Clinical Decision-making Experience of the Critical Care Nurses’ and Its Effect on Their Job Satisfaction: Opportunities of Good Performance

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Abstract

Background: Decision making is esteemed as single of the core traits of human being for a critical care nurse and vital aspect of the performance of critical care nursing. Critical care nurses are continually faced by way of situations where they have to create well clinical decisions. 

Aim: This study was conducted to investigate clinical decision-making Experience of the critical care nurses’ and its effect on their Job satisfaction. 

Subjects and method: A descriptive exploratory research design was used. Purposive sample of all nurses were included in this study. It included 60 nurse worked in Damanhur teaching governmental hospitals from ICU and CCU units. Data were collected through using two modified tools from; Michael, 2007 and Alzahrany (2010) which the first Tool includes nurse's job satisfaction sheet and the second tool contains nurse's clinical decision making experience questionnaire.

Results: The study discovered that the majority of the nurses were satisfied for work environment and rules, Money and reinforcement and facilities of work and autonomy and safety (75%), (68.3%), (70%) respectively with statistically significance difference. Also, it reflects unsatisfactory level regard programs and workshops and relation with work supervisors, colleagues and patients (55%), (91.7) respectively. In addition to, (53.3%) of the nurses were knowledgeable regarding clinical decision making process and satisfactory level in their job with statistically significance differences. In addition to, the nurses had more than 6 years work experience in critical care settings had satisfactory knowledge regarding clinical decision making process

Conclusion & recommendations: The present study concluded that the steps of clinical decision making becomes easier and controllable when the critical care nurses become more knowledgeable and qualified. The critical care nurses had more than 6 years’ experience making better clinical decision and had job satisfaction. So, the present study recommended that there are obvious needs for strength clinical competence in nurses, the development and enhancement of critical thinking should be emphasized at the nursing college's level and nurses should be empowered to make appropriate clinical decisions and corrective actions in critical situations of care which reflected indirectly on nurse's satisfaction.

Keywords: clinical, decision-making, experience, critical care nurses, effect, job satisfaction, opportunities of good performance


1. Introduction

Decision making is valued as one of the core character of being a critical care nurse and vital part of the practice of critical care nursing. Critical care nurses are continually faced with situations where they have to make knowledgeable decisions. Some of these decisions may include the nurse only, while other decisions would include medical staff and other members of the health team. Decisions taken by the critical care nurses vary between simple regular decisions and highly complex moral decisions [1].

In recent times, nursing care has become more difficult resulting in stressing the rising significance of critical thinking (CT) in nursing practices. Consequently, nurses will come up to the creation of best practices in an evidence based health care setting by increasing CT skills and attitudes [2]. It is observed as the basis of proficient decision and has the feasible to development the excellence of results and decisions in clinical practice [3]. Consequently, working in ICU setting requires that nurses approach rapid and precise decisions, be well-knowledgeable about complex situations and in general have more responsibility [4]. Since proper and correct decisions are the basis of intensive patient care,
it is critical that ICU nurses approach accurate and appropriate decisions using critical thinking derived from understanding-particular and theoretical information [5].

Moreover, Phillips, [6] added that clinical Decision Making (CDM) incorporates information handing out, critical thinking, evaluating verification, applying right knowledge, problem-solving skills, concern, and clinical decision to choice (and complete) the most excellent course of accomplishment that optimizes a patient’s health and minimizes any probable harm [7]. Clinical decision making encompasses theoretical, information, combined with related information and skills to make clinical judgments and get action for the high-quality care delivered to the patient [8].

Dorgham and Al Mahmoud, [9] referred that Clinical decision making is a vital element of proficient nursing care, nurses’ capability to construct efficient clinical decisions is the most significant issue affecting the quality of care. Lasater and Nielsen, [10] comprehensive the discussion by introducing the expression of clinical judgment (CJ), which incorporates critical thinking and clinical situational analysis and then requires a person to make a conclusion about what requirements to be done. Clinical judgment requires clinical reasoning crossways time about exacting patient situations [8]. CDM incorporates all of the prior concepts, moving from thought activity to either an action performed or a decision not to act. As illustrous in Figure 1, CDM may be the end result of the other three terms and relies on them to provide knowledgeable cognitive way for the proper clinical situation decisions [6].

Nurses are probable to deal with quick alteration in a difficult health care structure those principles of the ‘base line’ and effectiveness even as supporting quality in helpful and curing practices, to which nurse’s great effort to sustain their assurance. In spite of obstacles to quality in nursing practice, such as diminished facilities, time constraints and perceived threats to quality of care, many nurses carry out what may be called good work. High-quality work in nursing is defined as work that is theoretically and technically efficient as well as ethically and in a social context accountable. When nurses perform high-quality work and remain dedicated to quality, they experience accomplishment as they donate to the safety of their patients. Toward the inside professional nurses cited four major barriers to high-quality care in nursing: (1) lack of nurse; (2) time shortage; (3) contradictory ethics among peers; and (4) required self-rule. When up-to-date nurses discussed lack of autonomy, they articulated supposed lack in the capability or competence to produce modify. These factors are steady with those reported in the literature as major contributors to job dissatisfaction and attrition in the nursing profession. [11].

Autonomy is a chief determinant of nurse job satisfaction, and its lack may lead to high turnover and attrition. Autonomy has long been cited as 1 of the 3 crook stones of excellent, attractive job environments. Improvement in identifying managerial structures and top practices that allow clinical autonomy has been withdrawn by broad confusion, lack of precise definition of clinical autonomy, and frustration to separate between organizational and clinical autonomy. Autonomy is construction decisions— not always having to ask? Autonomous practice includes equally types of decision making—self-determining and mutually supporting. the majority probable autonomous practice would raise along with enhanced quality of patient care and nurses’ job satisfaction, if unit orientations and meetings included planning of the often made autonomous decisions on the unit and the knowledge and competencies needed to make those kinds of decisions [12].

Additionally, nursing responsibility for critically ill patient's outcomes increases, along with the difficulty of critical care. Rising the severity of critically ill individuals. Thus, nurses need to act in response to gradually more difficult and acute patient problems. Consequently, practice and clinical decision-making autonomy are broad preconditions for supporting critical care nurses in satisfying their caring tasks at an evidenced-based, quality and patient-centered approach [13].

In critical care, nurses must work exposed high levels of responsibility and discretion decision-making due to the essential in treating life-threatening illnesses. Thus, it might be probable that critical care nurses (CCNs) would possess high levels of autonomy to experience job accomplishment. Although CCNs are required continually to develop up-to-the-minute skills and build up their role [14], their autonomy appears to be restricted by medical control, their supposed lack of knowledge and the restricted responsibility afforded to them. Role inconsistency and role uncertainty amongst CCNs are also of worry, from the time when they can set off low job satisfaction [15].

Figure 1. Connection between CT, CR, CJ, and CDM
Nurse's job satisfaction was defined theoretically as the level of positive affection a nurse feels about his/her employment [16]. Kindly why nurses left the nursing profession and the factors that supply to nurses' job satisfaction are timely in the light of the increasing worldwide nursing shortage. In this context, the pull hospitals in the United States of America (USA) have the reputation of successfully retaining nursing staff through enhanced autonomy, professional levels of accountability, accommodating management and reserves in education. Also, Studies conducted in Magnet and non-Magnet hospital settings and public sectors. Although there is indication of a well-built association between professional autonomy and job satisfaction, comparatively little awareness has been rewarded to critical care compared to other settings. Two surveys have discovered that CCNs have a greater need for autonomy, and have higher autonomy levels of autonomy in association to non-CCNs. In both studies, CCNs’ autonomy was positively associated with job satisfaction [15].

Moneke and Umeh, [17] highlighted on that nurses' job satisfaction is a means issue to consider about in the preservation of critical care nurses. Lack of nurses resulting unsafe patient care, increased expenditure, and increased stress levels among other nurses. In addition, Nurses ICUs are often confronted dilemmas relating to issues of patient care management with life supporting treatment decisions. These decisions center on the improper use of antibiotics, nutrition, cardio-pulmonary resuscitation and mechanical ventilation. Nurses are roles and responsibilities, raised new questions and pro-concerned that critically ill patients receive both too much stressors and dilemmas regarding their treatment. Hence, the nurse working in the critical care units makes life and death decisions and they discover the situation of the critical care unit very challenging and stressful [18].

Dede, [19] added that decision making as the ability to solve complex problems for which all standard methods of problem solving be unsuccessful and the development of decision making is one of the main difficult mechanisms of human being thinking, as a combination of factors and courses of action interfere with it. In addition to, decision making is the interface between a problem that needs to be solved and a person who desires to solve it within a particular environment. This entire process is affected by personal and environmental variables, to all intents and purposes, individuals may make different decisions depending on whether they feel their boss is observing them, on the amount of information they have, or if definite motivations take part in a significant part in their life [20].

Furthermore, Clinical decision making is a difficult procedure that requires nurses designate well-informed, have right to use an proper information sources and work within a accommodating setting [21]. like the nurse’s professional role expands, they become accountable for a wider choice of clinical decisions [22]. Clinical decision making requires nurses to be qualified and well-informed in significant aspects of nursing [23] and accordingly the clinical decision making process becomes easier and more controllable. Nurses have to create a decision what the problem is, what information to gather how to solve the problem, if the treatment is successful or whether the patient requirements medical review for further investigation and treatment. Banning, [23] who stated that decisions are more difficult when tasks are more complex; however the progression of decision making becomes easier and controllable when the nurses become more qualified. By the way, nursing researches interested on study clinical decision making recommended largely distributed it into the two major fields of study: nursing education and nursing performance with the importance of the advanced nursing education strategies of how to choose and apply most excellent clinical decision-making for nursing practice [24].

**Aim of the study**: to investigate clinical decision-making of the critical care nurses’ and its effect on their Job satisfaction

### 1.1. Conceptual Framework

Scott-Ladd, et al., [25] indicated that a theoretical structure of the predictable relations is diagrammatically illustrated in Figure 2 and accessible in the following hypotheses:

1) Participation will positively manipulate affective dedication, equally directly and indirectly through enhanced job characteristics, rewards and act attempt. 2) Participation will definitely influence job satisfaction, both directly and indirectly through enhanced job characteristics, rewards and performance effort. 3) Participation will positively influence the individual job personality, implication, response and self-sufficiency. 4) Participation will positively influence perceptions of act attempt. 5) Participation will positively manipulate perceptions of rewards.

![Figure 2. Conceptual schema for participation in decision making](image)
1.2. Research Questions

What are the levels of clinical decision-making for the critical care nurses?
What are the levels of job satisfaction among the critical care nurses?
Are there a relation between clinical decision-making of the critical care nurses and job satisfaction?
Are there a relation between job satisfaction of the critical care nurses and their selected demographic data?

2. Subjects and Methods

2.1. Research Design

The present study is a descriptive exploratory study aiming to explore clinical decision-making of the critical care nurses and its effect on their job satisfaction.

2.1.1. Study Setting

This study was conducted in Damanhur city in Damanhur teaching hospital in the following wards: Intensive care and Cardiac care units.

2.1.2. Sampling:

Purposive sample. All nurses from both sex were assigned to work in the above mentioned settings were included in this study. They were 60 nurses from all shifts assigned to the critical care settings as mentioned above.

2.1.3. Tools for Data Collection

Data was collected by using two modified tools from; Michael, [26] and Alzahrany [27] as follows:

Tool I: Job satisfaction Questionnaire:
It contains two major parts as follows:

Part I: Nurse's Sociodemographic data Sheet:
- Consists of demographic characteristics of the studied nurses as their sex, age, social status, educational degree, total experience in nursing field, hospital work, critical care units, number of hours worked in critical care unit, preferable shift for work, total numbers of patients responsible for, number of patients admitted to critical care unit, number of isolated patients, number of daily discharge patient and number of assistant nurses.

Part II: Nurse's Job satisfaction sheet
- Includes 33 questions related to job satisfaction of nurses worked in critical care units.
- Classified for six items: Work environment and rules that contain 6 questions, Work facilities and time that contain 9 questions, Autonomy and safety that contain 4 questions, Training programs and workshops that contain 4 questions, Relationships with supervisors, colleagues & patients include 5 questions, Reinforcement and money include 5 questions.

Tool II: Clinical Decision making Experience sheet
- Includes Clinical decision-making scale which including 2 main parts; the first part was related to decision-making knowledge, opinion and action regarding situations and second part was related to decision making that contains 5 main categories scale of 37 questions regarding awareness of risks factors affecting in decision making, ability for take responsibility for decision making, methods & follow up of decision making, method of acceptance of another opinion, standardized and fairness in decision making respectively.

2.2. Ethical Consideration

1. Explain the aim of the study to the director of the unit to take his agreement to carry out this study.
2. Explain the aim of the study to each nurse to be familiar with the importance of his/her participation.
3. A concise explanation of the purpose and significance of the study was given to the nurses and assured that the obtained information will be confidential and used only the purpose of the study. Confidentiality of the information was assured by the researcher.

2.3. Pilot Study

Pilot study was carried out after the development of the tools on 10% of the nurses to test applicability of the tools then necessary modifications were done according to the results of the results of pilot study and expertise opinions. The purpose of pilot study was:
1- To test the applicability of the study tools.
2- To estimate any need for addition in the tool.
Otherwise, the six nurses were then excluded from the sample of research work to assure the stability of answers.

3) Field work:
- The interview sheet was filled out individualized with the nurse in the Intensive care unit, cardiac care unit; Data was collected from the selecting settings by the researcher using the pre-constructed tools. 1) Each nurse was individually filling questionnaire; the questionnaire was collected from 3 shifts by all the nurses while they are on duty, purpose of the study was explained prior to get the questionnaire sheet, and it distributed to be answered within (30 -45 minutes) then collected. 2) The questionnaire was filling from about 1-2 nurses per day started from July to September 2016, over a period of 3 months starting according to nurses schedule for attendance to the hospital and availability of time for both nurses and the unit works.

4) Statistical Design:
- Collected data was arranged, tabulated and analyzed according to the type of each data.

2.4. Scoring System

The total scores of nurse's satisfaction against 6 main parts was calculated to be 33 statement; Regulations and the work environment, Work facilities and time, Autonomy and safety, Training programs and workshops, Relationships with supervisors, colleagues & patients, Reinforcement and money. The respondent was given ranked according to likert scale as 4 point for strongly agree, sometimes agree 3, disagree 2, strongly disagree 1. Then unsatisfactory level distributed as ≤ 60% and satisfactory level ≥ 60%.

Regarding clinical decision-making scoring: It includes 2 main parts; the first part was related to decision making that contains 5 main categories scale of
– making knowledge, opinion and action regarding situations and it arranged for 3 choices as A, B, C and demands to choose the best answer suitable for situation or problem faced and it's corrective actions through using Ideal correction scale used from study of Al-zahrany, [27] and second part related to decision judgment skills contains 5 main categories of 37 questions regarding awareness of risks factors affecting in decision making, ability for take responsibility for decision making, methods & follow up of decision making, method of acceptance of another opinion, standardized and fairness in decision judgments respectively and it was arranged in scores ranged according to likert scale from 1 to 5 as follows Unnecessary, At all, Non-binding, Very necessary, and Binding respectively. Then clinical decision skills ranked as low ≤ 60 %, moderate from 60-75%, High > 75%.

2.5. Statistical Analysis

2.5.1. Data Analysis

Data was collected and entered into a database file. Statistical analysis was performed by using the SPSS 16 computer software statistical package. Data was described by summary tables and figures of socio-demographic characteristics, Chi-2 or Fisher Exact test was used. Statistical significance was considered at P-value <0.05 and highly significance at P-value <0.01.

2.5.2. Limitations of Study

Data collection was time-consuming for collection than the researcher's plan and predictions because the nurses had a lot of works and duties and there are insufficient times to fill these questionnaires. Thus, the researcher made additional effort to get nurses conformity to participate in the study and filling the questionnaire.

3. Results

Table 1: shows that the half of studied nurses was ranged age (26-34) years. The majority (98.3%) of nurses were female and married. Also, it reflect (68.3%) of them had nursing diploma.

Figure 3: illustrates that (88.3%) of nurses had nursing experience more than 6 years. While the minority of the nurses had less than one year in nursing experience

Figure 4: illustrates that (33.3%) of nurses had ICU experience in range between (4-6) years while minority (16.7%) of the nurses was less than one year ICU experience.

Figure 5: shows that favorable work time was (61.7%) of the nurses choose the morning shift in ICU While (5%) of them was choose night shift.

Table 2: Shows that nurses' satisfaction level related to criteria of quality in their hospital. It reflects the majority of the nurses were satisfied for work environment and rules, Money and reinforcement and facilities of work and autonomy and safety (75%), (68.3%), (70%) respectively with statistically significance difference. Also, it reflect unsatisfactory level regard programs and workshops and relation with work supervisors, colleagues and patients (55%), (91.7) respectively

Table 3: indicates that the majority of studied sample (93.3) were had satisfactory knowledge regarding decision making process

Table 4: shows that nearly half (51.7%) of the studied sample had high level satisfaction toward their decision making and (48.3%) of them had moderate level satisfaction toward their decision making

Table 5: shows that (53.3%) of the nurses were knowledgeable regarding clinical decision making process and satisfactory level in their job with statistically significance differences.

As regard nursing experience the majority of the nurses had more than 6 years work experience in critical care settings had satisfactory knowledge regarding clinical decision making process with no statistically significance difference.

Table 6: illustrates that (30%) of the nurses moderate level is making decision had satisfactory job with no statistically significant difference. Also, it reflects (55%) of their high level making the decision had more than 6 years’ experience with a statistically significant differences

Table 7: shows that (43.3%) of the nurses with diploma had job satisfaction with no statistically significant difference. Also, it reflect (55%) of the nurses with more than 6 years in nursing experience had job satisfaction.

Table 1. Number and percent distribution nurses according to socio demographic data

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 25</td>
<td>5</td>
<td>8.3</td>
</tr>
<tr>
<td>26-34</td>
<td>30</td>
<td>50.0</td>
</tr>
<tr>
<td>35-44</td>
<td>21</td>
<td>35.0</td>
</tr>
<tr>
<td>45-54</td>
<td>3</td>
<td>5.0</td>
</tr>
<tr>
<td>more than 55</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
<tr>
<td>sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>female</td>
<td>59</td>
<td>98.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
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<tr>
<td>married</td>
<td>59</td>
<td>98.3</td>
</tr>
<tr>
<td>single</td>
<td>1</td>
<td>1.7</td>
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<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
<tr>
<td>Level of education</td>
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<tr>
<td>diploma</td>
<td>41</td>
<td>68.3</td>
</tr>
<tr>
<td>Associate nurse</td>
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<tr>
<td>Baccalaureate</td>
<td>16</td>
<td>26.7</td>
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<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Figure 3. Number and percent distribution of the nurses’ opinion regarding nursing experience in ICU

Figure 4. Number and percent distribution of the nurses’ opinion regarding their experience

Figure 5. Number and percent distribution of the nurses’ opinion regarding favorable work time in ICU
Table 2. Number and percent distribution of nurses' according to their satisfaction level related to basic criteria of quality

<table>
<thead>
<tr>
<th>Items</th>
<th>Satisfactory</th>
<th>Unsatisfactory</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>work environment and rule</td>
<td>45</td>
<td>75.0</td>
<td>15</td>
</tr>
<tr>
<td>Work time and facilities</td>
<td>37</td>
<td>61.7</td>
<td>23</td>
</tr>
<tr>
<td>autonomy and safety</td>
<td>42</td>
<td>70.0</td>
<td>18</td>
</tr>
<tr>
<td>Training programs and workshops</td>
<td>27</td>
<td>45.0</td>
<td>33</td>
</tr>
<tr>
<td>Relationship with work supervisors, colleagues &amp; patients</td>
<td>5</td>
<td>8.3</td>
<td>55</td>
</tr>
<tr>
<td>Money and reinforcement</td>
<td>41</td>
<td>68.3</td>
<td>19</td>
</tr>
</tbody>
</table>

$\chi^2$: for Chi square test
*: Statistically significant at p ≤ 0.05.

Table 3. Number and percent of nurses' scores according to their satisfaction level regarding their decision making knowledge

<table>
<thead>
<tr>
<th>Decision making knowledge</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory</td>
<td>4</td>
<td>6.7</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>56</td>
<td>93.3</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4. Distribution of nurses' level satisfaction levels according to their decision making experiences

<table>
<thead>
<tr>
<th>Decision making</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Moderate</td>
<td>29</td>
<td>48.3</td>
</tr>
<tr>
<td>High</td>
<td>31</td>
<td>51.7</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 5. Relation between the nurses' knowledge of making decision, both their job satisfaction and experience

<table>
<thead>
<tr>
<th>Job Satisfaction</th>
<th>Clinical decision making</th>
<th>Total</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unsatisfactory</td>
<td>satisfactory</td>
<td></td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>0</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>satisfactory</td>
<td>6.7</td>
<td>53.3</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>6.7</td>
<td>56</td>
<td>100.0</td>
</tr>
</tbody>
</table>

$\chi^2$: for Chi square test
*: Statistically significant at p ≤ 0.05.

Table 6. Relation between clinical decision making levels of the nurses, both their job satisfaction and experience

<table>
<thead>
<tr>
<th>Job Satisfaction</th>
<th>Decision making</th>
<th>Total</th>
<th>Chi-Square $\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Moderate</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>18.3</td>
<td>21.7</td>
<td>40</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>30</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>48.3</td>
<td>51.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

$\chi^2$: for Chi square test
*: Statistically significant at p ≤ 0.05.
4. Discussion

Recently, nursing care has become more difficult resulting in stressing the growing significance of CT in nursing practices. Therefore, nurses will move toward the creation of best practices in an evidence based health care setting by growing CT skills and attitudes [2]. It is observed as the basis of professional decision and has the potential to development the quality of results and decisions in clinical practice [3]. Therefore, working in ICU setting requires that nurses style quick and precise decisions, be well-informed about complex situations and in general have more responsibility [4]. While appropriate and right decisions are the basis of intensive patient care, it is critical that ICU nurses style exact and appropriate decisions using critical thinking based on knowledge-specific and theoretical information [5,28].

The research result indicated that the majority of studied sample (93.3%) were had satisfactory knowledge regarding decision making process this result in the same line with Altallal [29] who indicated that the majority of the respondents (92%) well thought-out that critical care nurses had important information to supply to decisions regarding important patient care issues while only 7.9% disagreed or were uncertain. Almost 71.2% of the respondents felt that critical care nurses were implicated in decision making regarding important patient care issues, only 23% felt that critical care nurses were not involved. Berner et al., 2008 indicated that CCNs had important information to contribute to decision making.

Maharmeh et al., [1] added that critical care nurses use various sources of information, such as their experience, awareness, stories about their patients, and counsel from their colleagues and doctors. The complex and difficult health situations in critical care settings emphasize the difficulty and the magnitude of nurses decision making. Thus, Patients in critical care units are critically ill and frequently unstable and their health altered rapidly [31].

At the same time as Dorgham & Al Mahmoud [9] discovered in Egypt, ICU nurses had more autonomy in action base than in knowledge base. Even as in Finland Varjus et al., [31] mentioned that the majority of nurses reported more autonomy in relations to corrective actions and decision making pertaining to patient care than regarding issue related to unit operations. Whereas results showed in Kingdom of Saudi Arabia, nurses reported high autonomy in knowledge base than action base. They decided to have independency, correct and responsibility for their own knowledge.

Additionally, Iliopoulou & While [15] necessitated on that the CCNs often come upon difficulties connected with clinical decision-making. Their autonomy as decision-makers has been reported to be affected by their supposed lack of knowledge, by medical manage on a standard basis and by the mis-match between their high level of training in critical care field and the low level of responsibility afforded to them. Nevertheless, Scholes [14] confirmed that although CCNs are required frequently to develop up-to-the-minute skills and develop their role, their self-sufficiency appears to be limited by medical authority, their supposed of knowledge deficit and the limited responsibility afforded to them.

The present finding reflected that the nurses had experience more than 6 years had high level clinical making decision. In the same context with Papathanasoglou et al. [13] "who reported the positive association between the duration of ICU experience and decision making autonomy may be logical on the basis of both increased knowledge and psychomotor skills, and the capability of handle more professionally the hierarchical relationships of the unit. As well, the nurses with more than 12 years" experience reported higher levels of autonomy.

The present study showed that nearly half (51.7%) of the studied sample had high level toward making clinical decisions and (48.3%) had moderate level toward making decisions. In the high scores for autonomy were reported regarding the accomplishment of new-fangled ideas and the beginning of research activities, which is similar those reported by Mrayyan [16] and suggests that, in spite of Greek nurses’ autonomy being moderate in the framework of a medical dominance which ethics their contribution to decision-making, they make an effort to improve their authority by pursuing professional knowledge. Moreover, three-quarters of respondents reported moderate to high autonomy in decisions related to giving information to patients about their medications or diagnostic measures [15].

Altallal [29] paying attention to examine if the culture of patients and their relatives in Saudi Arabia might
influence critical care nurses’ decision making. The current results showed that most of the respondents (81.6%) professed that critical care nurses’ clinical decisions may be predisposed by the culture of the patient and their relatives. The majority of respondents (85.1%) agreed that the patients probable CCNs to act as their advocate, and contribute to essential clinical decisions making regarding their care. Also, more than two-third of the respondents (77%) agreed that critical care nurses should be given more influence in decision making in relation to patient care. Also, the study found that over half of the CCNs in this study believed that doctors and other health professionals wanted CCNs to be mixed up in decision making related to patient care. Otherwise, Advocacy has become an important idea in nursing practice. It includes protection of rights, ethics-based decision making, and respect for the person. In critical care units, nurses need to evaluate the situation and take actions to minimize the risks associated with these situations [33].

Dorgham & Al Mahmoud [9] added that the nature of the decisions that are taken within the critical care setting depends frequently on the situation, taken by the nurse unconsciously and well thought out as part of their everyday practice. There are certain decisions which are taken by the nurse who is looking after the patient and there are those shared decisions which are taken by both the nurse and the doctor. On the other hand, there are lots of “grey” areas where the nurses’ and doctors’ roles are consistent to a great scope. Some (normally) simply medical decisions are taken sometimes by critical care nurses or at least recommended by them. Also, clinical decisions taken by the nurses are likely to be perceptive in nature rather than rationale.

The current finding revealed that (53.3%) of the nurses were knowledgeable regarding decision making process and had satisfactory level in their job. In the same line with Scott-Ladd, [25] who indicated that participation in decision making directly influences job satisfaction and affective commitment. There is a positive relationship between participation in decision making and task range, work effort and rewards, however the causal analysis recommend that the way of the relationship is that task range, work effort and rewards uphold participation in clinical decision making.

Altallal, [29] referred that (86.2%) of respondents wanted to be more involved in decision making in relation to patient care and 88.5% supposed that critical care nurses should be officially involved in decisions regarding patient care. The accessibility of information technology and supporting equipments in particular decision making maintain systems could enhance and support critical care nurses’ decision making processes. The capacity to see the problems, the work environment and to find the significant supporting tools to make decisions to the problems is also vital [35,36].

Furthermore, Maharmeh et al., [1] suggested that this understanding decision-making skill comes from years of practice and knowledge accumulated from similar situations or model cases and reported that improvements were in terms of reduced operating costs, enhanced quality, and client service and reduced nurses’ absenteeism. However, it is difficult to confirm whether productivity improvements have resulted from employees being more effective through participation in clinical decision making, or technology improvements, increased workloads and work amplification, or as seems more expected, a combination of these factors. All the same, it does not mean that the nurse is taking the first chance to way out back to rituals, rather the experienced nurse can resolve in to rapidly changing patient situation and taking the right action at the time to attain the most wanted result for the patient [36].

Regarding nursing experience the present study discovered that the majority of the nurses had more than 6 years knowledgeable regarding clinical decision making process and job satisfaction. these findings goes in the same way with the study from Ersoy and Akpinar, [38] who conducted a study to assess the opinions and roles of intensive care unit (ICU) nurses regarding the distribution of ICU beds. The study found that more than half of the nurses were participated in the process of admission/discharge decisions. The study also found that the length of nurse’s experience contributes to the nurse’s participation in these decisions and challenge the physician decision regarding patient’s discharge. Furthermore, experienced nurses who have critical thinking ability be expecting to make high-quality clinical decisions. Also, Hoffman et al., [38] found that expert nurses collected a broad range of cues which amounted to twice than that of trainee nurses and almost the same numbers of cues in relation to hemodynamic status.

Also, the findings of present study revealed that experience is one of the main factors that determine the nurses’ ability to take decisions in critical situations. This finding supported with Ersoy and Akpinar, [37] & Thompson et al., [39] who definite that clinical experience where found to positively support quality nursing care. The experience comes from recognizing patient’s health situations and then developing action strategies to manage these situations [38]. The findings in the current study concurred with those of Ramezani-Bader et al. [30] & Bakalis, [40] in that years of experience is a aspect influencing nurses’ clinical decision making.

In this regard, Dorgham & Al Mahmoud [9] declared that Nurses who aged 30-40 years old or ≥ 40 years old had higher autonomy. Inside management literature, the degree of worker participation in decision making of clinical critical situations has been found to relate positively to satisfaction with work. In turn," Shah et al. [41] "asserted that professionals grown-up age- sensible and collect more experience, they tend to make a improved adjustment to the work environment when compared with younger peers.

Consequently, Critical thinking is a collection of dispositions and skills that improve decision making processes through such cognitive abilities as analysis, implication, and assessment [5]. In addition, Critical thinking in nursing is the capability to analyze problems through inferential interpretation and indication of the past situations that share related clinical indicators [42]. From another point of views, Cobanoglu’s and Algir’s, [43] highlighted in that efficient contact between physicians and nurses was indicated as essential issue in decision making process [29].
5. Conclusions

- The development of clinical decision making becomes easier and controllable when the critical care nurses become more experienced.
- The critical care nurses had more than 6 years’ experience making better clinical decision and had job satisfaction.
- The nurses had satisfaction level related to criteria of quality in their hospital
- The nurses were had high and moderate level satisfaction toward making decision
- The nurses were well-informed regarding clinical decision making process and it's appropriate corrective actions

6. Recommendations

- There are an obvious needs for power clinical skills in nurses, the development and improvement of critical thinking should be emphasized at the nursing college’s and nurses should be empowered to make appropriate clinical decision and corrective actions in critical situations of care.
- Development of critical thinking disposition in critical care settings must be provided educational opportunities of the institutional and outside the institution.
- Progress self-directed practice, along with improved quality of patient care and nurses’ job satisfaction in critical care settings, if unit orientations and meetings included discussions of the commonly made autonomous decisions on the unit and the knowledge which indirectly reflected on nurse’s and competencies needed to make Clinical judgment and better decisions.

References

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