء (تقييم الاستجابة العلاجية ، والرصد السابق واللاحق) بالطريقة الصحيحة.

أ- الاعتناء

ب- حضر

ت- الإدامة

ث- الرعاية

8. عندما ..... الممرض/ه لمواد تعليمية حديثة يحاول تحليل كيف اتى الممرض/ه ليتعلم ذلك

أ- يفهم

ب- يشمل

ت- يفهم

ث- يعرف

9. **عندما تكون المعلومات المتاحة غير مكتملة, الممرض/ه يبحث عن اي شيء اخر مطلوب من اجل فهم افضل لل..... السريريه**

أ- المشكله

ب- الحالات

ت- الإعاقة

ث- الكارثه

10. الممرض/ه يملء السجلات التمريضية بطريقة كاملة و.....

أ- ثقافية

ب- أنيق

ت- صارمة

ث- ناقص

Appendix: E

التفكير الحرج

مقدمة البرنامج:

مفهوم التفكير الحرج:

التفكير دوما يرتبط بحل مشكلة ما, لكون التفكير عملية عقلية يتفاعل فيها الادراك الحسي مع الخبرة السابقة لتحقيق هدف معين والتفكير على شكل حوارا داخليا مستمرا ومصاحبة لافعال متعددة مثل القيام بواجب معين او ملاحظة منظر ما او التعبير عن وجهة نظر محددة, و التفكير من ارقى العمليات حيث انها العملية التي يقوم بها الفرد بعد أن يدرك أبعاد الموقف الراهن ويتذكر خبراته السابقة , ولهذا فهو العملية العقلية الأخيرة التي تحدث قبل اصدار السلوك مباشرة وهو أيضا العملية التي توجه السلوك وتحدده.

وبما ان مهنة التمريض من أنبل المهن الإجتماعية والإنسانية ذات المتطلبات الكثيرة والمهام المتعددة، مما ينتج عنه إختلال في التوازن بين الأخذ والعطاء، إذ يكون العطاء أكبر حيث تتجاوز مهام الممرض العناية بالمرضى بتقديم العلاج والعناية بحالتهم الصحية إلى الإحساس بمعاناتهم وآلامهم.

بالتالي هذا ما يجعل من مهنة التمريض مصدرا للضغوطات النفسية والمهنية والإجتماعية، ويرفع من درجة المسؤولية لديهم مما يرفع التوتر والقلق خاصة عندما يتعلق الأمر بالحالات الحرجة, أن مصادر الضغوطات التي يعاني منها الممرضين متعددة منها إجتماعية، شخصية، تنظيمية ومادية، وتنعكس هذه الضغوطات سلبا على أداء عملهم وسلوكهم مما يرفع من نسبة الأخطاء، في حين وجدنا أن الخبرة والكفاءة التي يكتسبها الممرضين تمكنهم من تسيير ضغوطات العمل خاصة في الحالات الحرجة والمفاجئة.

الأهداف العامة:

عند الانتهاء من البرنامج التعليمي للتفكير الحرج سيكون الممرضين قادرين على :

1. التعرف على مفهوم التفكير الحرج.
2. وصف الصيغتان للتفكير الحرج.
3. فهم خصائص المفكر الذي يتميز بالتفكير الحرج.
4. تطوير البصيره الذاتيه عن طريق تطوير المهارات الشخصيه.
5. تمييز المهارات التي يتضمنها التفكير الحرج.
6. تحديد القدرات المعرفيه الكبيره والقدرات الصغيره.
7. تنظيم الذات وادارة الوقت بشكل صحيح.
8. يناقش المشاكل الصحيه بصوره منظمه.
9. يقارن بين المشاكل الصحيه الطارئه وغيرها .
10. ايجاد الحلول المناسبه للمشاكل التي يواجهها.

الجلسة الأولى

العنوان:

تعريف التفكير الحرج والخصائص التي يتميز بها المفكر الذي لديه تفكير حرج.

المقدمة:

التفكير الحرج (بالإنجليزية: Critical Thinking): على الرغم من تعدد التعريفات للتفكير الحرج ولكن يمكن أن تشمل صيغتان:

❖ **الأولى : توصف بالشخصية و الذاتية :** وهي تركز على الهدف الشخصي من وراء التفكير الحرج ، حيث هو تفكير تأملي معقول يركز على اتخاذ القرار فيما يفكر فيه الفرد أو يؤديه من أجل تطوير تفكيره و السيطرة عليه ، إنه تفكير الفرد بالطريقة التي يفكر فيه حتى يجعل تفكيره أكثر صحة ووضوحا و مدافعا عنه.

❖ **الثانية : تركز على الجانب الاجتماعي**: من وراء التفكير الحرج ، إذا هو عملية ذهنية يؤديها الفرد عندما يطلب إليه الحكم على قضية أو مناقشة موضوع أو إجراء تقويم . إنه الحكم على صحة رأي أو اعتقاد و فعاليته عن طريق تحليل المعلومات و فرزها و اختبارها بهدف التمييز بين الأفكار الإيجابية والسلبية.

ـ الأهداف:

- تزويد الممرضين معلومات عن جوانب التفكير الحرج.
- تسليط الضوء على الخصائص التي يتميز بها المفكر الذي يتميز بالتفكير الحرج.

- شرح مراحل هرم بلوم وارتباطه بالتفكير.

- تعريف التفكير الحرج:

حسب التعاريف العديده للتفكير الحرج من قبل سميث ,جون ديوي في كتابه (كيف نفكر) نستطيع تعريفه:

للموضوع العديد من التعريفات تتفق جميعها في أنه تحليل عقلانيّ شكوكيّ غير متحيّز، أو هو تقييم الأدلة والحقائق. وعملية موجهة ومنظّمة ومتابَعة ذاتيًا وتصحح نفسها بنفسها, هو التحليل الموضوعيّ للحقائق لصياغة حُكم " اذن التفكير الحرج هوه الذي يتطلب استخدام المستويات المعرفية العليا في تصنيف بلوم ، وهي التحليل و التركيب و التقويم".

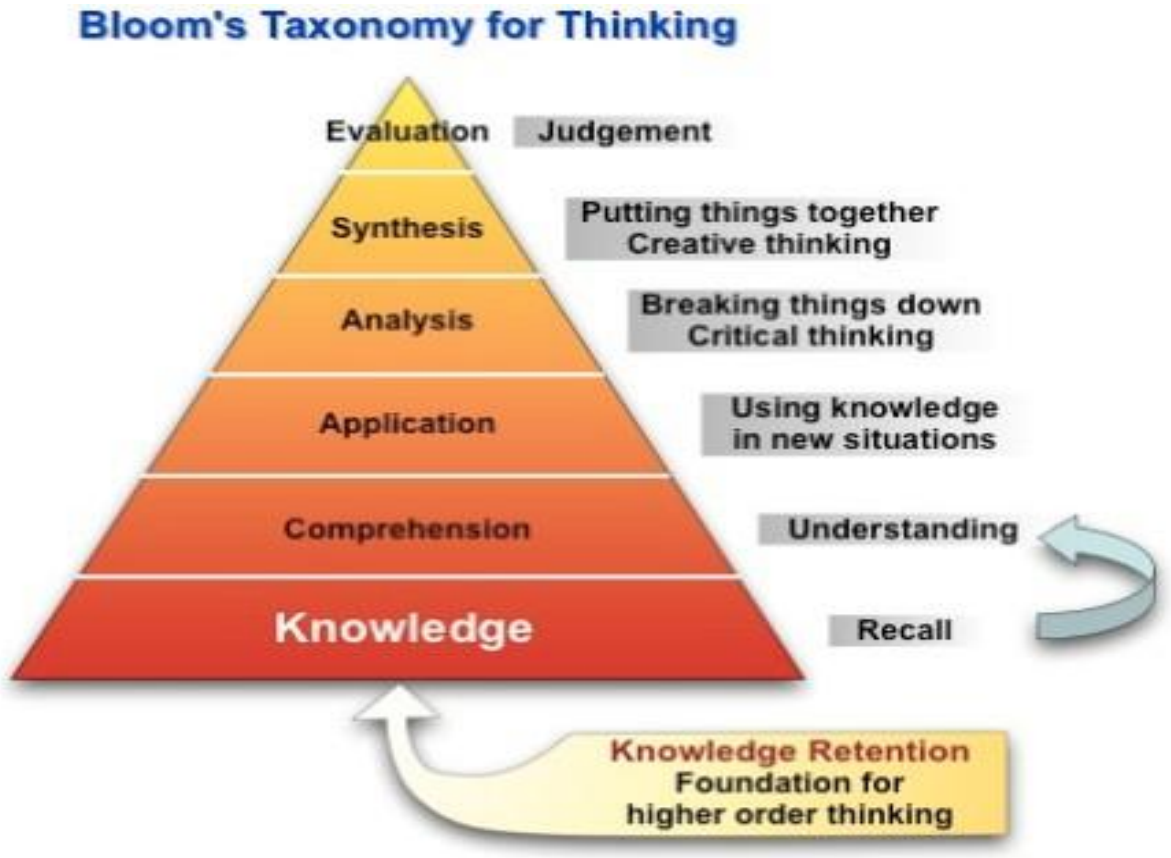
إنه يفترض التوافق بشأن معايير معينة والاستخدام اليقظ لها. كما يتضمن التواصل الفعّال والقدرة على حل المشكلات، والالتزام بالتغلب على الأنانيّة الفطريّة والأعراف المجتمعيّة. وإذا رجعنا إلى الكلمة الانكليزية Critical نجد إنها مشتقة من الأصل اللاتيني Critius أو اليوناني Kritikos الذي يعني ببساطة القدرة على التمييز وإصدار الأحكام .وقد يعبر هذا المدلول اللغوي للكلمة اليونانية , النظرة التقليدية القديمة للتفكير التي أرسى قواعدها , (DeBono,1944) بذلك يمكننا بالقول" إن مهارات التحليل والحكم والمجادلة مهمة في عملية التفكير لكنها ليست كافية في حد ذاتها لافتقارها إلى عناصر في غاية الأهمية من مثل جوانب التفكير الإنتاجية والإبداعية, وليس ممكنا التقدم في مجالات العلوم والتكنولوجيا بمجرد التوصل إلى الحقيقة عن طريق نقد مدى صحة الفرضية أو المعلومة القائمة.

ولابد من استكمال المهمة بالانتقال إلى مرحلة أخرى ربما تكون أكثر أهمية لخلق فرضيات جديدة وأفكار إبداعية لمعالجة الموقف أو حل المشكلة التي تبناها الفلاسفة الثلاثة سقراط وأفلاطون وأرسطو وتتخلص تلك النظرة في أن مهارات التحليل والحكم والمجادلة كافية للوصول إلى الحقيقة, يرجع مفهوم التفكير الناقد او الحرج في أصوله إلى أيام سقراط التي عرفت معنى غرس التفكير العقلاني بهدف توجيه السلوك. وفي العصر الحديث بدأت حركة التفكير الحرج مع أعمال جون ديوي عندما استخدم فكرة التفكير المنعكس و الاستقصاء إلا أن هناك افتقارًا ملحوظًا حول توافق الآراء التى تناولته من حيث تعريفاته وموضوعاته ومجالاته وأهدافه. في الثمانينات من القرن العشرين بدأ فلاسفة الجامعات بالشعور أن الفلسفة يجب أن تعمل شيئا للمساهمة في حركة إصلاح التعليم. و من ثم بدأ علماء النفس المعرفيون و التربويون في بناء وجهات النظر الفلسفية المتعلقة بالتفكير الحرج ووضعها في أطر معرفية و تربوية لاستغلال القدرات العقلية و الإنسانية في جميع مجالات الحياة. لذلك مع تطور التمريض علماً و معرفة و ممارسة و ازدياد المسؤوليات التمريضية, أصبح التفكير الحرج الذي يمثل القدرة على التساؤل و اتخاذ القرارات الموضوعية أكثر أهمية. وبما ان الممرضين/ات وجب عليهم اتخاذ القرارات الفعالة التي تمكنهم من تقديم الرعاية التمريضية المتنوعة من خلال استخدام المعلومات، المهارات والتفكير الحرج

كما أن التغيرات السريعة في بيئة الرعاية الصحية تتطلب من الممرضين/ات القيام بدورهم في اتخاذ القرار. إذ يتطلب التفكير الحرج اختبار جميع الأفكار و الأفعال بشكل موضوعي, حيث تتطلب رعاية المرضى في جميع الاجراءات اتخاذ القرارات و حل المشاكل.

يعتبر التفكير الحرج عنصراً أساسياً في عملية اتخاذ القرار التي تشمل مقارنة الخيارات و حل المشاكل التي تتطلب التحليل مما يمكن الممرضين/ات من تحدي الممارسات التمريضية الروتينية في الوقت الراهن, و تطوير فهم أكثر عمقاً لأية مشكلة بالاستناد إلى الأسباب, و تطوير مهاراتهم القيادية , كما تمكنهم من تطوير حلول أكثر إبداعية عند استخدامهم للتفكير الحرج. على الرغم من أهمية مهارات التفكير الحرج, إلا أنه توجد قلة في الدراسات الأجنبية و العربية و لا توجد أية دراسة في العراق عنيت بهذا الجانب من المهارات

التي يجب أن يستخدمها الممرضين/ات ليؤدوا دورهم بكفاءة, لذلك أجريت الدراسة الحالية لزيادة التفكير الحرج لدى الممرضين/ات.



.(2011) .Higherorderthinkingskills1358fst.blogspot.com.au

خصائص المفكر الذي يتميز بالتفكير الحرج:

أورد العلماء والباحثون والمهتمون بموضوع التفكير الحرج الكثير من خصائص للذين يتمتعون بالقدرة على التفكير الحرج على وجه الخصوص ويمكن أبراز الخصائص على النحو التالي :

1. **توافر القابليات او الميول اوالنزعات او العادات العقليه الأساسيه:**آن توافر الدقة والوضوح والالتفات إلى وجهات النظر المتباينه والعمل على تغيير المواقف في ضوء ظهور مبررات جديده وتقدير الادله والانفتاح الذهني يجعل الفرد يميل إلى التفكير الحرج كسلوك عقلي في بنائه المعرفي وبالتالي يصبح التفكير الحرج عادة من عادات العقل.

2. **توفير المعايير المناسبة: أن** العمل على على تخليق المفكر الذي يتميز بالتفكير الحرج بطريقه تحتكم الى المنطق يتطلب توفير معيار او مجموعة من المعايير المناسبة التي يتمكن الفرد من الاحتكام اليها بهدف ممارسة عمليه التمييز بهذا الشأن الى أن العمل على ايجاد معايير مشتركه بين الحالات او المواقف امر غير سهل وبالتالي فان ايجاد معايير خاصة بالحاله الواحده قد يكون من الامور المفيده جدا.

3. **القدره على المجادلة:** تعرف المجادله بانها جمله او عباره او فكره تستند الى دليل وبالتالي فان التفكير الناقد يتضمن تعريف المجادلات ومن ثم العمل على تقيمها وتطويرها.

4. **الاهتمام بالاستدلال:** آن قدرة الفرد على استنتاج الأحكام او القواعد النهائيه واحده او اكثر من المسلمات التي تعتبر من المميزات الرئيسية للممرض/ه الذي يتميز بالتفكير الحرج ومن اجل بلوغ هذه الخاصية فان الامر يتطلب العمل على فحص العلاقات المنطقية بين البيانات والمعلومات المتوفره.

5. **الاهتمام بوجهات النظر الأخرى :** ان تمركز الفرد حول وجهه نظره فقط تعتبر من العوائق الأساسية للتفكير المنطقي بل ان العالم السويسري (جان بياجيه) وصف هذه الحاله بما اسماه بمظاهر التمركز حول الذات فالمفكر الناقد يتميز باخذه الظاهره موضوع البحث والدراسة من جوانب متعدده قد يكون للاخرين وجهات نظر مختلفة عما يعتقده هو أن الاهتمام بوجهات النظر المختلفه يعمل على اتخاذ القرار المناسب والاكثر دقه وقبولا.

6. أن لا يجادل في أمر لا يعرف عنه شيئا .

7. يعرف متى يحتاج إلى معلومات جديدة بشأن شيء لايفهمه .

8. يعرف الفرق بين النتيجة التي قد تكون حقيقية والنتيجة التي يجب ان تكون حقيقية .

9. يعرف إن لدى الناس افكارة مختلفة نحو معاني المفردات.

10. يحاول تجنب الأخطاء الشائعة في تحليل الأمور.

11. يتساءل عن أي شيء لا يفهمه.
12. يحاول بناء مفرداته وزيادتها باستمرار بحيث يستطيع فهم ما يقوله الاخرون.

استراتيجيات التعليم:

1. **الوقت والتاريخ:**10:30- 11:30 صباحا, 5 مارس 2022.
2. **المدة:** 60 دقيقه.
3. **المكان:** قاعة الندوات في مستشفى الامام الصادق(ع) التعليمي.
4. **طرق العرض:** المحاضرات, المناقشة, الكمبيوتر, عرض البيانات (PowerPoint).

الجلسة الثانيه:

- العنوان: المهارات التي يتضمنها التفكير الحرج : (1) البعد الأول : الاستراتيجيات الانفعالية وتتكون من: تطوير البصيرة الذاتية للفرد عن طريق تطوير المهارات الشخصيه:

المقدمه:

المهارات الشخصية: هي المهارات التي من الممكن الحصول عليها عند تحديد نقاط القوة، وتنقسم المهارات

الشخصية إلى قسمين هي المهارات التقنية التي تختص بالمهام والنشاطات الخاصة بالعمل، والمهارات الاجتماعية التي تختص بالمزايا منها الشخصية، والمشاعر، وأساليب التواصل، والأمور الاجتماعية، والنجاح في هذا النوع يظهر التواصل مع الآخرين بحكم عمل الممرضين/ ات سواء كانوا من العائلة أوالمريض نفسه ، أو الأصدقاء، أو حتى زملاء العمل.

تعدّ المهارات الشخصية إحدى المهارات التي يُمكن للفرد تنميتها وتطويرها، وتسمح للإنسان بالتعبير عن ذاته، والتفاعل مع الآخرين، وهي من المهارات السهلة التي تظهر عبر المواقف وصفات الإنسان، حيث تستخدم هذه المهارات في الحياة اليومية وفي العمل. **وبما ان أخلاقيات مهنة التمريض** هي فرع من الأخلاق التطبيقية التي تهتم بالفعاليات في مجال التمريض,والتي أسهمت العديد من المبادئ في المهن الطبية، مثل الخير، وعدم إيذاء، واحترام الاستقلال الذاتي .ويمكن تمييزها بتركيزها على العلاقات، والحفاظ على الكرامة والرعاية التعاونية. أن المهارات الشخصية الجيدة للممرضين/ ات تسمح لهم للتعامل بشكل جيد مع المرضى، والزملاء في المجال الطبي، وتساعد على نقل الأفكار بشكل واضح، والاستماع إلى الآخرين جيداً، كما يجب على الممرضين/ ات ان يمتلكون مهارات شخصية قوية، لكي يعملون بنجاح ويكونون متحمسين مما يجعل مكان العمل أفضل.

المهارات الشخصية هي المهارات الحياتية الأساسية التي نحتاجها للمساعدة في الحفاظ على صحة الجسم والعقل، وتشمل هذه المهارات العديد من تلك الموجودة في قائمة منظمة الصحة العالمية مثل

(المرونة وضبط النفس والوعي الذاتي)، وتشمل أيضاً مهارات مثل كيفية التعرف على المشاعر وإدارتها والتعامل معها.

ـ الأهداف:

- سيكون الممرضين لهم القدرة على تطوير بصيرتهم الذاتية عن طريق تطوير مهاراتهم الشخصيه.
- سيطبق الممرضين الاساليب التي تساهم في تطوير الذات.

❖ **المهارات الشخصية في العمل:**

تنقسم المهارات الشخصية في العمل إلى عدة أقسام كما يأتي :

وهي أن يكون الممرضين/ات لديهم القدرة على حل المشاكل التي تعترض طريقهم باستخدام التحليل والتفكير الحرج.

- **مهارات إدارة العلاقات الشخصية:**

من المهارات الشخصية التي تختص بإدارة العلاقات الشخصية، ما يأتي :

✓ **توكيد الذات**

وهي المهارات السلوكية اللفظية وغير اللفظية، التي تساعد على تعبير الإنسان عن مشاعره الإيجابية والسلبية، ومقاومة الضغوط التي يمارسُها الآخرين على الإنسان، وتنقسم مهارات التوكيد لعدة أمور منها:

- الدفاع عن الحقوق العامة والخاصة.
- الاعتذار العلني.
- الاستقلال بالرأي.
- النقد.
- المساومة.
- العِتاب.
- الغضب.
- ضبط النفس.
- إظهار الإعجاب.
- المُصارحة.

- المديح.
- التعبير عن الاحتجاج.

✓ **الاهتمام بالذات**

ـ تطوير الذات بأساليب متنوعة ومتسلسلة، منها:

1.تحديد المبادئ والقيم

ضروري أن يعمل الإنسان الذي يريد أن يطور ذاته وينمي شخصيته، على ضبط بوصلته نحو مبادئه وقيمه التي فطره الله عليها، وذلك حتى لا يختلط عليه طريق التغيير فتصبح مسيرته في طريق مختلف عن مبادئه وأصوله التي عاش عليها لفترة طويلة من حياته, على الإنسان أن يدرك دائماً أن القيم هي نقطة الارتكاز التي تنطلق منها كل عمليات التغيير والتطوير، وهي صمام الأمان الذي يحافظ على توجهات الإنسان ويرسم له طريقه في المستقبل.

وتبرز أهمية الأخلاق المهنية في كونها مؤشرا على التطور الحضاري للمجتمعات ، فعلماء الاجتماع يرون بأن نجاح المنظمات مرهون بمدى امتلاك العاملين بها لأخلاق مهنية يعتمدون عليها في ممارساتهم المهنية، فهي تتصدر قائمة شروط النجاح في أي سلوك يسلكه الأفراد، فالمنظمات تسعى دائما إلى تحقيق جودة الأداء عن طريق تعزيز الصفات الايجابية لدى العاملين بها، خاصة المنظومة الأخلاقية.

فالأداء الفعال لا يمكن أن يتشكل بعيدا عن الاستثمار الأمثل للوقت والتواصل الفعال فضلا عن التعاون والاحترام، فأسلوب الأداء وكيفية تعامل العاملين مع بعضهم والوقت الذي يأخذونه في انجاز مهامهم يعطي صورة عن القيم التي يتحلى بها الشخص لما لها أهمية كبرى سواءا على السبيل الفردي المتعلق بالإنسان بحد ذاته أي ذلك الحيز الشخصي الذي من خلاله يستطيع الفرد أن ينظم سلوكياته، ويضبط طريقة تفاعله مع الآخرين وفق قيم اجتماعية، أو على السبيل الجماعي من خلال تحقيق نوع من التوافق والتكامل بين جميع الأفراد " فالقيم تؤدي وظيفة تنظيمية ترتب حاجيات وأولويات المجتمع بتخليصه من الفوضى التي يعيشها أفراده".

كذلك المبادئ التي يحملونها،وبهذا يختلف الأفراد العاملون في مجموع الأخلاق المهنية التي تتحكم في أدائهم ومدى انجازاتهم, وللأخلاق المهنية دورا كبيرا في حياة العاملين، فأدائهم الوظيفي مقرون بالأخلاق المهنية التي يتمتعون بها، فعدم مغادرة مكان العمل قبل انتهاء الوقت الرسمي للعمل وطلب

الإذن لأخذ إجازة يعبران عن الالتزام في العمل ، و ذلك باعتبار العمل واجب يلزم العمال الانضباط و القيام بمتطلبات المهنة.

كما أن التعاون يزيد من سرعة تقديم الخدمة لأن العمل الجماعي يكون أحسن، فهو يخفف من ضغط العمل، و يسهل العمل الصعب كما يساعد على التحفيز و التغطية على النقص الفردي في الأداء مما يزرع الثقة في نفوس العاملين وبذلك يكتسبون خبرات أخرى، فيؤدي ذلك الى الإتقان و الجودة و سرعة الأداء، و احترام الزملاء يزيد من فعالية انجاز المهام، لأن تقدير إنجاز العامل يزيد من عزيمته و الرفع من ثقته بنفسه فيحاول القيام بعمله على اكمل وجه.

2.الأولويات

تحديد أولوياتك قبل البدء في أي خطط تغيير، أفضل ما تقدمه لنفسك خلال مشوارك في النمو الشخصي، فمن خلال جدول أعمال زمني يضاف إليه المهمات التي عليك اتباعها وتنفيذها في وقت محدد، تساعد نفسك في تحقيق الأهداف حسب أولوية كل منها، وهذا يكون معنى الإنجاز الحقيقي، أما العشوائية في إنجاز المهمات ومع إهمال المهم والأهم، فإنها تؤدي إلى خلل في النتيجة، والقيمة النهائية المحصلة.

3.التعلم والخبرات

من أهم ركائز تطوير الذات، هي المقدرة على التعلم واكتساب الخبرات المختلفة في فترة وجيزة، حتى تتمكن من التطوير الحقيقي المطلوب، وذلك لأنه قائم على العلم يعود بالنفع على صاحبه في جميع الأحوال، ويؤدي العلم إلى التحسين الطردي والملائم في جوانب الشخصية، ومهاراتها، وسلوكها.

4.التفكير الإيجابي

يعد التفكير الإيجابي عملية أساسية ملازمة للتطوير والتحسين في الذات، فعندما يكتسب الإنسان صفات إيجابية، تساعده على المضي قدماً نحو أهدافه، فضلاً عن أنها تجعله الشخص المفضل لجميع من حوله، وتفتح له العديد من الفرص المميزة، كما أن التفكير بإيجابية ينعكس على سلوكيات الفرد ومهاراته وواقعه، إذ لا يعرف الإيجابي طريقاً مسدوداً، فالخيارات أمامه مفتوحة، والبدائل بجعبته متعددة.

5.التفاؤل

تظهر فائدة التفاؤل كقيمة نبيلة في تنمية دوافع الإنسان، وتحفيزه على إتمامِ مسيرته وسعيه في تطوير ذاته، وتحقيق أهدافه وطموحاته، وينعكس التفاؤل في استشعار السعادة أثناء العمليات المعتادة لتطوير الذات، والتنمية، والتعلم المستمر.

6.الثقة بالنفس

احترام الذات وتقديرها والثقة فيها، من أول مقومات النجاح الحقيقي، فعندما يبرز الإنسان ثقته بنفسه، يمكنه من تحقيق تقدم وخطوات ناجحة في حياته، لأنه أصبح شخصاً ناضجاً مميزاً يختلف عن كل المحيطين به.

7.التوازن

على الإنسان الذي يطور من ذاته، أن يعمل على تحقيق الترتيب والتوازن، حيث يتمكن من تحقيق طموحاته شيئاً فشيئاً ببناء متناغم ومنظم.

8.المثابرة والتركيز

إن أكثر ما يمنع الإنسان من تطوير ذاته ويحرمه لذَة النجاح والإنجاز هو التسويف، ومن أراد الوصول إلى ما يتمنَّاه وتطلبه نفسه فعليه بالسعي، والعمل، وتركيز الجهود نحو أهدافه دون تخبط أو تشتت، فالإنجاز لا يتحصل دفعة واحدة، وإنما يأتي بمواظبة مرحلية تتحقق فيها مكتسبات أولية تستلزم المثابرة والسعي لإكمال البناء، وتحقيق النجاح الكلي عبر الخطط المرسومة، والتركيز على الأهداف المنشودة.

9.التواصل

تعني قدرة الشخص على تبادل المعلومات مع مختلف الأشخاص، والقدرة على التواصل كتابياً والاستماع الفعّال للأشخاص.

10.إدارة الوقت

تتضمّن القدرة على إنهاء الأعمال والمشاريع قبل الوقت المحدد لها، بالإضافة إلى القدرة على تحديد الأولويات والتنظيم.

11.رعاية المريض

هي المهارة التي تساعد على تلبية احتياجات المريض وتقديم الخدمات الصحيه لهم، وتتضمّن مهارات التعامل مع الآخرين.

12.القيادة

تُستخدم هذه المهارة لتنظيم عمل مجموعة موظفين للوصول إلى هدف مشترك، وتتضمّن المرونة، والقدرة على التوجيه والإرشاد.

13.حل المشكلات

تُمثِّل القدرة او مهارات حل المشاكل على إيجاد سبب المشكلة بسرعة وإيجاد الحل الأنسب لها، حيث تتطلّب التعاون، والدقة، والصبر.وهي من المهارات الحياتية المفيدة الأخرى التي يجب تعلمها وإتقانها هي حل المشكلات، لأنها تتيح لنا التحكم في بيئتنا و التأقلم مع الظروف المحيطة، ويمكن أن يوفر اكتشاف السبب الجذري للتحدي أو المشكلة قدراً كبيراً من الرضا والإنجاز. طوال حياة الشخص سوف يواجه العديد من العقبات التي يجب عليه مواجهتها والتغلب عليها. أن اتخاذ القرار عملية حسم لموقف مشكل يعتمد على الوظيفة العقلية ، أي أنها عملية معرفية تنطوي على سلسلة من الفعاليات العقلية ، كالانتباه والإدراك والمبادأة من أجل تحقيق الهدف المطلوب.

تعلم كيفية حل المشكلات يمكن أن يساعدك على:

- اختبار قدرتك على تحليل المعلومات وتقييم المواقف.
- ابتكار استراتيجيات جديدة للتغلب على مشكلة.
- تعزيز احترامك لذاتك ومستويات قدرتك.

14.مهارة الوعي الذاتي

يشير الوعي الذاتي إلى قدرتك على التعرف على عواطفك ومعتقداتك وسلوكياتك ودوافعك أو إدراكها، من بين الخصائص الأخرى بما في ذلك نقاط القوة والضعف لديك, ويعد الوعي الذاتي مهارة حياتية حاسمة، لأنها تمنحنا معرفة أفضل بمن نحن، وكيف نختبر أنفسنا، وما الذي يجعلنا فريدين ومختلفين عن الأفراد الآخرين. بمجرد أن تصبح مدركاً لذاتك، ستتمكن من إجراء تغييرات في نمط الحياة تساعدك

على التفكير بشكل أكثر إيجابية، تتضمن بعض الفوائد الرئيسية التي يمكنك اكتسابها من الوعي الذاتي ما يلي:

- تعزيز الاتصالات.
- إثراء الذكاء العاطفي.
- مهارات استماع وتعاطف أكبر.
- تعزيز القدرات القيادية.

15.مهارة الاعتذار

هناك عدد من الأشخاص لا يعرفون كيف يقدمون اعتذاراً صادقاً عما يرتكبونه من أخطاء، لذلك تكون مهارة الاعتذار والاعتراف بالخطأ بإخلاص واحدة من أهم تلك المهارات الحياتية التي يحتاجها الإنسان طوال حياة، لأن جميع البشر يرتكبون أخطاء ويكونوا في حاجة دائمة للاعتذار عن أفعالهم التي قد تسبب ضرراً للآخرين.

تتضمن استراتيجية الاعتذار الناجحة 6 خطوات تشمل:

- التصرف بسرعة.
- تقديم الاعتذار شخصياً.
- شرح ما حدث.
- شرح كيفية تجنب هذه المشكلة في المستقبل.
- الاعتذار.
- تقديم تعويض.

ولتفادي عواقب الأخطاء الوخيمة يجب على الممرضين:

1. التصرف المناسب السريع المنقذ أو المصحح للخطأ الذي تم.
2. تبليغ الطبيب المعالج والممرض المسؤول عن نوع الخطأ.
3. متابعة حالة المريض متابعة مكثفه مستمرة إلي زوال فترة الخطورة
4. كتابة الخطأ ونوعه ووقته وكل ما يدور من معلومات في ورقة ملاحظة المريض التوصيات المهمة لتفادي الإهمال وتكرار وقوع الأخطاء.
5. زيادة عدد الممرضين/ات.
6. فتح برامج تمريضية تخصصية.

7. عدم السماح بدوام المناوبة المزدوجة.
8. التوثيق الدقيق في وقته وتطبيق أساليب التوثيق الحديثة.
9. التعليم المستمر وأهميته في التقليل من حدوث الأخطاء الصحيه.
10. أي فجوات أو ثغرات أن وجدت يجب أن تصبح فرص جديدة للتعليم.
11. مراجعة اللائحة التنفيذية لمزاولة المهنة أذا كان بها بعض الثغرات.
12. عقد ندوات تعريفية للممرضين/ات وتعريفهم بحقوقهم وواجباتهم والتركيز علي أخلاقيات الممارسات التمريضيه.
13. من الضروري إنشاء نظام يتولى مراقبة سلامة هذه المهنة كنظام لتوثيق الأخطاء التمريضيه والاستفادة منها لتفاديها مستقبلا.

إن حدوث الأخطاء التمريضيه والتبليغ عنها لا يعني إن هناك مشكلة أو نقصا أو شيئا من هذا القبيل بل على العكس بل إن معرفة ماهية هذه الأخطاء وأسباب حدوثها هي التي تساعد في المستقبل على تلافيها.

16.مهارة الرفض بطريقة لائقة

واحدة من المهارات التي لا يعرف عنها الكثير، حيث إن قول كلمة "لا" تكون عبئاً كبيراً على بعض الأشخاص ويشعرون بالضيق بسبب عدم قدرتهم على قولها، رغم أنهم بحاجة إلى الاعتراض أو عدم قبول الأمر، لذلك فهي تعد مهارة حياتية جيدة تساعد صاحبها على الاستمتاع بالحياة بشكل أفضل.

ضروري أن يتعلم الشخص كيفية قول كلمة «لا» بطريقة لائقة ومن دون شعوره بالذنب، ومن دون إزعاج الطرف الآخر أيضاً، فعلى الفرد أن يتعلم ويتفهم أن هناك بعض الأشياء التي يجب أن تكون لها الأولوية بما في ذلك (الصحة، الوقت، الحياة، الأسرة), وممارسة التحكم الذاتي العقلي ، الذي يستند على مجموعة من المعايير العقلية ,ايضا استكشاف الأفكار التي تتضمن المشاعر, وتطوير الجراءه العقلية اضافة الى المثابره العقلية التي تساعد في تطوير الثقة في العمل.

استراتيجيات التعليم:

1. **الوقت والتاريخ:**10:30- 11:30 صباحا, 11 مارس 2022.
2. **المدة:** 60 دقيقه.
3. **المكان:** قاعة الندوات في مستشفى الامام الصادق(ع) التعليمي.
4. **طرق العرض:** المحاضرات, المناقشة, الكمبيوتر, عرض البيانات (PowerPoint).

الجلسة الثالثه:

العنوان: المهارات التي يتضمنها التفكير الحرج : (2) البعد الثاني : الاستراتيجيات المعرفية والفكرية ـ القدرات الكبيرة والقدرات الصغيره.

المقدمة:

خطوات يسير بها المتعلم لتكون لديه مهارات التفكير الحرج على النحو التالي:

1. جمع سلسلة من الدراسات والأبحاث والمعلومات والوقائع المتصلة بموضوع الدراسة.
2. أستعراض الآراء المختلفة بالموضوع.
3. مناقشة الآراء المختلفة لتحديد الصحيح منها وغير الصحيح.
4. تمييز نواحي القوة ونواحي الضعف في الآراء المتعارضة.
5. تقييم الآراء بطريقة موضوعية بعيدة عن التحيز والذاتية.
6. البرهنة وتقديم الحجة على صحة الراي الذي تتم الموافقة عليه.
7. الرجوع الى المزيد من المعلومات اذا ما استدعى البرهان او الحجة لذلك.
8. صقل التعميمات وتجنب الإفراط في التبسيط.
9. مقارنة المواقف المتماثلة من خلال عملية التبصر الى بيئات جديدة بهدف المقارنة.
10. تطوير وجهة النظر للشخص من خلال استكشاف المعتقدات أو الجدالات أو النظريات
11. توضيح القضايا ، والخلاصات ، أو المعتقدات.
12. توضيح وتحليل معاني المفردات أو الجمل.
13. تقييم مصداقية مصادر المعلومات.
14. تحليل وتقييم الجدالات ، والتفسيرات والمعتقدات والنظريات.
15. إيجاد الحلول وتقييمها.
16. تحليل الأعمال والسياسات وتقييمها.
17. القراءة بشكل ناقد.
18. الاستماع بشكل ناقد.
19. إيجاد علاقات بين الأنظمة.
20. ممارسة النقاش.
21. التعقل الذي يستند إلى الحوار.
22. التعقل الذي يستند إلى المجادلات المنطقية.

23. مقارنة المثاليات من خلال ممارسة الحقيقة ، ومن ثم البحث عما يناقضها.
24. التفكير بدقة حول التفكير من خلال استخدام الكلمات الناقدة.
25. اختبار المزاعم وتقييمها.
26. ملاحظة أوجه الشبه والاختلاف المهمة.
27. تمييز الحقائق ذات العلاقة من الحقائق غير ذات العلاقة.
28. القيام باستنتاجات معقولة أو تنبؤات أو تفسيرات.
29. تقييم الإثباتات والحقائق المزعومة.
30. إدراك التناقضات.
31. استكشاف التضمينات.

- الأهداف:

- سيتعرف الممرضين على الخطوات التي يمكن أن يسير بها المتعلم لتكون لديه مهارات التفكير الحرج.
- يحدد الممرضين المهارات التي تتطلب انتاج او ابتكار حلول جديده.

✓ **المهارات الإنتاجية / المبتكره:**

1. **الاستنتاج Inferring: التفكير فيما هو أبعد من المعلومات المتوافرة لسد الثغرات فيها.**
2. **التنبؤ Predicting:** استخدام المعرفة السابقة لإضافة معنى للمعلومات الجديدة وربطها بالأبنية المعرفية القائمة.
3. **الإسهاب Elaborating:** تطوير الأفكار الأساسية والمعلومات المعطاة وإغناؤها بتفصيلات مهمة وإضافات قد تؤدي إلى نتاجات جديدة.
4. **التمثيل Resenting:** إضافة معنى جديد للمعلومات بتغيير صورتها (تمثيلها برموز أومخططات أو رسوم بيانية) مهارات التكامل والدمج.
5. **التلخيص Summarizing:** تقصير الموضوع وتجريده من غير الأفكار الرئيسة بطريقة فعالة و عملية.
6. **إعادة البناء Restructuring** عديل الأبنية المعرفية القائمة الإدماج معلومات جديدة، مهارات التقويم.
7. **وضع معايير Establishing Criteria:** اتخاذ معايير لإصدار الأحكام والقرارات.
8. **الإثبات Verifying:** تقديم البرهان على صحة أو دقة الادعاءات.
9. **التعرف على الأخطاء Identifying Errors:** الكشف عن المغالطات أو الوهن في الاستدلالات المنطقية، وما يتصل بالموقف أو الموضوع من معلومات، والتفريق بين الآراء والحقائق.

✓ مهارات التفكير فوق المعرفية :

توصلت الدراسات التي أجريت منذ بداية السبعينيات حول مفهوم عمليات التفكير فوق المعرفية إلى تجديد عدد من المهارات العليا، التي تقوم بإدارة نشاطات التفكير وتوجيهها عندما ينشغل الفرد في موقف حل المشكلة أو اتخاذ القرار. وقد صنف (ستيرنبرج1985 Sternberg,هذه المهارات في ثلاث فئات رئيسة، هي: التخطيط والمراقبة والتقييم وتضم كل فئة من هذه الفئات عددا من المهارات الفرعية يمكن تلخيصها فيما يأتي:

1. **التخطيط : Planning**

- تحديد هدف أو الإحساس بوجود مشكلة وتحديدها.
- اختيار استراتيجية التنفيذ ومهارات.
- ترتيب تسلسل العمليات أو الخطوات.
- تحديد العقبات والأخطاء المحتملة
- تحديد أساليب مواجهة الصعوبات والأخطاء.
- التنبؤ بالنتائج المرغوبة أو المتوقعة.

2. **المراقبة والتحكمMonitoring & Controlling :**

- الإبقاء على الهدف في بؤرة الاهتمام.
- الحفاظ على تسلسل العمليات أو الخطوات.
- معرفة متى يتحقق هدف فرعي.
- معرفة متى يجب الانتقال إلى العملية التالية.
- اختيار العملية الملائمة التي تتبع في السياق.
- اكتشاف العقبات والأخطاء.
- معرفة كيفية التغلب على العقبات والتخلص من الأخطاء.

3. **التقييم Assessment :**

- تقييم مدى تحقق الهدف.
- الحكم على دقة النتائج وكفايتها.
- تقييم مدى ملائمة الأساليب التي استخدمت.
- تقييم كيفية تناول العقبات والأخطاء.
- تقييم فاعلية الخطة وتنفيذها.

✓ **مهارات جمع المعلومات وتنظيمها:**

1) الملاحظة Observing يقصد بالملاحظة هنا استخدام واحدة أو أكثر من الحواس الخمس (الإبصار، السمع، الذوق، الشم، اللمس) للحصول على معلومات عن الشيء أو الظاهرة التي تقع عليها الملاحظة. وهي عملية تفكير تتضمن المشاهدة والمراقبة والإدراك، وتقترن عادة بوجود سبب قوي أو هدف يستدعي تركيز الانتباه ودقة الملاحظة. وهي بهذا المعنى ليست مجرد النظر إلى الأشياء الواقعة في مرمى أبصارنا أو سماع الأصوات الدائرة من حولنا واستنادا إلى طبيعة الموقف وهدف الملاحظة قد يكون التركيز على التفاصيل أو على جوهر الموضوع أو على الاثنين معا، وقد يتطلب الأمر أقصى درجة من الدقة في المشاهدات، وقد يكتفي بصورة تقريبية لها.

2) المقارنة Comparing المقارنة هي إحدى مهارات التفكير الأساسية لتنظيم المعلومات وتطوير المعرفة. وتتطلب عملية المقارنة التعرف على أوجه الشبه وأوجه الاختلاف بين شيئين أو أكثر عن طريق تفحص العلاقات بينهما، والبحث عن نقاط الاتفاق ونقاط الاختلاف، ورؤية ما هو موجود في أحدهما ومفقود في الآخر. وتوفر المقارنة فرصة للممرضين/ات كي يفكروا بمرونة ودقة في شيئين أو أكثر في آن واحد، كما أنها تضيف عنصر التشويق والإثارة للموقف التعليمي عندما يخطط لها لتحقيق هدف واضح في إطار السياق الطبيعي.

3) التصنيف Classifying: التصنيف مهارة تفكير أساسية لبناء الإطار المرجعي المعرفي للفرد، وضرورية للتقدم العلمي وتطوره، بل يمكن اعتبارها من أهم مهارات التعلم التفكير الأساسية. فإذا لم نتمكن من القيام بعملية التصنيف لن يكون بمقدورنا التكيف مع عالمنا المعقد، ذلك أن قدرتنا على تقسيم أو تصنيف الأشياء أو الخبرات الجديدة ضمن منظومات أو فئات مألوفة لدينا تحدد طبيعة استجاباتنا لها. إن تعلم مهارة التصنيف عبارة عن تعلم ماهية الخصائص المشتركة بين جميع مفردات فئة أو عائلة معينة وغير المتوافرة لدى مفردات فئة أو عائلة أخرى من الأشياء أو الكائنات، وإيجاد نظام أو طريقة لفصل المفردات وإلحاقها بفئات لكل منها خصائص تميزها عن الفئات الأخرى .

فعندما نصنف الأشياء أو نبوبها، فإننا نضعها في مجموعات وفق نظام معين في أذهاننا. فإذا طلب إلينا تصنيف مجموعة من الأدوات أو المواد او الأفكار فإننا نبدأ بفحصها أولا، وعندما نرى أشياء معينة تجمعها خصائص مشتركة نقوم بفصلها ووضعها معا، ونستمر في ذلك حتى يصبح لدينا من التجمعات. وإذا بقي شيء يبدو غير قابل للتصنيف وفق النظام الذي ارتأيناه، فإما أن نستخدم نظماً مختلفة للتصنيف يستوعب ما تبقى من أشياء، وإما أن نصنفها في مجموعة تحت بند " متفرقات "أ" غير ذلك ". وفي بعض الحالات قد نجد أن مفردات عائلة أو فئة معينة يمكن إلحاقها بعائلة أخرى وذلك تبعا لنوع الخصائص التي اتخذت أساسية للتصنيف.

4) **الترتيب Ordering:** الترتيب هو مهارة تفكير أساسية من مهارات جمع المعلومات وتنظيمها، ويعني الترتيب هنا وضع المفاهيم أو الأشياء أو الأحداث التي ترتبط فيما بينها بصورة أو بأخرى في سياق متتابع وفقا لمعيار معين. فالإنسان يكون صورة ذهنية أو مفاهيم للأشياء التي يتعرض لها من واقع خبراته التعليمية والشخصية، ويعطي لكل مفهوم أو شيء اسما أو عنوان مختلفة، فهذه شجرة وتلك سفينة ، ثم يبحث عن الخصائص الأساسية التي تتميز بها مجموعة من المفاهيم أو ألأشياء، ويقوم باختزانها على شكل مجموعات ترتبط كل منها بخاصية مميزة. ويجدر الانتباه إلى أن عملية الترتيب ليست بالسهولة التي قد تبدو للوهلة الأولى، فهناك الكثير من المفاهيم والأشياء التي تجمعها علاقة أو خاصية ما، ولكن الفروق في درجة الخاصية أو قوتها طفيفة إلى الحد الذي يصعب معه ترتيبها وفق هذه الخاصية . وفي مثل هذه الحالة ينبغي عدم التسرع والبحث عن خاصية عامة مشتركة يمكن أن تكون الفروق بين المفاهيم بالنسبة لها أكثر وضوحا.

5) **تنظيم المعلومات Organizing Data:** إن تنمية العقل البحاث لدى المتعلم أكثر أهمية من تلقينه فيضا من المعلومات التي يمكن أن يتوصل إليها بنفسه إذا اتيحت له فرص الرجوع إلى مصادر هذه المعلومات ومن الطبيعي أن يواجه الطلبة مشكلة ـ ليست سهلة كما يبدو – في تنظيم المعلومات وفي كيفية عرضها بعد جمعها. ولما كان هناك أكثر من طريقة لتنظيم المعلومات وإخراجها، فلابد أن يتعرض الطلبة الخبرة الممارسة العملية حتى يمكن تطوير مهاراتهم في المواقف المختلفة. ومن بين الاعتبارات المهمة التي ينبغي مراعاتها في تنظيم المعلومات. طبيعة الجمهور الذي ستعرض عليه، والوقت المخصص لذلك، والسياق التاريخي الذي ستعرض بموجبه.

✓ **مهارات معالجة المعلومات وتحليلها:**

1) **التطبيق Applying:** يقصد بمهارة التطبيق استخدام المفاهيم والقوانين والحقائق والنظريات التي سبق أن تعلمها الطالب لحل مشكلة تعرض له في موقف جديد. وفي بعض الأحيان يعرض الموقف على شكل حدث وقع في الماضي ونتيجته معروفة، ويقتصر دور الطالب على تفسير النتيجة استنادا إلى قوانين وحقائق يفترض أنه قد مر بها. وفي أحيان أخرى تكون المعطيات حول موقف افتراضي أو مستقبلي، ويطلب من الطالب التنبؤ بما يمكن أن يحدث في ضوء المعطيات مع بيان الأسباب أو المبررات التي هي عبارة عن القوانين والحقائق ذات العلاقة.

2) **التفسير:Interpreting** التفسير هو عملية عقلية غايتها إضفاء معنى على خبراتنا الحياتية أو استخلاص معنى منها. فنحن عندما نقدم تفسيرا لخبرة ما إنما نقوم بشرح المعنى الذي أوحت به إلينا، وعندما نسأل عن كيفية توصلنا لمعنى معين من خبرتنا فإننا نقوم بإعطاء تفصيلات تدعم تفسيرنا لتلك الخبرة. وعندما تعرض على الطلبة رسوم بيانية أو جداول أو صور أو رسوم كاريكاتيرية ويطلب إليهم استخلاص معنى أو عبرة منها، فواقع الأمر أنهم أمام مهمة تستدعي إعطاء تفسير لما يشاهدون. وقد

تكون المعاني أيضا نتاجات تفسير مشاهدات الرحلات والنزهات أو نتيجة إجراء مقارنات أو عمل ملخصات أو ربط المكافات والعقوبات بالسلوك. وفي كل المجالات التي يكون فيها التفسير أو الاستنتاج ناجمة عن رد فعل لخبرة ما، فإنه يمكن فحص دقة التفسير في ضوء الحقائق المعطاة للتأكد ما إذا كانت البيانات تدعم التفسير بالفعل.

3) **التلخيص Summarizing**: التلخيص عملية تفكيرية تتضمن القدرة على إيجاد صلب الموضوع واستخراج الأفكار الرئيسة فيه والتعبير عنها بإيجاز ووضوح. وهي عملية تنطوي على قراءة لما بين السطور، وتجريد وتنقيح وربط للنقاط البارزة. إنها عملية تعاد فيها صياغة الفكرة أو الأفكار الرئيسة التي تشكل جوهر الموضوع. على أن التلخيص لا يعني مجرد إعادة صياغة نص مسموع أو مرئي أو مكتوب، كما لا يعني مجرد تكثيفه وتقصيره. إنه أشبه ما يكون بعملية البحث عن العقيق الخام في كومة من الصخور، وبدون معرفة معقولة بشكل العقيق وطبيعته فإن هذه العملية يمكن أن تكون محبطة وميؤوس منها. إن التلخيص يتطلب القيام بعملية فرز للكلمات والأفكار، ومحاولة فصل ما هو أساسي عما هو غير أساسي، ومعالجة المفاهيم والأفكار المتضمنة بلغة من يقوم بالتلخيص، وانطلاقا من خبرته بالموضوع وفهمه له، كما يتطلب مهارة في ترتيب الأولويات. ومن ناحية منهجية فإن الملخصات أدوات مهمة لتعليم التفكير الناقد، لأنها تساعد الطالب على تثبيت الأفكار في الذهن، وتوفر تدريبة على تحديد الأفكار والمفاهيم الرئيسة، كما توفر فرصة لتنظيم المعلومات حسب أولويات معينة.

✓ **مهارات الاستدلال :**

مفهوم الاستدلال :- الاستدلال لغة معناه تقديم دليل أو طلبه لإثبات أمر معين أو قضية معينة، وأما اصطلاحا فهو عملية تفكيرية تتضمن وضع الحقائق أو المعلومات بطريقة منظمة بحيث تؤدي إلى استنتاج أو قرار أو حل لمشكلة. وتشير عدة موسوعات علمية ومراجع في علم النفس المعرفي إلى أن لفظ " الاستدلال " يستخدم للدلالة على معان مختلفة من بينها:

1) التعقل أو التفكير المستند إلى قواعد معينة مقابل العاطفة والإحساس والشعور.
2) الدليل أو الحجة أو السبب الداعم لرأي أو قرار أو اعتقاد.
3) العملية العقلية أو الملكة التي يتم بموجبها التوصل إلى قرار أو استنتاج.
4) الإقناع مقابل الإيمان الفطري أو الأعمى في اللاهوت.
5) القدرة على الاستنباط والاستقراء في المنطق والفلسفة.
6) أحد مكونات السلوك الذكي أو القدرة على حل المشكلات.
7) توليد معرفة جديدة باستخدام قواعد واستراتيجيات معينة في التنظيم المنطقي لمعلومات متوافرة.

ويعرف باير (Beyer , 1987) الاستدلال بأنه مهارة تفكيرية تقوم بدور المسهل لتنفيذ أو ممارسة عمليات معالجة المعلومات التي تضم التفسير والتحليل والتركيب والتقييم، ويضعه في المستوى الثالث

من عمليات التفكير المعرفية بعد استراتيجيات التفكير المعقدة (وهي حل المشكلات واتخاذ القرار وتكوين المفاهيم) ويصنف الاستدلال ضمن مهارات فرعية هي: الاستدلال الاستقرائي، الاستدلال الاستنباطي، والاستدلال التمثيلي. وهناك من يضيف مهارة رابعة هي الاستدلال السببي (أي إظهار العلاقة بين السبب والنتيجة) كأحد أشكال الاستدلال العقلي.

ويعرف نيكرسون (Nickerson, 1986) الاستدلال يرد تعبير الاستدلال في مراجع علم النفس المعرفي مرتبط بصفات عديدة من بينها: الاستدلال اللفظي، الاستدلال الرياضي / الكمي، الاستدلال المجرد/ البصري، الاستدلال الإشراطي، الاستدلال التحليلي، الاستدلال الإرتباطي، الاستدلال الأخلاقي الاستدلال الإكلينيكي، الاستدلال الصوري وغير الصوري، إلى غير ذلك من الأوصاف. ويرتبط الاستدلال اللفظي والاستدلال الكمي بالتعلم، وبالتالي فإنهما يعكسان ما سمي بالذكاء المتبلور Crystalized Intelligence، بينما ترتبط القدرة على الاستدلال المجرد / بالذكاء التحليلي المجرد أو الذكاء الفطري Fluid Intelligence) بأنه مجموع العمليات العقلية المستخدمة في تكوين وتقييم المعتقدات، وفي إظهار صحة الإدعاءات والمقولات أو زيفها. وتتضمن هذه العمليات العقلية ما يأتي:

1) توليد وتقييم الحجج والافتراضات.
2) البحث عن الأدلة.
3) التوصل إلى نتائج.
4) التعرف على الارتباطات والعلاقات السببية.

ويرتبط الاستدلال بعدد كبير من الموضوعات كالتفكير الناقد والمنطق واللغة والمعرفة وغيرها. ونظرا لأهمية فهم طبيعة العلاقة بين الاستدلال وكل من هذه الموضوعات، فإننا نستعرضها بإيجاز فيما يأتي:

الاستدلال والتبرير: يتخذ لتبرير Rationalization شكل الاستدلال وصورته في الغالب، إلا أن هناك فرقا رئيسة بين الاستدلال والتبرير يرجع إلى هدف كل منهما، فالاستدلال يهدف إلى توليد معرفة جديدة عن طريق إعمال الفكر في المعلومات والأدلة المتوافرة، وتقليب الأمر على وجوهه، واستخدام قواعد واستراتيجيات عملية معقولة للوصول إلى نتائج صحيحة أما عملية التبرير فإنها تهدف إلى بلوغ استنتاج يتفق مع رغبات صاحب العلاقة وتفضيلاته، عن طريق إخفاء الدوافع الحقيقية والأسباب الخفية لعمل ما، واختلاف أسباب تبدو مقنعة ومقبولة لتبرير العمل.

ومن الأساليب المستخدمة في عملية التبرير ما يأتي:

1) تركيز الاهتمام على جميع المعلومات المؤيدة للقرار أو الاستنتاج المرغوب فيه وتجاهل أو إهمال المعلومات التي لا تدعمه أو تضعفه.
2) إعطاء أهمية أكبر لمصدر المعلومات المؤيدة والتقليل من قيمة أو مصداقية مصدر المعلومات غير المؤيدة للنتيجة المرغوبة.
3) استخدام معايير متناقضة في تفسير الأدلة والحكم عليها.
4) لوم الآخرين ونقدهم وتشتيت الانتباه والابتعاد عن لب الموضوع. تصيد الأخطاء والهفوات في حجج وعروض الآخرين، بهدف كسب النقاش أو دحض النتيجة دون اكتراث لتحري الحقيقة.

استراتيجيات التعليم:

1) **الوقت والتاريخ:**10:30- 11:30 صباحا, 17 مارس 2022.
2) **المدة:** 80 دقيقه.
3) **المكان:** قاعة الندوات في مستشفى الامام الصادق(ع) التعليمي.
4) **طرق العرض:** المحاضرات, المناقشة, الكمبيوتر, عرض البيانات (PowerPoint).

الجلسة الرابعه:

العنوان: المهارات التي يتضمنها التفكير الحرج: (3) البعد الثالث : استراتيجيات التعامل مع الاخرين والتنظيم الذاتي:

المقدمة:

✓ **مهارات العلاقات الشخصية والتواصل**

لا أحد يمكنه أن يحيا بمعزل عن الآخرين، يساعد التواصل الاجتماعي على تنمية المهارات وتوسيع دائرة الإدراك وتقبل الآخرين وتعلم أشياء ومهارات وخبرات جديدة، كذلك يحسن من أفكار ومشاعر الأشخاص, لذلك تعتبرهذه من المهارات التي تساعد على التفاعل والتواصل مع الآخرين، وهم الأشخاص الذين يتفقون مع من حولهم في العمل، فهم أشخاص يعملون بشكل جيد داخل فريق العمل.

كما ويعتبر التعامل والتواصل مع الآخرين مهاره مهمه جدا لنجاح الممرضين/ ات بصوره كبيره اثناء ادائهم للمهنه، وبالتالي فهي جزء مهم ما يجعلنا بشراً. كل موظف بالمؤسسة وباختلاف نوعية ووظيفته هو جزء من مجموعة تعمل لتقديم كل الخدمات وعلى أكمل وجه للمرضى بغض النظر عن ديانتهم ، اتجاههم السياسي، مركزهم الإجتماعي أو بلدهم ، مع مراعاة التعامل بلطف مع المرضى وتقدير وضعهم النفسي والبدني.

يُنظر إلى مهارات الاتصال عموماً على أنها مجموعة فرعية من مهارات التفكير الحرج مثلها مثل عملية صنع القرار وحل المشكلات، ولكن كليهما مهم بما يكفي للنظر فيهما أيضاً, والتي سوف تساعد الممرضين/ات في:

- ✓ تشخيص المريض.
- ✓ تنفيذ ومراقبة التدخلات التي نفذت.
- ✓ الحفاظ على الاستمرارية والسلامة في جودة ممارسات الرعاية الصحية.
- ✓ الإدارة الفعالة للحالات غير المتوقعة.
- ✓ تنظيم العمل بالكفاءات.

ـ الأهداف:

- سيكون الممرضين لديهم استراتيجيات التعامل مع الاخرين والتنظيم الذاتي.
- سيتعلم الممرضين مهارات التواصل مع الاخرين.

✓ **تنقسم مهارات إقامة العلاقات مع الآخرين لعدة أقسام، منها:**

- التفهم.
- المشاركة الوجدانية.
- التحكم في التعاطف.
- التحكم في المساحة النفسية.
- التعاطف.
- تحمل واجبات العلاقة.

- **مهارات التعامل مع الآخرين:**

تتكون هذه المهارات من عدة قواعد منها:

- احترام الآخرين وتقبلهم كما هم.
- التفرقة بين السلوك والنوايا، فليس من الضروري أن يُعبر السلوك السيئ عن وجود النية السيئة.
- تساعد المرونة على السيطرة على الموقف.
- عدم التوقف عند الفشل بل اعتباره تجارباً وخبرات.
- الاتصال الإنساني عن طريق الوعي وهو موقع تحليل المعلومات، واللاوعي وهو مكان تخزين المعلومات.

- **مهارات القراءة والكتابة**

يتواصل معظم الأشخاص حالياً باستخدام الكلمة المكتوبة من خلال الرسائل النصية ووسائل الاتصال الحديثة ومجموعة من الطرق الأخرى, وتعد القدرة على الكتابة بوضوح ودقة وسيلة قوية للغاية للتواصل، سواء على أساس فردي أو مع جمهور أكبر، لذلك فحاول أن تكتسب هذه المهارة الإبداعية وأبحث عن الوسائل التي تساعدك على التعلم بالطريقة التي تتقبلها حتى تحسن من تلك المهارة وتتمكن من التعبير عن أفكارك الداخلية بشكل أفضل.

- **مهارات المُحادثة:** مهارات لفظية وغير لفظية والتي تشمل كلاً من كيفية استخدام صوتك واختيار الكلمات المناسبة، وأيضاً استخدام نبرة الصوت ولغة الجسد، لأن ذلك يمكنك من المساعدة في بناء علاقة , وفاعلية مهارات الاستماع مع تقنيات التوضيح والتفكير، ذلك يمكن أن يساعد على منع سوء الفهم, ويُصنّف الناس من طريقة محادثتهم إلى ثلاثة أنواع، هي:

1) **النمط الصوري :**وهو الشخص الاجتماعي وكثير الكلام، ويتميز بأنه حليم، وكريم، ويثق بالآخرين بسرعة، كما أنه يهتم بنفسه، ومحب للسيطرة، ويأكل ويتحرّك ويتنفس بسرعة.

2) **النمط السمعي :**وهو النمط الذي يتعامل الإنسان فيه مع الآخرين بواسطة حاسة السمع، وتتميز هذه الشخصية بأنها بطيئة الحديث لكنها تتكلم بسرعة، محبة للعمل في وظائف المحاماة، أو التدريس، أو الكتابة، تنصت جيداً، وهي سريعة الحِفظ وكثيرة الأسئلة، وتقدّر من يحترمها.

3) **النمط الحسي :**وهو الذي يتعامل الإنسان فيه مع الآخرين عن طريق المشاعر والأحاسيس، وتتميز هذه الشخصية بالهدوء، وكثرة الحركة، والصمت، وحب الأعمال اليدوية، وتكره المغامرات، كما أنها شخصية قليلة الثقة بذاتها، ومُنعزلة وانطوائية.

4) **مهارة الفراسة :**وهي التفرقة بين بواطن الأمور وظواهرها، ومن الممكن أن تُعرّف بأنها القُدرة على التعبير عن طريق الإشارات والتعبيرات التي تصدر بشكل لا إرداي.

❖ **الاتصال الفعّال:**

وهي العملية التي يقوم بها أحد الأطراف بنقل رسالة لطرف آخر بشكل لفظي أو غير لفظي، من أجل تحقيق هدف ما، ويُعتبر نجاح هذه العملية منوطاً بمدى تحقق الهدف، وتنقسم مهارات الاتصال لعدة أقسام، هي:

1) الإنصات.
2) عرض البيانات.
3) المناقشة.
4) الكتابة بشكل واضح.
5) القراءة بشكل سريع وفعّال.

6) إدارة الحديث.

- **المهارات الاجتماعية**

المهارات الاجتماعية هي التي تمكن الإنسان من تطوير ذاته بشكل فعال، لأنها مبنية على السلوكيات وردود الأفعال والقدرة على التفاعل الجيد مع الآخرين، وتؤثر هذه المهارات في قدرتك على بناء العلاقات وإحداث انطباعات جيدة عن نفسك لدى الآخرين في المواقف الاجتماعية المختلفة.

1) التنظيم الذاتي:

تبدو مهارة تنظيم الذات من اكثر المهارات المعرفية إثارة للاهتمام ؛ لأنها تسمح لذوي التفكير الحرج الجيد أن يعملوا على تحسين تفكيرهم ؛ بمعنى أخر فإن الفرد يطبق التفكير الحرج على نفسه, ويعرف مؤتمر هيئة الخبراء مهارة تنظيم الذات بأنها مراقبة الفرد لنشاطاته المعرفية بشكل واع ، من حيث استخلاص العناصر المشتركة في هذه النشاطات ، والنتائج المستخلصة بشكل خاص من خلال تطبيق مهارات التحليل وتقييم الفرد لأحكامه الأستدلاليه مع نظرة نحو التساؤل، والتأكيد والمصداقية ، والتصحيح ، سواء تصحيح الفرد لإفكاره أو لنتائجه . وتشتمل هذه المهارة على مهارتين فرعيتين هما : مهارة اختبار الذات ، ومهارة تصحيح الذات.

التنظيم الذاتي مصطلح واسع الاستخدام، يدل على أي نوع من التنظيم الذاتي للذات وهكذا، فعندما تستخدم بعض القدرات النفسية، تكون بعض العمليات النفسية سلوكية، أو تحفيزية أو مادية، أو حالة مرغوبة، وهي حالة من التنظيم الذاتي. وعلى هذا النحو فإن التنظيم الذاتي يتضمن الكثير من الجوانب.

يقصد بالتنظيم الذاتي السيطرة على أفكار الفرد وعواطفه واهتماماته، وقدرته في وضع أهداف متوافقة مع الذات، وإتمام العمل الموجه نحو الهدف بنجاح، والقدرة على السيطرة على الانتباه، أي القدرة على الحفاظ على اهتمام واحد والتركيز على هدف معين على الرغم من التشتيت، والسيطرة على العمل أي القدرة على تنظيم التأثير دون الحاجة لدعم خارجي، والعمل على تطبيق السلوك البديل الموجه والسلوك المناسب حتى في ظل الإجهاد.

الممرضين/ات الذين يفكرون للتتطلع إلى تطوير ذاتهم، فلا يهملون مهارة التنظيم، فهي أساس نجاح الإنسان ، كما أنه يساعدك في التحصيل أو إجراء أهدافهم بشكل أسرع وبأقل مجهود ممكن، وبدون أن تطغى مهمة على أخرى، ومن غير إهمال جانب من جوانب الحياة على حساب الجانب الآخر, فهي تساعد في القدرة على حل المشكلات وعلى التعامل مع المواقف الصعبة أو المفاجئة.

وان الذين يجيدون حل المشاكل يتصفون بالهدوء عندما يواجهون عقبات، حيث إنهم يعملون على تقييم جميع خياراتهم للعثور على أفضل حل خاصة الممرضين/ات الذين يعملون في أقسام العناية المركزة المختلفة يتعرضون إلى ضغوط نفسية كبيرة نسبيا قد تؤثر فيهم وتحتاج الى مهارة تنظيم ذاتيه لمنع زيادة الضغوط عليهم وإسداء الخدمة التمريضية للمرضى على أكمل وجه.

- **مهارات التنظيم الذاتي:**

1) **الجدارة وتحمل المسؤولية:** من المهم جداً أن يكون الإنسان من النوع الذي يُعتمد عليه في وظيفته، حيث يرغب أصحاب العمل على الحصول على شخص يتحمّل المسؤولية، ولديه ثقة كبيرة في نفسه، مما يفتح له المجال ليصبح مديراً أو قائداً قوياً.

2) **المرونة في العمل:** تعني المرونة في العمل القُدرة على القيام بعدة وظائف في الوقت ذاته، حيث تكون المرونة مفيدة في مناوبات العمل، أو عند العمل في مواعيد مختلفة.

3) **الإيجابية والشغف اتجاه العمل:** وهي إيجاد دافع لدى الممرضين/ات من أجل أن يشعروا بالحماس، مما يعمل على الاجتهاد في العمل.

4) **الثقة بالنفس:** الثقة بالنفس هي الإيمان بقدراتك وأفعالك وقراراتك، إذا كنت واثقاً من نفسك فمن المحتمل أن تسعى لتحقيق أهداف طموحة، وتجربة أشياء جديدة، بل ستعتقد، طوال الوقت، أنك قادر على النجاح.

5) **القدرة على التكيف:** أي التكيف بسرعة وسهولة مع أشياء، مواقف، ظروف جديدة، والأشخاص الذين يتعاملون مع التغيير بشكل جيد غالباً ما يتعايشون مع مجموعة متنوعة من الشخصيات، ويزدهرون، كذلك، في أي بيئة، كما يمكنهم أن يظلوا هادئين في المواقف المفاجئة. إنهم قادرون على التكيف مهما كنت الظروف، والحقيقة أن هذه المهارة هي أهم مهارة في الحياة بشكل عام، فطالما أنك قادر على التأقلم مع أي شيء فليكن ما يكون.

6) **النزاهة والشفافية:** تعني هذه المهارة أن تكون شخصاً صائب القول دائماً، لأن الصدق والنزاهة والشفافية تمنحك سمعة جيدة، ويجعلك الناس موضع ثقة لهم، ما يفتح أمامك العديد من الفرص. تعني النزاهة فعل الصواب وقول الحقيقة مهما كانت، حتى لو كانت ما لا يريد الناس سماعه، يمنحك الصدق والنزاهة سمعة جيدة، ويجعلك موضع ثقة الجميع، ما يفتح أمامك الكثير من الفرص.

- **المهارات الشخصية القيادية:** يعد فهم قوة وقيمة القيادة مهارة مهمة جداً في الحياة، حيث يمكن أن يكون لها تأثير كبير على حياتك وحياة الآخرين أيضاً، لا يتولى القائد السيطرة فحسب، بل يعرف أيضاً كيف يحفز الآخرين ويلهمهم ويمكّنهم, لكي تكون قائداً ناجحاً عليك أن ترى الأفضل في من حولك وأن تعلمهم أن يؤمنوا بقيمتهم، يمكن للقيادة أن تفيد كل مجال من مجالات الحياة، وتساعد على:

1) تعزيز الثقة بالنف.
2) تقوية مهارات الاتصال.
3) تطوير الشخصية.
4) بناء الثقة.

تساعد المهارات القيادية على صنع علاقات قوية بين الناس، مما يُحدث أثراً إيجابياً على العمل والعالم بشكل عام، والقيادة هي القدرة على توجيه الناس، ويمكن للقادة الجيدين تحفيز الآخرين، ومساعدتهم في الوصول إلى أهدافهم أيضاً، إنهم يبنون الثقة ويرفعون الروح المعنوية لمن يعملون معهم.

وتنقسم المهارات للشخصية القيادية لعدة أقسام، منها ما يأتي:

- **الشجاعة:** تعني الشجاعة في هذه الحالة القُدرة على العمل دون الشعور بالخوف، وهي من المهارات التي تساعد على الإتقان، والتي تُساعد على الوصول إلى الأهداف المرجوة.
- **الغضب الصّحي:** يمتلك الغضب سُمعة سيئة في الثقافة والمجتمع بشكل عام، إلا أن صفة الغضب تمتلك سُلْطة كبيرة في خلق رؤيا ما، وخاصة الغضب الصحي الذي يحدد العمل غير الصائب في الوقت الحالي، وهو من المهارات التي يحتاج كل قائد إلى امتلاكها.

يمكن أن تكون القدرة على إدارة الغضب والتوتر أيضاً مهارات حياتية أساسية، يمكن أن يؤدي التعرف على الغضب والتوتر، والتعرف على ما قد يحفزهما، طريقة فعالة في منعهما وتحسين نوعية حياتنا بشكل كبير والاستفادة من الطاقة المُهدرة في الغضب وتحويلها إلى أشياء إيجابية، وبهذا تكون تغلبت على العادات السيئة في شخصيتك ليس هذا فحسب، بل تحولها إلى طاقة إيجابية جديدة تمكنك من تعلم شيء جديد أو تمارس فعل يفيدك.

- **الإصرار:** يساعد الإصرار على التعامل مع الأشخاص في الأوقات الصعبة، وعلى أن يكون الإنسان أكثر التزاماً.

- **مهارة إدارة الوقت:**

تتيح لك الإدارة الجيدة للوقت تحقيق المزيد في نطاق زمني أقصر، ما يؤدي إلى مزيد من وقت الفراغ، لذا فإن معرفة كيفية العمل بشكل جيد تحت الضغط والقدرة على التركيز والبقاء منظماً يمكن أن تقلل من مستويات التوتر ويبقيك على المسار الصحيح.

هناك العديد من النصائح المتعلقة بإدارة الوقت التي يمكن أن تساعد مثل:

- ✓ تحديد الأولويات بحكمة.
- ✓ أخذ فترات راحة منتظمة.
- ✓ التخطيط للمستقبل.
- ✓ تحديد الأهداف بشكل صحيح.

استراتيجيات التعليم:

1) **الوقت والتاريخ:**10:30- 11:30 صباحا, 17 مارس 2022.
2) **المدة:** 80 دقيقه.
3) **المكان:** قاعة الندوات في مستشفى الامام الصادق(ع) التعليمي.
4) **طرق العرض:** المحاضرات, المناقشة, الكمبيوتر, عرض البيانات (PowerPoint).

المصادر العربية والاجنبية:

- Abdelmaksoud, S. H. E. (2014). برنامج تدريبي عن اتخاذ القرار لطلاب الفرقة الرابعة بكلية التمريض جامعة الزقازيق. *مجلة تمريض الزقازيق*, 19-33.
- ابو الحصين, & محمد فرج الله مسلم. (2010). الضغوط النفسية لدى الممرضين والممرضات العاملين في المجال الحكومي وعلاقتها بكفاءة الذات.
- مهدي محمد نصر, ف., & فتحي. (2018). برنامج إرشادي وقائي لتعزيز التنظيم الذاتي والتفاؤل المتعلم لدى عينة من طلاب جامعة الباحة المعرضين لخطر الإجهاد النفسي. *مجلة بحوث التربية النوعية*, *2018*(52), 297-351.
- Gamel, E. Z. (2017). التفكير الناقد بين المقاربة الفلسفية والمقاربة التعليمية" برتراند رسل" و" جون ديوي" نموذجًا. Hermes Journal, 6(19).
- ولاء اصبيرة. (2016). مهارات التفكير الناقد لرئيسات الشعب التمريضية في مشفى الأسد الجامعي والمشفى الوطني في اللاذقية. *Tishreen University Journal-Medical Sciences Series*,*37*(3).
- ماهر محمد عواد العامري. (2019). التفكير الناقد. الجامعة المستنصرية كلية التربية البدنية وعلوم الرياضة.
- بوقـــراف, المسعود, دومة, & عبد القادر. (2017). القيـــم التنظيمية وعلاقتها بالالتزام التنظيـــمي. (Doctoral dissertation).
- مهدي علوان عبود القريشي. (2014). فاعلية استراتيجية البيت الدائري في تنمية اتخاذ القرار ومهارات ما وراء المعرفة لدى طالبات الصف الخامس الأدبي بمادة مبادئ الفلسفة وعلم النفس. Journal of Education College Wasit University, 1(16), 276-353.
- عبد النبي عبد الله الطيب. (2016). مهارات الاتصال الفعال. Al Manhal.

- عيشاوي وهيبة, & عوفي مصطفى. (2020). مصادر الضغوط المهنية لدى فئة الممرضات وكيفية الحد منها. مجلة الباحث في العلوم الإنسانية و الإجتماعية, 12(7), 143-156.
- به جميل بوشي, & د. محمد سليمان صليبي. (2021). التفكير الناقد وعلاقته بالتفكير ما وراء المعرفي لدى عينة من طلبة جامعة دمشق. سلسلة العلوم التربوية, 43(18).
- ويكري, فضيلة, زويكري, بوبكر, & هشام (مشرفا). (2017). الأخلاق المهنية و علاقتها بالأداء الوظيفي (Doctoral dissertation).

- Lai, E. R. (2011). Critical thinking: A literature review. Pearson's Research Reports, 6(1), 40-41.
- Berman, A. T., Frandsen, G., & Snyder, S. (2021). Kozier & Erb's Fundamentals of Nursing, eBook. Pearson Higher Ed.
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- https://www.alroeya.com/210-0/219367. visited this page on 9/30/21.

Appendix: F

بسم الله الرحمن الرحيم

حضرة الأستاذ الفاضل .....المحترم

تحية طيبة.....

تقديرا واعتزازا بخبرتكم العلمية والعملية والتي ستكون دعما لموضوع أطروحة الدكتوراه الموسومة..

أثر البرنامج التعليمي للتفكير الحرج على معارف الممرضين في مستشفيات الحلة التعليمية

Impact of Critical Thinking Educational Program on Nurse's Knowledge in Al-Hillah Teaching Hospitals

راجين من حضرتكم مراجعة وتقويم وإبداء ملاحظاتكم القيمة على محتويات استبانة الاطروحه بجزئيها لتكون دليل عمل لنا في خطوات البحث.

مع جزيل الشكر والاحترام.

الاسم الثلاثي:

اللقب العلمي:

سنوات الخبرة:

مكان العمل:

الملاحظات:

التوقيع:

طالبة الدكتوراه

آمنه عبد الحسن جبر

جامعة بابل / كلية التمريض

Phone:07715344472E-mail: ameenaibrahim29@gmail.com

: Appendix F

وزارة التعليم العالي والبحث العلمي

كلية التمريض / جامعة بابل

استبيان بحثي

عزيزي الممرض/ عزيزتي الممرضه...

المعلومات والأجوبة التي سيتم اختيارها في هذا الاستبيان ستساعد في تقييم التفكير الحرج للممرضين/ الممرضات في مستشفيات الحله التعليميه. بناء على إجاباتك، سيتم إعداد برنامج تعليمي لتطوير مهارات التفكير الحرج التي تساعد الممرضين على اتخاذ القرار المناسب عند تطبيق التدخلات التمريضية.

هناك مجموعة من الفقرات في النموذج، يرجى قراءتها بعناية واختيار الإجابات الصحيحة، أدناه من كل فقرة من الفقرات التي تراها الأنسب لك، مع العلم أن المعلومات ستكون سرية لغرض البحث العلمي فقط.

شكرا لكم على المشاركة في هذه الدراسة.

عنوان البحث:

أثر البرنامج التعليمي للتفكير الحرج على معارف الممرضين في مستشفيات الحلة التعليمية

Impact of Critical Thinking Educational Program on Nurse's Knowledge in Al-Hillah Teaching Hospitals

جامعة بابل / كلية التمريض

طالبة الدكتوراه

امنه عبد الحسن جبر

I. موافقة الممرض/ه:

-المشاركة في الدراسة:

نعم: ☐

كلا: ☐

II. الخصائص الديموغرافية للممرض/ للممرضة:

1. **العمر:** ☐ سنه
2. **الجنس:**
   - ذكر: ☐
   - انثى: ☐
3. **الحاله الزوجيه:**
   - اعزب/عزباء: ☐
   - متزوج/ه: ☐
   - مطلق/ه: ☐
   - ارمل/ه ☐

III.الخصائص الوظيفة:

1. **اسم المستشفى:**

4. **سنوات الخبره في اخر الردهه:**
   - ☐ اشهر
   - ☐ سنه

IV.معارف الممرضين المتعلقه بمفهوم التفكير الحرج:

I. البعد المعرفي:	
1.	**تشمل خصائص التفكير الحرج:**
أ.	**النظر في ما هو مهم في حالة معينة.**
ب.	قبول طريقة ثابتة لتقديم رعاية المرضى.
ت.	اتخاذ القرارات على أساس الحدس.
ث.	القدرة على قراءة واتباع تعليمات الطبيب
2.	**التمرضين المحترفين مسئولين عن اتخاذ القرارات السريرية:**
أ.	إثبات الأساليب التقليدية لتقديم الرعاية التمريضية للمرضى.
ب.	**اتخذ إجراءات فورية عندما تسوء حالة المريض.**
ت.	تطبيق حلول كتابية واضحة لمشاكل المرضى.
ث.	صياغة خطط رعاية موحدة لمجموعات المرضى
3.	**التمرضين بحاجة إلى التذكير بالمسؤولية المهنية عند أداء أي من هذه ألإجراءات؟**
أ.	اتخاذ قرار سريري مستنير
ب.	اتخاذ قرار سريري أخلاقي
ت.	اتخاذ قرار سريري في مصلحة المريض
ث.	**اتخاذ قرار سريري بناءً على تقييمات التحول السابقة**
4.	**ما هو المكون الأول لنموذج التفكير الحرج لاتخاذ القرارات السريرية؟**
أ.	خبرة
ب.	الاجراءات التمريضية
ت.	سلوك
ث.	**قاعدة معرفية علمية**

5. أي تطبيقات التفكير الحرج على التمريضي اختيارها للوصول الى التشخيص السريري المثالي؟

أ. الاعتماد على التجارب السريرية السابقة لصياغة خطط رعاية موحدة

ب. الاعتماد على استرجاع المعلومات من المحاضرات والكتب المدرسية السابقة

ت. اعتمادًا على الممرضة المسؤولة لتحديد أولويات الرعاية

ث. استخدام الاجراءات التمريضية كإيطار عمل

6. إن أفضل وصف لمهارة التفكير الحرج للتقييم في ممارسة التمريض هو:

أ. فحص البيانات.

ب. مراجعة فاعلية الإجراءات التمريضية.

ت. دعم النتائج والاستنتاجات.

ث. البحث عن روابط بين البيانات وافتراضات

7. من اهم المفاهيم المتداوله في تعريف الاتصال هو؟

أ. تبادل المعلومات

ب. الرسائل

ت. المتلقي

ث. المرسل

8. خمسة من الإجراءات تساعد التمرضي على التفكير الحرج هي:

أ. الاعتراف والاستجواب وجمع المعلومات والتقييم والاتصال

ب. التحقيق والاستجواب والتفتيش والتقييم والاتصال

ت. الاعتراف والتدخل وجمع المعلومات والتواصل والاجتماع

ث. التفكير الحرج ، الاتصال ، الانضباط أو المكافأة ، الاستنتاج ، تكرار

9. الخطوة الأولى في عملية التفكير الحرج هي:

أ. تقييم

ب. التعرف على

ت. جمع المعلومات

ث. تواصل

10. ما الذي يميز التشخيص التمريضي عن التشخيص الطبي؟

أ. استجابة المرضى لمشكلة صحية

ب. المصطلحات الخاصة بمرض الفرد أو إصابته

ت. جزء من التشخيص الطبي للمرضى

ث. ظهور العلامات والأعراض على الفرد

II. البعد الفكري:

1. يحتاج مدرب التمريض إلى تقييم قدرات الطلاب على تجميع البيانات وتحديد العلاقات بين التشخيصات التمريضية. ما مهمة التعلم الأنسب لاحتياجات هذا المعلم؟

أ. مفهوم وضع الخطه

ب. تدوين الملاحظات اليوميه

ت. القراءة مع ملخص مكتوب

ث. محاضرة ومناقشة

2. لغرض تحديد مشكلة ماهي الخطوة الواجب اختيارها من ادناه:

أ. جمع المعلومات

ب. التقويم

ت. الاتصال

ث. التمييز

3. يتحكم معظم مرضى السرطان في التعبير عن الألم خشية من ادمانهم على العقاقير المهدئه. لمساعدة المرضى بتصحيح معتقداتهم بهذا الاتجاه تقع على التمريضيين مسؤولية من اي نوع:

أ. الإبداع

ب. الإنصاف

ت. التفكير السريري

ث. تطبيق المعايير الأخلاقية

4. دليل ادخال القثطرة البولية للمريض تذكر بضرورة وضع المريض على ظهره لضمان سلامته. اذا كان المريض لديه آلالام الظهر عند الاستلقاء فقط. بالرغم من ذلك، طلب التمريضي من المريض الاستلقاء على ظهره اثناء الاجراء. هذا مثال على:

أ. الدقه

ب. انعكاس

ت. المخاطره

ث. التفكير الحرج الاساسي

5. أي مما يلي هو الجانب الأكثر أهمية في تطوير القدرات المعرفيه للمريض للمشاركة في اتخاذ القرارات بشأن الاجراءات السريرية؟

أ. العمل في أماكن رعاية صحية متعددة

ب. تعلم مهارات الاتصال الجيد

ت. قضاء الوقت مع المريض لتطوير العلاقه معه

ث. الاعتماد على الأدلة في الممارسة العملية

6. خلال التقييم الصحي اخبرت احدى المريضات بانها تعاني من اضطرابات في النوم والوهن خلال النهار بالاضافة الى فقدان التركيز خلال العمل وعدم القدرة على حل المشاكل البسيطه بعد مرورها بحادث فقدان اختها قبل اسبوعين. حدد الممرض/ه بان التشخيص التمريضي لهذه الحاله هي عدم القدرة على التكييف , اي من القدرات الفكرية استخدم الممرض/ه:

أ. التشخيص المبني على الاستنتاج

ب. الكفاءة

ت. حل المشكلات

ث. استدلال

7. يقوم التمريضي بمراجعة دليل الاجراءات الخاص بوضع قثطرة بولية وذلك لمراجعة خطوات العمل قبل المباشرة بالتنفيذ في الردهة الجراحية. اي من مستويات التفكير الحرج استخدمه التمريضي في هذه المراجعة:

أ. التزام.

ب. المنهج العلمي.

ت. أساسيات التفكير الحرج.

ث. التفكير الحرج المعقد.

8. الممرضة تسأل المريضة كيف تشعر حيال الجراحة الوشيكة لسرطان الثدي. قبل المناقشة استعرض الممرض وصف الفقد والحزن ومبادئ الاتصال العلاجي في كتابه المدرسي. عنصر التفكير الحرج المتضمن في مراجعة الممرضة للأدبيات هو:

أ. الخبرة.

ب. حل المشكلات.

ت. تطبيق المعرفة

ث. اتخاذ القرارات السريرية

9. أي مما يلي ينفرد بمستوى الالتزام بالتفكير الحرج؟

أ. يزن الفوائد والمخاطر عند اتخاذ القرار.

ب. يحلل ويدرس الخيارات بشكل أكثر استقلالية.

ت. التفكير المنطقي.

ث. المبادرة بالاختيار دون مساعدة الاخرين

10. اختر العبارات التي تعبر بشكل واضح عن الاجراءات التمريضية:

أ. تطوير معايير العناية الصحية

ب. طريقه لحل مشاكل المريض وتحديد العناية التمريضية

ت. اجراءات منفصلة ومميزة

ث. اجراءات تعتمد على التشخيص الطبي

III. البعد التطبيقي:

1. أي مما يلي يوضح أن التمريضين يستخدمون التأمل الذاتي لتحسين عملية اتخاذ القرار السريري؟

أ. يستخدم نهج موضوعي في جميع المواقف

ب. يحصل على البيانات بطريقة منظمة

ت. يحسن خطة الرعاية أثناء التفكير مرة أخرى في التدخلات التي يتم إجراؤها

ث. يقدم تفسيرات قائمة على الأدلة لجميع التدخلات التمريضية

2. لا يبدو أن المريض يعاني من ضائقة واضحة ، لكن العلامات الحيوية التي أخذها العاملون المساعدون تكشف عن انخفاض شديد في النبض. تقوم الممرضة بعد ذلك بتسميع نبضة قمي وتسأل المريض عما إذا كان لديه أي شكاوى أو تاريخ من مشاكل القلب. الممرضة تستخدم مهارة التفكير الحرج؟

أ. التفسير

ب. تقييم

ت. التنظيم الذاتي

ث. الشرح

3. خلال تعرض التمريضيين العاملين في الوحدة الباطنية الى الشد النفسي ودخولهم في مجادلات جراء ضغط العمل , ماهو الاجراء المناسب الذي سيساعد في معالجة الموقف؟

أ. نشر مقال

ب. المشاركة في اجتماع وحدة مشاركة المشاعر.

ت. اطلب من مدير التمريض ان يخصصك الفريق للعناية بالمرضى

ث. مراجعة دليل السياسه والاجراءات بشأن العناية المقدمة

4. خلال استعمال نموذج تقييم الألم مع مريض معين, يظهر التمريضي مقدرته على التفكير الحرج من خلال؟

أ. الفضول

ب. كفاية

ت. الانضباط

ث. التفكير باستقلالية

5. بدأت الوحدة الجراحية في استخدام مقياس لتصنيف الألم لتقييم شدة الألم لدى المرضى أثناء تعافيهم بعد الجراحة. خلال نوبة العمل يقوم التمريضين بمراجعة درجات الألم المسجلة للمريض على مدار الـ 24 ساعة الماضية. استخدام مقياس الألم هو مثال على أستخدام المعيار الفكري الاتي:

أ. عميق

ب. ذات الصلة

ت. متناسق

ث. هام

6. خلال جلسة العلاج الطبيعي لمريض يعاني من الم شديد في الكتف وبعد تناوله جرعة من مسكن الالم. يحاول المريض اخبار التمريضي بانه " يتالم كثيرا , لا ارى سببا للقيام بهذا التمرين" ماهي ردة فعل الممرض/ه الذي يمتاز بقدرته على التفكير الحرج لمعالجة الموقف؟

أ. "أنا أتفهم ترددك ، ولكن التمارين ضرورية لك لاستعادة وظيفة كتفك. دعنا نذهب ببطء أكثر قليلاً ونحاول الاسترخاء."

ب. "أرى أنك غير مرتاح. سأتصل بطبيبك ليقرر الخطوة التالية."

ت. "أرني مكان ألمك بالضبط وقيمه بالنسبة لي على مقياس من 0 إلى 10."

ث. "هل هناك أي شيء آخر يزعجك؟ بخلاف الألم ، هل هناك أي سبب آخر قد يجعلك لا ترغب في أداء التمارين؟"

IV. البعد التحليلي:

1. أي من سيناريوهات المريض التالية هو الأكثر دلالة على التفكير الحرج؟

أ. إعطاء مسكنات الآلام حسب ما تم إعطاؤه لآخر مرة

ب. سؤال المريض عن طرق تخفيف الآلام ، الدوائية وغير الدوائية ، التي نجحت في الماضي

ت. تقديم مسكنات الآلام بناءً على أوامر الطبيب

ث. الشرح للمريض أن تقاريره عن الألم الشديد لا تتفق مع الإجراء البسيط الذي تم إجراؤه

2. عند وضع الام المرضعه وليدها بطريقة غير صحيحه لغرض ارضاعه , يستطيع مقدم الرعاية الصحية معرفة ان الام ليس لديها معرفة بالطريقة الصحيحة للرضاعة, هذه الطريقة في اصدار الاحكام تدعى:

أ. **انعكاس**

ب. المثابرة

ت. الحدس

ث. حل المشكلات

3. يلاحظ الممرض/ه ان مشية المريضه غير مستقره بالاضافة الى وجود كدمات على ساق, تبلغ المريضه 72 من العمر وتعيش بمفردها اخبرت المريضه بانها تعرضت للسقوط. تحدد لتحديد هذا التشخيص يحتاج الممرض/ه الى اي من القدرات التالية:

أ. الاستدلال.

ب. أساسيات التفكير الحرج.

ت. التقييم.

ث. التفكير التشخيصي.

4. مسؤول التمريض في الردهة الجراحيه عقد اجتماع للتمريضين العاملين بعد ان توفي مريض عانى من صعوبة التنفس وانخفاض في مستوى ضغط الدم بعد العملية ب (30) دقيقة , وذلك لمناقشة ظروف وفاة المريض , تحت اي من العناوين التاليه يدرج هذا الفعل على انه:

أ. حل المشكلات.

ب. التعاطف الانساني.

ت. اجراء منعكس لفعل معين

ث. اجراء ضمن ممارسة المسؤولية

5. عند مراقبة تسريب السوائل الوريدية لمريض راقد في الردهة لاحظ الممرض/ه بأن قطرات السائل عددها غير صحيح , قام الممرض /ه بتقييم القسطره الوريديه , وتصحيح وضع الذراع لتسهيل عملية التسريب الوريدي . اي نوع من القدرات تسمى هذه :

أ. الاستنتاج

ب. التشخيص

ت. الكفاءة

ث. حل المشكلات

6. متمرس في التمريض له مايقارب (3) سنوات من العمل في ردهة الاورام , خلال تقديمه العناية التمريضية لمريض لاحظ ان المريض يعاني من علامات واعراض الصدمة الانتانية (septic shock). قام التمريضي بالاتصال هاتفيا مع الطبيب المعالج قائلا "على الاغلب المريض يعاني من الصدمه الانتانية". "دعني انقل لك مأراه". اختر ماتراه مناسب من المفردات تعكس قدرات التفكير الحرج عن التمريضين:

أ. الخبرة

ب. الاداب المهنية

ت. التحليل

ث. المخاطره

7. مريض خضع لعملية جراحية في الفخذ منذ 16 ساعة. خلال النوبة السابقة ، كان لدى المريض 40 مل من الصرف في جهاز جمع الصرف الجراحي لمدة 8 ساعات. تشير الممرضة إلى خطة الرعاية المكتوبة ، مع ملاحظة أنه يجب إخطار مقدم الرعاية الصحية عندما يتجاوز الصرف في الجهاز 100 مل في اليوم. عند دخولها الغرفة ، تنظر الممرضة إلى الجهاز وتلاحظ بعناية مقدار التصريف الموجود به حاليًا. هذا مثال على:

أ. التخطيط

ب. التقييم.

ت. التدخل.

ث. التشخيص.

V. البعد الاخلاقي:

1. كل هذه هي مبادئ الأخلاق الطبية باستثناء:

أ. الاستقلالية

ب. الاحسان

ت. الصدق

ث. العدالة

2. والإجراءات التي يمكن اتخاذها للمساعدة في منع الأضرار أو إزالتها أو لمجرد تحسين حالة الآخرين" هي ___

أ. الاحسان

ب. السرية الحفاظ على الإجراءات

ت. الاستقلالية

ث. لا شيء مما سبق

3. الفضائل هي عادات تشكلها كل ما يلي باستثناء:

أ. شخصية الشخص

ب. التفاعل مع الناس في بيئة العمل.

ت. التدريب الأبوي والاجتماعي، التدريب الوالدي والاجتماعي في مجال التعليم والتدريب الاجتماعي

ث. المهنية والعايير التي يختارها الفرد لاداء دوره في المجتمع.

4. جميع العبارات التالية صحيحة بشأن المبدأ (غير مؤذيه) ماعدا:

أ. يتضمن التزاما بعدم إلحاق الضرر عمدا.

ب. يشمل الموافقة وقول الحقيقة.

ت. يجب الامتناع عن تقديم علاجات غير فعالة أو التصرف بخبث تجاه المرضى.

ث. يقدم القليل من التوجيهات المفيدة لأن العلاجات فيها مخاطر جانبية.

5. بعض الأحيان، توجد أسباب وجيهة لتجاوز مبدأ قول الحقيقة. عند التعامل مع:

أ. جميع المرضى المصابين بالسرطان أو الإيدز.

ب. إذا كان المرضى امي (غير متعلم).

ت. المرضى لا يريدون الحقيقة إذا كانت الأخبار سيئة.

ث. كل ما سبق

6. الأطباء ملزمون بما يلي:

أ. مساعدة الأفراد ذوي الإعاقة

ب. إنقاذ الأشخاص المعرضين للخطر

ت. منع الضرر وإزالتها

ث. كل ما سبق

7. التوقف عن اعطاء دواء معين بعد التاكد من اثاره الضاره عند الاستعمال هوه مثال على :

أ. الالتزام بعدم الحاق الاذى

ب. الاستقلالية

ت. الاخلاقي

ث. الاحسان

8. إذا كان هنالك فكرتان مختلفتان، فمن المهم في حل النزاع أن يختارا:

أ. الخيار الصحيح والأكثر فائدة

ب. الخيار الصحيح

ت. الخيار الأكثر فائدة

ث. لا شيء مما سبق

9. القدرة على التفكير، واتخاذ قرار والعمل على أساس الفكر والقرار بحرية وبشكل مستقل (دون السماح للتدخل)" أفضل وصف لل:

أ. السرية

ب. الاستقلالية

ت.	التحليل المنطقي
ث.	نظرية الفضيلة
10.	**تشمل العقبات العملية التي تهدد السرية في التعامل مايلي:**
أ.	يعتمد العلاج الطبي الحديث على بعض المهن غير الصحيحه
ب.	**يتم تخزين المعلومات حول المرضى بشكل متزايد على قواعد البيانات الإلكترونية الكبيرة التي قد لا تكون آمنة على الإطلاق.**
ت.	اجراء البحوث بكثره.
ث.	أ , ب.
11.	**عادة ما يعتبر الأثر المزدوج في الأخلاقيات الطبية الأثر المشترك لل:**
أ.	الإحسان والاستقلال الذاتي
ب.	تجنب سوء الاداء والسرية
ت.	الاستقلال والعدالة
ث.	**الإحسان وتجنب الأذى**
12.	**تقوم مدربة تمريض بتعليم طلاب التمريض مبادئ الأخلاق في مجال الرعاية الصحية، وتقول لهم إن المبدأ البالغ الأهمية الذي يجب مراعاته أثناء رعاية المريض لا يضر. مبدأ الأخلاق الذي وصفته هنا:**
أ.	الاحسان
ب.	العدالة
ت.	عدم الانحياز
ث.	**احترام الاستقلال الذاتي**

Appendix : F

Ministry of Higher Education and Scientific Research

Faculty of Nursing / University of Babylon

Research Questionnaire

Dear nurse...

The information and answers to be selected in this questionnaire will help assess **Nurse's Knowledge about Critical Thinking in Al-Hillah Teaching Hospitals.** Based on your answers, an educational program will be prepared to develop critical thinking skills that help nurses make the right decision when applying nursing interventions.

There are a set of paragraphs in the form, please read them carefully and choose the correct answers, below from each paragraph you see best suited to you, knowing that the information will be secret for scientific research purposes only.

Thank you for participating in this study.

Research Statement:

Impact of Critical Thinking Educational Program on Nurses Knowledge in Al-Hillah Teaching Hospitals

أثر البرنامج التعليمي للتفكير الحرج على معارف الممرضين في مستشفيات الحلة التعليمية

Ph.D. student

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<u>Part I: Nurses' agreements:</u>

-Participated in this study:

-Yes: ☐

-No: ☐

Part II: Demographical characteristics:

1. Age: Years

2. Gender:

- Male: ☐
- Female : ☐

3. Marital status:

- Single: ☐
- Married: ☐
- Divorce : ☐
- Widow: ☐

:Employment characteristics :III

1. :Hospital Name

2. Years of Experience in the last Unit:

- Months ☐
- Years ☐

Part IV: Nurses' Knowledge related to critical thinking concept :

I. Knowledge Domain :

1. The characteristics of critical thinking include the following:

a. Considering what is important in a given situation.

b. Accepting one, established way to provide patient care.

c. Making decisions based on intuition.

d. Being able to read and follow physician's orders.

2. Professional nurses are responsible for making clinical decisions:

a. Demonstrating traditional methods of delivering nursing care to patients.

b. **Take immediate action when the patient's condition worsens.**

c. Apply clear written solutions to patients' problems.

d. Formulation of standardized care plans for patient groups.

3. The nurse needs a reminder of professional responsibility when performing which of these actions?

a. Making an informed clinical decision

b. Making an ethical clinical decision

c. Making a clinical decision in the patient's best interest

d. Making a clinical decision based on previous shift assessments

4. What is the first component of the critical thinking model for clinical decision-making?

a. Experience

b. Nursing process

c. Attitude

d. A scientific knowledge base

5. Which of the following critical thinking model may be chosen when applying the best clinical decisions?

a. Drawing on past clinical experiences to formulate standardized care plans.

b. Relying on recall of information from past lectures and textbooks.

c. Depending on the charge nurse to determine priorities of care**.**

d. **Using the nursing process as a framework.**

6. **The critical thinking skill of evaluation in nursing practice can be best described as:**

a. Examining the meaning of data.

b. Reviewing the effectiveness of nursing actions.

c. Supporting findings and conclusions.

d. Searching for links between data and the nurse's assumptions

7. **The student learning about therapeutic communication techniques knows that the most important concept in the definition of communication is:**

a. **exchanging.**

b. .messages

c. .receiver

d. .sender

8. **Five actions that help nurses to think critically are:**

a. **recognition, questioning, information gathering, evaluation, and communication**

b. realizing, questioning, inquisition, evaluation, and communication

c. recognition, intervention, information gathering, communication, and meeting

d. Critical thinking, communication, discipline or reward, conclusion, repeated.

9. **The first step in the critical thinking process for nurses is:**

a. Evaluation

b. Recognition

c. **information gathering**

d. communication

10. **Which differentiates a nursing diagnosis from a medical diagnosis?**

a. **A client's response to a health problem**

b. Terminology for the client's disease or injury

c. A part of the client's medical diagnosis

d. The client's presenting signs and symptoms

II. Intellectual and cognitive domain

1. A nursing instructor needs to evaluate students' abilities to synthesize data and identify relationships between nursing diagnoses. Which learning assignment is best suited for this instructor's needs?

a. Concept mapping

b. Reflective journaling

c. Reading assignment with a written summary

d. Lecture and discussion

2. When using the critical thinking process, which step may use to identify the problem?

a. information gathering

b. evaluation

c. communication

d. **recognition**

3. A nurse has seen many cancer patients struggle with pain management because they are afraid of becoming addicted to the meds. By helping patients to correct their beliefs about pain control, the nurse carrying out which responsibilities:

a. Creativity

b. Fairness

c. clinical reasoning

d. **criteria ethical applying**

4. A nurse prepares to insert a Foley. The procedure manual calls for the patient to lie in the dorsal recumbent position. The patient complains of having back pain when lying on her back. Despite this, the nurse positions the patient in dorsal recumbent as the manual recommends and begins to insert the foley. this is an example:

a. Accuracy

b. Reflection

c. Risk-taking

d. **Basic Critical Thinking**

5. An aspect of clinical decision-making is knowing the patient. Which of the following is the most critical aspect of developing the ability to know the patient?

a. Working in multiple health care settings

b. Learning good communication skills

c. Spending time establishing relationships with patients

d. Relying on evidence in practice

6. A patient who lost her sister 2 weeks ago reported that she has sleeping disturbance, and fatigue, she explain that she lose her ability to concentrate and even solve simple problems. The nurses identify the patient's problem as ineffective coping. This is an example:

a. Diagnostic reasoning.

b. Competency.

c. Problem solving.

d. Inference.

7. A nurse has been working in a surgical unit for 3 weeks. A patient requires a Foley catheter to be inserted, so the nurse reads the procedure manual for the institution to review how to insert it. The level of critical thinking the nurse is using is:

a. Commitment.

b. Scientific method.

c. Basic critical thinking.

d. Complex critical thinking.

8. The nurse asks a patient how she feels about her impending surgery for breast cancer. Before the discussion, the nurse reviewed the description of loss and grief and therapeutic communication principles in his textbook. The critical thinking component involved in the nurse's review of the literature is:

a. Experience.

b. Problem solving.

c. Knowledge application.

d. Clinical decision making.

9. Which of the following is unique to the commitment level of critical thinking?

a. Weighs benefits and risks when making a decision.

b. Analyzes and examine choices more independently.

c. Concrete thinking.

d. Anticipates when to make choices without others' assistance.

10. Which statement about the nursing process is correct?

a. It was developed from ANA standards of care

b. It is a problem-solving method to guide nursing activities

c. It is a linear process with separate distinct steps

d. Depending on the medical diagnosis

III. Application domain:

1. Which of the following demonstrates a nurse utilizing self-reflection to improve clinical decision-making?

a. Uses an objective approach in all situations

b. Obtains data in an orderly fashion

c. Improves a plan of care while thinking back on interventions performed

d. Provides evidence-based explanations for all nursing interventions

2. The patient appears to be in no apparent distress, but vital signs taken by assistive personnel reveal an extremely low pulse. The nurse then auscultates an apical pulse and asks the patient whether he has any complaints or a history of heart problems. The nurse is utilizing which critical thinking skill?

a. Interpretation

b. Evaluation

c. Self-regulation

d. Explanation

3. What will be helpful to manage medical unit team members during stressful situations, when everyone feels pressured and gets into more arguments:

a. publish a study

b. **participate in a unit meeting to discuss feelings**

c. ask the nurse manager to assign you to less difficult patients

d. review the policy and procedure manual on proper care of patients after death

4. By using known criteria in conducting an assessment such as reviewing with a patient the typical characteristics of pain, a nurse is demonstrating which critical thinking attitude?

a. Curiosity

b. Adequacy

c. **Discipline**

d. Thinking independently

5. The surgical unit has initiated the use of a pain-rating scale to assess patients' pain severity during their postoperative recovery. The registered nurse (RN) looks at the pain flow sheet to see the pain scores recorded for a patient over the last 24 hours. Use of the pain scale is an example of which intellectual standard?

a. Deep

b. Relevant

c. **Consistent**

d. Significant

6. During a home health visit the nurse prepares to instruct a patient on how to perform range-of-motion (ROM) exercises for an injured shoulder. The nurse verifies that the patient took an analgesic 30 minutes before arrival at the patient's home. After discussing the purpose of the exercises and demonstrating each one, the nurse has the patient perform them. After two attempts with only the second of three exercises, the patient stops and says, "This hurts too much. I don't see why I have to do this so many times." The

nurse applies the critical thinking attitude of integrity in which of the following actions?

a. "I understand your reluctance, but the exercises are necessary for you to regain function in your shoulder. Let's go a bit more slowly and try to relax."

b. "I see that you're uncomfortable. I'll call your doctor to decide the next step."

c. "Show me exactly where your pain is and rate it for me on a scale of 0 to 10."

d. "Is anything else bothering you? Other than the pain, is there any other reason you might not want to do the exercises?"

IV. Analysis domain

1. **Which of these patient scenarios is most indicative of critical thinking?**

a. Administering pain relief medication according to what was given last shift

b. Asking a patient what pain relief methods, pharmacological and nonpharmacological, have worked in the past

c. Offering pain relief medication based on physician orders

d. Explaining to the patient that his reports of severe pain are not consistent with the minor procedure that was performed

2. A nurse just started working in a well-baby clinic. One of her recent experiences was to help a mother learn the steps of breastfeeding. During the first clinic visit, the mother had difficulty positioning the baby during feeding. The nurse considers what affected the inability of the mother to breastfeed, including the mother's obesity and inexperience. The :nurse's review of the situation is called

a. Reflection

b. Perseverance

c. Intuition

d. Problem solving

3. **A nurse enters a 72-year-old patient's home and begins to observe her behaviors and examine her physical condition. The nurse learns that the patient lives alone and notices bruising on the patient's leg. When watching the patient walk, the nurse notes that she has an unsteady gait and leans to one side. The patient admits to having fallen in the past. The nurse identifies the patient as having the nursing diagnosis of Risk for Falls. This scenario is an example of:**

a. Inference.

b. Basic critical thinking.

c. Evaluation.

d. **reasoning Diagnostic**

4. A patient on a surgical unit develops sudden shortness of breath and a drop in blood pressure. The staff responds, but the patient dies 30 minutes later. The manager of the nursing unit calls the staff involved in the emergency response together. The staff discusses what occurred over the 30-minute time frame, the actions taken, and whether other steps should have been implemented. :The nurses in this situation are

a. Problem-solving.

b. Showing humility.

c. **Conducting reflective practice.**

d. Exercising responsibility.

5. **Patient with I.V. fluid, the rate flow is noted as correct, because of the cannula, the nurse assesses the site of the cannula, and repositions the patient arm so the infusion continuous to flow easily. This is a type of:**

a. Inference.

b. Diagnostic reasoning.

c. Competency.

d. **.solving Problem**

6. **A nurse has worked in an oncology unit for 3 years. One patient has become visibly weaker and states, "I feel funny." The nurse knows how patients often have behavior changes before developing sepsis when they have cancer. The nurse asks the patient questions to assess thinking skills and notices the patient shivering. The nurse goes to the phone, calls the physician, and begins the conversation by saying, "I believe that your**

patient is developing sepsis. I want to report symptoms I'm seeing." What examples of critical thinking concepts does the nurse show? (Select all that apply.)

a. Experience

b. Ethical

c. **Analyticity**

d. Risk-taking

7. **A patient had hip surgery 16 hours ago. During the previous shift, the patient had 40 mL of drainage in the surgical drainage collection device for 8 hours. The nurse refers to the written plan of care, noting that the health care provider is to be notified when drainage in the device exceeds 100 mL for the day. On entering the room, the nurse looks at the device and carefully notes the amount of drainage currently in it. :This is an example**

a. Planning

b. **Evaluation**.

c. Intervention.

d. .Diagnosis

V. Ethical domain

1. **All of these are Principles of Medical Ethics EXCEPT:**

a. Autonomy

b. Beneficence

c. **Honesty**

d. Justice

2. **Actions that can be taken to help prevent or remove harm or to simply improve the situation of others" are _____.**

a. **Beneficent actions**

b. maintaining actions Confidentiality

c. Autonomy

d. None of the above

3. **The Virtues are habits formed by all of the following EXCEPT:**

a. One's personality

b. **Interacting with people in the work environment.**

c. .Parental and social training

d. Professional and other standards suitable to one's choices and roles in society.

4. **All of these are true about the non-maleficence principle EXCEPT:**

a. Includes an obligation not to inflict harm intentionally.

b. **Includes informed consent and truth-telling.**

c. Physicians must refrain from providing ineffective treatments or acting with malice toward patients.

d. Offers little useful guidance to physicians because many beneficial therapies also have serious risks.

5. **Sometimes, there are good reasons for overriding the truth-telling principle. Such as:**

a. All patients with cancer or AIDS.

b. If the patients are from China.

c. **Patients do not want the tru23t5tth if the news is bad.**

d. All of the above

6. **Physicians do have an obligation to:**

a. Helping individuals with disabilities

b. Rescuing persons who are in the most danger.

c. and remove harm Prevent

d. **All of the above**

7. **Stopping a medication that is shown to be harmful is an example of:**

a. **maleficence-Non**

b. Autonomy

c. Ethical

d. Beneficence

8. **When there are two different ideas, it is important in resolving the conflict to choose:**

a. **The right and most beneficial choice**

b. The right choice

c. The most beneficial choice

d. None of the above

9. "The capacity to think, decide and act on the bases of thought and decision freely & independently (without let or hindrance)" best describes:

a. Confidentiality

b. Autonomy

c. Reasoned analysis

d. Virtue Theory

10. Practical Obstacles to the Practice of Confidentiality include:

a. Modern medical treatment involves a small number of medical professionals.

b. Information about patients is increasingly stored on large electronic databases which may not be secured absolutely.

c. Approved research

d. A+B

11. Double effect in medical ethics is usually regarded as the combined effect of:

a. Beneficence and Autonomy

b. malpractice and Confidentiality-Non

c. Autonomy and Justice

d. malpractice-Beneficence and Non

12. A nursing instructor is teaching nursing students about principles of ethics in health care, and she tells them that the utmost important principle to observe while taking care of the patient is no harm. The principle of Ethics she described here:

a. Beneficence

b. Justice

c. Nonmaleficence

d. Respect for autonomy

Appendix : G

خبراء تحكيم استمارة الاستبيان

ت	اسم الخبير	اللقب العلمي	مكان العمل	الشهادة	الاختصاص	سنوات الخبرة
1	الدكتورة راجحة عبد الحسن حمزة	استاذ	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة الكوفة	37 سنة
2	الدكتورة هدى باقر حسين	استاذ	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بغداد	35 سنة
3	الدكتورة صباح عباس احمد	استاذ	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بغداد	34 سنة
4	الدكتورة حكيمة شاكر حسن	استاذ	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بغداد	33 سنة
5	الدكتور حسين هادي عطية	استاذ	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بغداد	18 سنة
6	الدكتورة سحر ادهم علي	استاذ	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بابل	24 سنة
7	الدكتورة شذى سعدي محمد	استاذ	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بابل	24 سنة
8	الدكتورة سعاد جاسم محمد	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بغداد	42 سنة
9	الدكتور تحسين رجب محمد	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بغداد	22 سنة
10	الدكتور حسن عبد الله عذبي المالكي	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة كربلاء	19 سنة
11	الدكتور عقيل حبيب جاسم	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة بغداد	18 سنة
12	الدكتور ابراهيم علوان كاظم	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة الكوفة	16 سنة
13	الدكتور محمد عبد الكريم	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض/ جامعة الكوفة	13 سنة
14	الدكتور صادق عبد الحسين حسن الفياض	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض / جامعة بغداد	12 سنة
15	الدكتور جهاد جواد كاظم	استاذ مساعد	تمريض صحة البالغين	دكتوراه	كلية التمريض / جامعة الكوفة	9 سنة
16	الدكتور محمد باقر حبيب	مدرس	تمريض صحة مجتمع	دكتوراه	كلية التمريض/ جامعة بغداد	15 سنة

Appendix : H

Some photos were taken during the implementation of the educational program


B612

الملخص

خلفية الدراسة: تعريف التفكير الحرج حسب مؤسسة التفكير الحرج بأنه تخصص فكري يتكون من مكونات التفكير التالية: تحديد الغرض والمشكلة ، وتعريف المفهوم ، واكتشاف الافتراضات ، والنظر في وجهات النظر ، والكشف عن الآثار / العواقب ، والتحقق من صحة الأدلة ، والتفكير عملية صنع القرار والتواصل بين العاملين في مجال الرعاية الصحية ، ويبلغ ذروته في وفاة المرضى.

الاهداف: تحليل أثر برنامج التعليمي للتفكير الحرج على معارف الممرضين في مستشفيات الحلة التعليمية.

منهجية الدراسة: تصميم كمي شبه تجريبي من خلال طريقة الاختبار القبلي والبعدي؛ تطبيق كل من المجموعة التي تخضع للبرنامج والمجموعة الضابطة من الممرضين لتحديد تأثير برنامج تعليمي للتفكير النقدي على معارف الممرضين من الفترة ما بين 10 أكتوبر 2020 إلى 12 يونيو 2022 في مستشفيات الحلة التعليمية. تم اختيار عينة غير احتمالية وفقا للدور الحرج الذي يؤديه الممرضين في ردهات العناية الحرجة في مستشفيات الحلة التعليمية. وبلغ عدد الممرضين في العينة (72)، مقسمين إلى مجموعتين (36) ممرضا المجموعة الذين تعرضوا للبرنامج، و(36) ممرضا المجموعة ضابطة. تم إجراء استبيان خاص وبرنامج تعليمي من خلال مراجعة شاملة للأدبيات والكتب والدراسات السابقة والمعلومات المكتسبة من خلال تقييم احتياجات الممرضين وأهداف الدراسة. ولجمع البيانات، تم استخدم استبيان؛ وكان يتألف من أربعة أجزاء أساسية: الجزء الأول: الموافقات للمشاركة بالدراسة من قبل الممرضين، الجزء الثاني: المعلومات الديموغرافية، الجزء الثالث: خصائص وظيفيه ,الجزء الرابع: استبيان معد لتقييم معارف الممرضين المتعلقة بمفاهيم التفكير الحرج؛ التي شملت خمسة فقرات. المصداقية للاستبيان تم الحصول عليها بعدما تم تقييمها من قبل (15) خبيرا وبعدها تم إجراء دراسة تجريبية مصغرة. تم إجراء الاختبار القبلي والبعدي لتقييم تأثير البرنامج التعليمي.

النتائج: وأظهرت نتائج الدراسة أن معظم عينة الدراسة كانت (72) ممرضا وافقوا على المشاركة في الدراسة وانقسموا إلى مجموعتين: (36) ممرضا كمجموعة خضعوا للبرنامج التعليمي و(36) ممرضة كمجموعة ضابطة ,فيما يتعلق بالعمر يبين الجدول أن النسبة الأعلى من الفئة العمرية 24 سنة (66.7٪)، و20 سنة (55.6٪) من المجموعة التداخلية(الذين خضعوا للبرنامج) والضابطة كانت بين (24-29) سنة. وفيما يتعلق بنوع الجنس، كانت النسبة المئوية العالية 24 (66.7 ٪)، و 28 (77.8 ٪) من كلتا المجموعتين من الإناث. سجلت المجموعة الضابطة 18 (50٪) متزوجين ، في حين سجلت المجموعة التداخلية 23 (63.9٪) كانوا عازبين. وفيما يتعلق بسنوات الخبرة، أظهرت النتائج أن النسبة العالية لكل مجموعة 32 (88.9٪)، و 24 (66.7٪) كانت 3 سنوات أو أقل.

الاستنتاجات: يوجد نقص لمعارف الممرضين بشكل رئيسي تجاه مفاهيم التفكير الحرج بين كلتا المجموعتين. لذلك ، بعد تنفيذ البرنامج التعليمي ، هنالك تحسن في معارف الممرضين مما يؤدي إلى تطويرها بشكل جيد. سجل غالبية المشاركين في الدراسة خصائص متجانسة تتعلق بالمعلومات الشخصيه (العمر والجنس والحالة الاجتماعية) ,وفيما يتعلق بالمعلومات الوظيفيه (سنوات الخبرة للممرضين) لها تاثير ايجابي على معارف الممرضين. اكتسب الممرضين اللذين تعرضوا لبرنامج التفكير الحرج التعليمي تحسنا في المعرفة بعد تنفيذ البرنامج مقارنة بتقييمهم قبل البرنامج.

التوصيات: بناء على نتائج الدراسة الحالية ، سيحتاج مقدموا الأبحاث والتعليم والرعاية الصحية إلى التوصيات التالية: يحتاج طاقم التمريض وإدارة التمريض إلى العمل معا لتوفير اجواء تحفزعلى التفكير الحرج والابتكار ، ويمكن إجراء مزيد من الأبحاث لتشجيعهم كشرط لتعزيز الوظائف من خلال مؤسسات الرعاية الصحية ، وبناء بيئة عمل إيجابية تعزز التفكير النقدي لدى طاقم التمريض في مؤسسات الرعاية الصحية.

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة بابل
كلية التمريض

أثر البرنامج التعليمي للتفكير الحرج على معارف الممرضين في مستشفيات الحلة التعليمية

اطروحة مقدمة إلى
مجلس كلية التمريض / جامعة بابل
كجزء من متطلبات نيل درجة الدكتوراه فلسفة علوم في التمريض

من قبل
امنه عبد الحسن جبر خضير الجشعم

بإشراف
أ. م. د. حسام عباس داود

نيسان / 2023 ميلادية **رمضان / 1444 هجرية**