

**How to Cite:**

Shlash, A. M. J., & Mohammed, S. S. (2022). Evaluating of academic nurses' clinical judgement skills in a critical care unit at Babylon City, Iraq. *International Journal of Health Sciences*, 6(S1), 125-133. <https://doi.org/10.53730/ijhs.v6nS1.4753>

# **Evaluating of Academic Nurses' Clinical Judgement Skills in a Critical Care Unit at Babylon City, Iraq**

**Ahmed Mohammed Jasim Shlash**

Department of Adults Health Nursing, College of Nursing, University of Babylon & University of Al-Ameed, Iraq

**Shatha Saadi Mohammed**

Department of Adults Health Nursing, College of Nursing, University of Babylon, Iraq

**Abstract**---Clinical judgement is the foundation of nursing practices and recognized as essential skills for all nurses and serves as a distinguishing factor between professional nurses and those in strictly technical roles. Hence, the goal of this study was to evaluate of academic nurse's clinical judgement skills. A cross-sectional quantitative design is used to conduct this study. The data was gathered during a period of time that started on July 10, 2021, and ended on September 20, 2021, using a non-probability purposive sampling approach that recruited (ninety-one) critical-care nurses from three public governmental hospitals in Babylon City, Iraq. The data was obtained through using a questionnaire format and amended by the researcher, data analyzed was through using (SPSS -version 25). More than half (56.0 %) of the study's participants are between the ages of 25 and 29, and more than two-thirds (61.5 %) are female, single, have a degree of Baccalaureate in nursing, within (1-5) years graduated from nursing, experience in nursing was (1-5 years), and live in urban regions. The results indicated that the majority of participants had average clinical judgement abilities, overall mean was (1.56).

**Keywords**---academic nurses, clinical judgement, critical care unit, evaluating, skills.

## **Introduction**

Clinical judgement refers to the nurse's making decisions based on various types of information, such as recognizing important questions, anticipating and

---

International Journal of Health Sciences ISSN 2550-6978 E-ISSN 2550-696X © 2022.

**Corresponding author:** Shlash, A. M. J.; Email: [ahmedmoh1994.ar@gmail.com](mailto:ahmedmoh1994.ar@gmail.com)

Manuscript submitted: 27 Nov 2021, Manuscript revised: 18 Feb 2022, Accepted for publication: 09 March 2022

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

Clinical judgement has been recognized as a critical skill that allows nurses to plan appropriate nursing actions while planning patient care, especially the capacity to manage patients who are quickly deteriorating (Lindsey & Jenkins, 2013). The clinical environment in nursing is more complicated than ever today. Nursing, as a rapidly evolving profession, necessitates a nurse with a high cognitive skill. Creative and critical thinking, as well as clinical judgment, are regarded as basic skills for all health professionals (Potgieter, 2012; Alfaro-LeFevre, 2016). In medical institutions, clinical judgement is a crucial part of nursing practice (McCartney, 2017). The clinical judgement of nurses may have a significant impact on patient outcomes, necessitating careful consideration and decision-making [8]. However, studies indicate that owing to a lack of information and experience in the ever-changing healthcare environment, nursing students are not acquiring the sophisticated reasoning skills and clinical judgement abilities required to operate successfully after graduation (Van Graan et al., 2016). A novice may become an expert with more inductive, analytic, and critical thinking contextual patterns with knowledge improvement and repeated practice (Pouralizadeh et al., 2017).

In 2019, 15.9% of nurses in the United States leave their work, and this trend is visible around the world. The problem of nurse shortages is aggravated by the fact that about greater than twenty percent of a new graduated nurse (NGN) abandon their jobs in a year. In the United States, for example, 27.6% of NGNs left their positions in 2019 (NSI Nursing Solutions, Inc., 2020) (Maré et al., 2019). In today's health care environment, in addition to superior clinical skills, nurses must have good clinical judgement skills. Clinical judgement is a necessary ability for nurses and a critical component of nursing practice to provide safety, efficient, and effective patient care in a health care system complicated today's. Furthermore, new nurses entering the health-care system with a good clinical judgement and excellent practice knowledge are needed to assist patients' complicated care requirements and contribute to the best possible decisions about patient's care (Lasater, 2011; Samuels & Leveille, 2010).

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

## Materials and Method

A cross-sectional quantitative design is used to evaluate of academic nurse's clinical judgement skills.

### Participants in the study

A target populations are academic nurses who work in the critical care units of the chosen hospitals.

### Data collection

The questionnaire was used to gather data through (interview and self-report). Researchers were collected data individually from each participant. Each interview lasts between twenty and thirty minutes.

### Sample

A non-probability purposive sampling approach that recruited (ninety-one) critical-care nurses from three public governmental hospitals (Marjan medical city, Al-Imam Al-Sadiq hospital, and Al-Hillah teaching hospitals) at Babylon city, who agreed to take part in the research and satisfied both the inclusion and exclusion criteria, The data was gathered using the following standard questionnaire checklist from July 10, 2021, to September 20, 2021: clinical judgment assessment (CJA) tool ([Pongmarutai, 2010](#)). Which composed of three part; which includes:

- Part I: The first part provided nurses with a variety of clinical information (cues) similar to what would be given throughout a change shift report.
- Part II: The second part of the tool from the clinical record (client's chart) contained additional clinical information (cues)
- Part III: In the third part, based on the clinical data collected earlier the nurses were then instructed to first determine the appropriate nursing diagnosis.
- Part IV: In the fourth part, priorities their clinical judgement by ranking from section three the indicated nursing diagnoses.
- Part V: Finally, in a five section, they utilized a Likert scale from zero to ten (where ten indicated complete confidences and zero indicated no confidence at all).

Four major concept of instrument measures are:

- Information collection (using observation and knowledge)
- Clinical judgement accuracy
- Interpretation
- Prioritizing were the four main ideas assessed. Clinical judgement, the last assessment (composite score), was a compilation of scores from the previous four components.

It is essential, the subsequent statistical analysis in regards of item scaling, that the scaling used in this study produces a substantial degree of variation between responders. For the first and second parts, the proposed tool was scaled on a dichotomous basis, ranging from one (information relevant to the treatment plan) and zero (knowledge irrelevant to care plan). The scores of nurses' (for the instrument's first, second, and third parts) were computed in relation to the expert-identified criteria. Nurses were given one score if they followed an item that was generally accepted in the recommended clinical judgement guideline, while a score of zero was given if the judgement was incorrect.

Statistical Analysis: The data from the research is analyzed through using the "Statistical Package for the Social Sciences" (SPSS -version 25). The descriptive statistical data analysis technique was utilized to represent the research variables: frequencies and percentages, mean of score, and standard deviation degree. The protocol of this study was approved by ethics Committee of the faculty of nursing of Babylon university, each hospital's nursing administration authorized the study. They were instructed about the study's purpose and methodology. Nurses were assured of secrecy and anonymity, and the completion of a questionnaire was considered permission to participate.

## Results

Table 1  
Demographic characteristics of the study participants

Items	Categories	Frequent	Percent
Age / Years	20-24	16	17.6
	25-29	51	56.0
	30-34	21	23.1
	35-39	2	2.2
	40 and more	1	1.1
	Total	91	100%
Gender	Male	35	38.5
	Female	56	61.5
	Total	91	100%
Marital Status	Single	52	57.1
	Married	39	42.9
	Total	91	100%
Nursing program enrolling	Baccalaureate (BSN)	90	98.9
	Master degree (MSN)	1	1.1
	Total	91	100%
Number of year(s) graduate from nursing	1-5 years	86	94.5
	6-10 years	5	5.5
	Total	91	100%
Years of experience in nursing	1-5 years	80	87.9
	6-10 years	10	11.0
	11 and above	1	1.1

	Total	91	100%
Residency	Urban	60	65.9
	Rural	31	34.1
Total		91	100%

Table (1) show that the majority of participant (56.0 %) are within age (25-29) years old, and greater percent of them (61.5 %) are female, with the others (38.5 %) being male. When it comes to marital status, it's clear that the majority of the survey participants are single (57.1 %). In concerning with nursing program enrollment, results show that the majority of participants (98.9 %) have a Baccalaureate degree nursing program enrolling. The results also show that the number of year(s) of nursing graduate was within the (1-5 years), consisting (94.5 %). Regarding the experience of nurses, our findings indicated that the majority of nurses (87.9 %) are within (1-5) years. Concerning with residency, the majority of them reside in urban regions, which makes up the majority of the participant (65.9 %).

Table 2  
Overall distribution of study sample related to their Clinical Judgement

Overall Clinical Judgement	Scale	F	%	M.S	S.d.	Assessment
	Important	64	70	1.56	0.23	Average
	Not important	27	30			
	<i>Total</i>	<i>91</i>	<i>100</i>			

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

In table (2), the results of overall clinical judgement at (section one, two and three). According to the statistical cut off point, the majority of participants demonstrated average clinical judgement. Basis on the variations in the frequency and percentage of occurrences of all aspects of clinical judgement evaluation, overall mean (1.56) of the study results indicate that there is an acceptable clinical judgement of study participants.

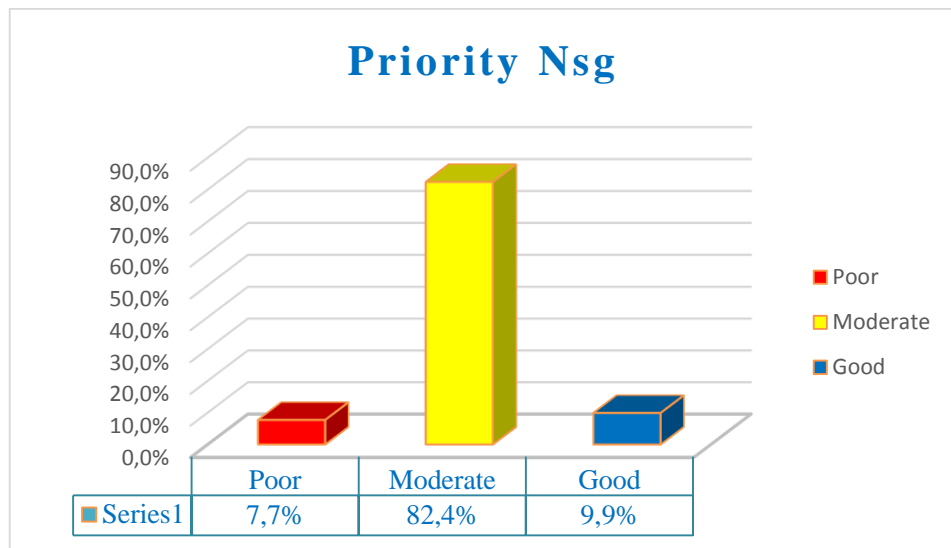


Figure 1. Distribution of Participants' According to Rank of Priority Nursing Diagnosis

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

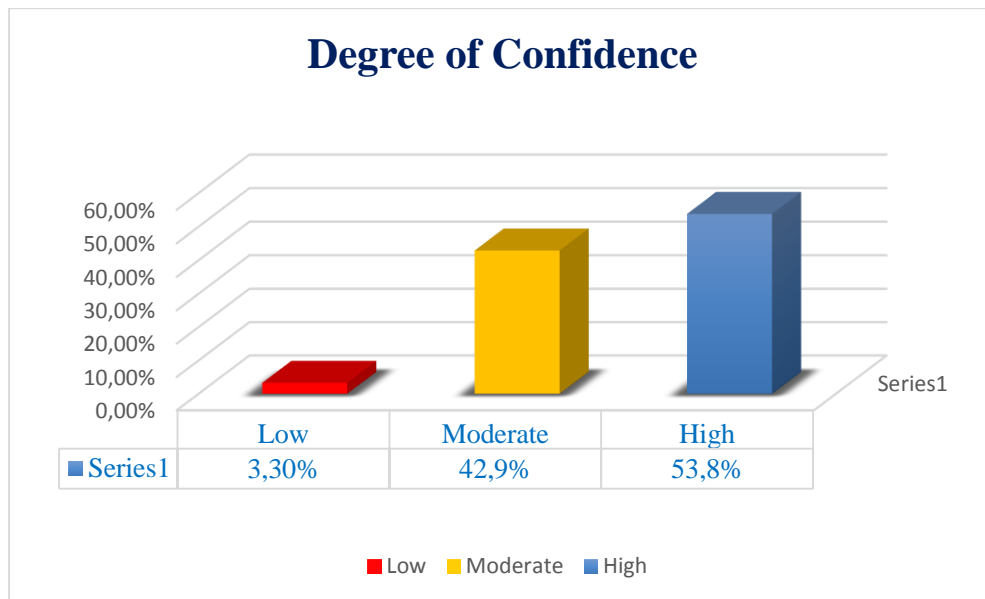


Figure 2. Distribution of Participants' According to Degree of Confidence in their Clinical judgement

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

## Discussion

*Demographical characteristic:* According to our data, the majority of participant (56.0 %) are within age (25-29) years old, and greater percent of them (61.5 %) are female, with the others (38.5 %) being male. In comparison to another research conducted by Canto and colleagues, the mean age of participants was 22.4 years, the majority of participants were female (88 %), and the remainder were male (11.4 %) (Canto et al., 2021). When it comes to marital status, it's clear that the majority of the survey participants are single (57.1 %). In parallel with another study of that studied “factors affecting the academic performance of student nurses: A cross-sectional study”, the data revealed that the majority of responders were single (84.6 %) (Alshammari et al., 2017).

In terms of nursing program enrollment, results show that the majority of participants (98.9 %) have a Baccalaureate degree. In line with the results of Jung and Kim's research, the majority of the nurses (65.3 %) have bachelor's degrees (Jung et al., 2020). The results also show that the number of year(s) of nursing graduate was within the (1-5 years), consisting (94.5 %). Regarding the experience of nurses, our findings indicated that the majority of nurses (87.9 %) are within (1-5) years. In another research conduct by Jacobs and colleagues, found that participants' job experience in the area of nursing ranged from (5 to 42) years, with (52%) of them having experience ranging from 30 to 45 years (Jacobs et al., 2018). In terms of residence, the majority of them reside in urban regions, which makes up the majority of the participant (65.9 %). This is also supported by another research, which found that nine of participant live in suburban area and six of them reside in the urban region out of fifteen homes nurses participate in study (Vlaeyen et al., 2021).

### Overall clinical judgement for the academic nurses

The results of overall clinical judgement at (section one, two and three). According to the statistical cut off point, the majority of participants demonstrated average clinical judgement. Basis on the variations in the frequency and percentage of occurrences of all aspects of clinical judgement evaluation, overall mean (1.56) of the study results indicate that there is an acceptable clinical judgement of study participants. In another study done by Victor, who studied “improving clinical nursing judgment in prelicensure students”. The findings indicated that, the clinical nursing judgement increased significantly at the beginning and ending of a bachelor degree program (Victor, 2017). In contrast with another study, the results showed that, possessing an organized framework offered objective means of evaluating and developing the clinical judgement of new graduate nurses. It is supposed that academic clinical preceptors may find this approach beneficial in preparing students for transfer to practice (Nielsen et al., 2016).

In figure (one) four clinical judgement. The result indicated that the majority of respondents that rank a priority nursing diagnoses were (82.4%) within a moderate level. In another study, the results mentioned that a nurses who have a degree of bachelorette in nursing are thought to utilize greater levels of cognitive abilities, as they learn to analyze conditions, reflection on their performance, evaluating interventions and making clinical judgements (McLaughlin et al.,

2008). In figure (two) clinical judgement. The result indicated that the majority of respondents (53.8%) within a high confidence. In light of this, another study of Fenske & others, the results indicated that there is an increased confidence in the skills of clinical judgment among nurses who have less than one year of experience in the field of nursing and whose ages range from twenty-one to twenty-five; and in comparing with their actual skills, they have consistently rated themselves at a much higher level (Fenske et al., 2013).

### **Implications for practice**

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

### **Acknowledgments**

This research was taken from a doctoral dissertation in adult health nursing with the code of TAHDC. NURSING. R. No (21). We would like to appreciate the Ministry of Health, Training and Human Development Center of Babylon, as well as the study ethical committee of the faculty of Nursing at the University of Babylon. Furthermore, the researcher would like to acknowledge the participants and nurses from the critical care units at Imam Sadiq, Marjan Medical City, and Al-Hillah Teaching Hospital for their contributions to this study.

### **References**

- Alfaro-LeFevre, R. (2016). *Critical thinking, clinical reasoning and clinical judgment: A practical approach, pageburst E-book on kno*. Elsevier Health Sciences.
- Alshammari, F., Saguban, R., Pasay-an, E., Altheban, A., & Al-Shammari, L. (2017). Factors affecting the academic performance of student nurses: A cross-sectional study. *Journal of Nursing Education and Practice*, 8(1), 60.
- Canto, V. B. D., Silva, T. G. D., Santos, G. A. D., Carvalho, E. C. D., Morais, S. C. R. V., & Frazão, C. M. F. D. Q. (2021). Clinical judgment performance of undergraduate Nursing students. *Revista Latino-Americana de Enfermagem*, 29.
- Cappelletti, A., Engel, J. K., & Prentice, D. (2014). Systematic review of clinical judgment and reasoning in nursing. *Journal of Nursing Education*, 53(8), 453-458.
- Fenske, C. L., Harris, M. A., Aebbersold, M. L., & Hartman, L. S. (2013). Perception versus reality: A comparative study of the clinical judgment skills of nurses during a simulated activity. *The Journal of Continuing Education in Nursing*, 44(9), 399-405.
- Gerdeman, J. L., Lux, K., & Jacko, J. (2013). Using concept mapping to build clinical judgment skills. *Nurse Education in Practice*, 13(1), 11-17.



- Jacobs, S., Taylor, C., Dixon, K. A., & Wilkes, L. M. (2018). Consensus of the characteristics of clinical judgement utilised by nurses' in their practice: results of a survey. *Open Journal of Nursing*, 746-757.
- Jung, J. H., Kim, H. J., & Kim, J. S. (2020, June). Comparison of nursing performance competencies and practical education needs based on clinical careers of operating room nurses: A cross-sectional study. In *Healthcare* (Vol. 8, No. 2, p. 136). Multidisciplinary Digital Publishing Institute.
- Lasater, K. (2011). Clinical judgment: The last frontier for evaluation. *Nurse Education in Practice*, 11(2), 86-92.
- Lindsey, P. L., & Jenkins, S. (2013, January). Nursing students' clinical judgment regarding rapid response: the influence of a clinical simulation education intervention. In *Nursing forum* (Vol. 48, No. 1, pp. 61-70).
- Manetti, W. (2018). Evaluating the clinical judgment of prelicensure nursing students in the clinical setting. *Nurse Educator*, 43(5), 272-276.
- Marć, M., Bartosiewicz, A., Burzyńska, J., Chmiel, Z., & Januszewicz, P. (2019). A nursing shortage—a prospect of global and local policies. *International nursing review*, 66(1), 9-16.
- McCartney, M. (2017). Margaret McCartney: Nurses must be allowed to exercise professional judgment. *BMJ*, 356.
- McLaughlin, K., Moutray, M., & Muldoon, O. T. (2008). The role of personality and self-efficacy in the selection and retention of successful nursing students: a longitudinal study. *Journal of advanced nursing*, 61(2), 211-221.
- Nielsen, A., Lasater, K., & Stock, M. (2016). A framework to support preceptors' evaluation and development of new nurses' clinical judgment. *Nurse Education in Practice*, 19, 84-90.
- Pongmarutai, T. (2010). *Application of a judgment model toward measurement of clinical judgment in senior nursing students*. University of Nevada, Las Vegas.
- Potgieter, E. (2012). Clinical teaching: Developing critical thinking in student nurses: Education. *Professional Nursing Today*, 16(2), 4-8.
- Pouralizadeh, M., Khankeh, H., Ebadi, A., & Dalvandi, A. (2017). Factors influencing nursing students' clinical judgment: A qualitative directed content analysis in an Iranian context. *Journal of Clinical and Diagnostic Research: JCDR*, 11(5), JC01.
- Samuels, J. G., & Leveille, D. M. (2010). Senior nursing students' clinical judgments in pain management. *Nurse educator*, 35(5), 220-224.
- Tanner, C. A. (2006). Thinking like a nurse: A research-based model of clinical judgment in nursing. *Journal of nursing education*, 45(6), 204-211.
- Van Graan, A. C., Martha, J. S., & Koen, M. P. (2016). Clinical judgement within the South African clinical nursing environment: A concept analysis. *health sa gesondheid*, 21, 33-45.
- Victor, J. (2017). Improving clinical nursing judgment in prelicensure students. *Journal of Nursing Education*, 56(12), 733-736.
- Vlaeyen, E., Poels, J., Colemonts, U., Peeters, L., Leysens, G., Delbaere, K., ... & Milisen, K. (2021). Predicting falls in nursing homes: A prospective multicenter cohort study comparing fall history, staff clinical judgment, the care home falls screen, and the fall risk classification algorithm. *Journal of the American Medical Directors Association*, 22(2), 380-387.