Assessment of Women’s Knowledge about Health Promotion after Cesarean Delivery at Maternity and Pediatric Hospital in Al-Samawa City

Hanan R. Hameed, MScN*
Najmah M. Miran, PhD **
Nuha A. Ibrahim, PhD***

*Assistant Instructor, Ministry of Higher Education and Scientific Research, University of Al-Muthanna. E-mail: hanan.rassoul1203a@conursing.uobaghdad.edu.iq
** Assist. Professor, Obstetrics and Gynecology Department, University of Baghdad, College of Medicine. e-mail: najmah@comed.uobaghdad.edu.iq
*** Instructor, Maternal & Neonate Health Nursing Department, University of Baghdad, College of Nursing. e-mail: nuhaa@conursing.uobaghdad.edu.iq

Abstract

Objective(s): To assess women’s knowledge about health promotion after a cesarean delivery and to determine the association between women’s knowledge and their demographic data of age, level of education, and monthly income.

Methodology: A descriptive design is carried out to assess women’s knowledge about health promotion after cesarean delivery at Maternity and Pediatric Hospital in Al-Samawa City. This study starts from 26th of September 2020 up to 16th March 2021. Sample of (100) women who are at reproductive age, pregnant (prime or multipara) who have planned to have birth by elective cesarea or had previous elective caesarian section without medical indication or women who had cesarean section with medical indication or emergency.

Results: Results of the study show moderate mean of scores for most questions are moderate significance and others questions shows low mean of scores for most questions.

Recommendations: The study recommends providing instructions for pregnant women by nurses and midwives about promotion of health after a cesarean delivery. Apply knowledge for gestation women will be counseled by nurses and midwives during the antenatal cycle about childbirth procedures, symptoms, characteristics, and risks, allowing women to make their own decisions through primary health care centers.

Keywords: Women’s Knowledge, Health Promotion, Cesarean Delivery
Introduction

A Caesarean section is a surgical procedure in which one or more incisions are made in the belly and uterus of a woman in order to deliver one or more babies. Where a normal birth would endanger the survival of the infant or the mother's wellbeing, a C/S is performed. Any Caesarean sections are performed without any indications, but they can only be undertaken when there is a legitimate purpose. It is solely dependent on medical need in order to maximize the mother's or child's result. According to the WHO, it can only be done for medical reasons\(^1\).

One of the individual determinants of cesarean deliveries is a woman's socioeconomic status. Also after accounting for medical risk factors, there are variations in the style of distribution across social classes, which are mostly measured by salary, profession, or schooling\(^2\).

A cesarean birth, particularly today when effective means of ensuring surgical safety are a given in industrialized countries, is at times it is both fitting and required. The treatment may be life-saving in cases of cord prolapse, placenta previa, placental abruption, and recurrent transverse lie of the fetus. These life-threatening situations are uncommon, but they do happen in considerably fewer than 1% of all births. In the other hand, there are abundant there are some reasons to believe that a birth would go smoothly: There is only one fetus in the womb 99 percent of the time, (97) percent of babies are born alive. (97) percent of fetuses have no significant anatomical or genetic defects when they are born headfirst\(^3\).

Particularly after controlling for maternal comorbidities, obese women have a higher risk of cesarean delivery and a lower incidence of vaginal birth after cesarean than women of average weight\(^4\).

The extent at which it is carried out continues to climb, with concentrations above 30% in many hospitals and health regions. One of the most contentious examples is cesarean delivery at the behest of the mother, which is noteworthy given that in just 150 years, cesarean section has progressed from a last resort procedure that typically results in maternal death to a mode of delivery by women choice\(^5\).

Iraq's average cesarean section rate of 24.4 percent is much higher than the recommended rate of 10%. From 2008 to 2012, Iraq's cesarean section rate increased dramatically, with much of the increase due to the Kurdistan region. The incidence of cesarean sections in hospitals, particularly in private hospitals, is extremely high\(^6\).

Methodology

Design of the Study:

In order to accomplish aims of the study, a descriptive design is conducted to assess women’s knowledge about health promotion after cesarean delivery at Maternity and Pediatric Hospital in Al-Samawa City.

Study Sample:

A purposive, non-probability, sample consisted of (100) woman who are at the age of reproduction, pregnant (primi or multipara) who have planned to have birth
by elective cesarean section or had previous elective caesarian section without medical indication or women who have caesarian delivery with medical indication or emergency.

**Ethical Considerations:**

The Scientific Research Ethical Committee at the University of Baghdad, College of Nursing has approved the study to be conducted. All women who have participated in the study have signed consent form to present their agreement for their participation and to protect their human rights.

**The Study Instrument:**

A questionnaire format is developed for the current research. The research instrument is made up of two parts:

**Part I: Socio-Demographic Data:**

It includes demographic data concerning the age, residence, level of education, occupation, and monthly income.

**Part II: Women’s Knowledge about Health Promotion after Cesarean Delivery**

Women knowledge about promotion of health after cesarean delivery consists of 10 questions.

**Validity of the Questionnaire:**

Content validity of the questionnaire is determined through panel of experts.

**Reliability of the Questionnaire:**

Internal Consistency Reliability of the knowledge questionnaire is determined through split-half technique and the use of Cronbach Alpha Correlation Coefficient (r=0.829).

**Data Collection:**

This study started from 26th of September 2020 up to 16th March 2021. The study was conducted in Al- Maternity and Pediatric Hospital in Al-Samawa City during Morning shift, and the interview with women carried out at the wards (public and private wards), preoperative room, out-patient department.

**Data Analysis:**

The current study's data are analyzed with the Statistical Package for Social Sciences (SPSS) version (24).


**Results**

Table (1): Distributions of the Research Sample According to the Socio Demographic Data

<table>
<thead>
<tr>
<th>Demographic data</th>
<th>Groups</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>≤ 24</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>25-28</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>29-32</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>33-36</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>37+</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>M= 28.17</td>
<td>SD= 7.051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residence</td>
<td>Urban</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>61</td>
<td>61</td>
</tr>
<tr>
<td>Level of Education</td>
<td>Not Read and Write</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Read and Write</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Primary School</td>
<td>Secondary school graduate</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Institute degree</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>college graduate</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Occupation</td>
<td>House Wife</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Employ</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Retired</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Free work</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Delivery mode</td>
<td>Emergency</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Elective Cesarean Section</td>
<td>59</td>
<td>59</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

M= Mean, SD = Standard deviation

Table (1) shows that the study sample contains the largest proportion (33%) of people in the same age group (≤ 24) years, where residence of study sample shows that the best proportion (61%) Residents make up the majority of the study's participants of rural areas. The highest % for level of education (28%) of the research participants have completed primary school, where occupation shows that the most significant proportion (59%) of the study sample are housewives, The highest percentage for delivery mode (59%) of the research participants have completed elective cesarean section.
Table (2): Women’s Knowledge about Health Promotion after a Cesarean Delivery

<table>
<thead>
<tr>
<th>Items</th>
<th>True</th>
<th>False</th>
<th>MS</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods that help uterus to return to its normal position</td>
<td>31</td>
<td>69</td>
<td>1.31</td>
<td>P</td>
</tr>
<tr>
<td>To reduce infection after cesarean delivery, Characteristic of underwore should be……..</td>
<td>33</td>
<td>67</td>
<td>1.33</td>
<td>M</td>
</tr>
<tr>
<td>Benefit of early mobilization after the effects of anesthesia wears off for a cesarean delivery is considered……..</td>
<td>34</td>
<td>66</td>
<td>1.34</td>
<td>M</td>
</tr>
<tr>
<td>Avoid Sexual intercourse after CSa for……..</td>
<td>38</td>
<td>62</td>
<td>1.38</td>
<td>M</td>
</tr>
<tr>
<td>Methods of enhancing the health of the immune system and speed up wound healing, except …….</td>
<td>37</td>
<td>63</td>
<td>1.37</td>
<td>M</td>
</tr>
<tr>
<td>Awareness of preoperative preparation regarding nutrition before the caesarean …….</td>
<td>35</td>
<td>65</td>
<td>1.35</td>
<td>M</td>
</tr>
<tr>
<td>It is recommended for 16 weeks after a cesarean delivery to stay away from the following …….</td>
<td>38</td>
<td>62</td>
<td>1.38</td>
<td>M</td>
</tr>
<tr>
<td>The best sleeping positions after a cesarean delivery</td>
<td>42</td>
<td>58</td>
<td>1.42</td>
<td>M</td>
</tr>
<tr>
<td>Tips for caring for a cesarean delivery wound</td>
<td>35</td>
<td>65</td>
<td>1.35</td>
<td>M</td>
</tr>
<tr>
<td>Pregnancy space after CS, wait for …….</td>
<td>28</td>
<td>72</td>
<td>1.28</td>
<td>P</td>
</tr>
</tbody>
</table>

F= Frequency, % = Percentage, MS=Mean of scores, Sig=Significance

Results of the study indicate that women’s knowledge about health promotion of after cesarean delivery is Moderate.
Table (3): Knowledge of the Study Sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>Classification</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Women’s Knowledge about Promotion of Health after A Cesarean Delivery</td>
<td>High</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Moderate</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

F=Frequency, %=Percentage.

Results of the study in Table 3: (Knowledge of Sample) show that (52%) of the participants in the analysis were moderate.

Table (4): The Relationship between Women’s Knowledge about Health Promotion after Cesarean Delivery and Demographic Data

<table>
<thead>
<tr>
<th>Demographic Data</th>
<th>The Relationship between Women's Knowledge about Promotion of Health after A Cesarean Delivery and Demographic Data</th>
</tr>
</thead>
</table>
| Age              | Chi-square=6.092<sup>a</sup>  
df=4  
P-value=0.192  
Non-Significant   |
| Level of Education | Chi-square=19.353  
df=5  
P-value=0.002  
Significant      |
| Monthly Income   | Chi-square=4.537<sup>a</sup>  
df=2  
P-value=0.103  
Non-Significant  |

df: Degree of freedom, P-value: Probability value.
Results of the study show that the relation between women’s knowledge about health promotion after cesarean delivery and demographic characteristics of age and monthly income are non-significant except level of education is significant.

Discussion

Part I: Discussion Distributions of the Study Sample According to the Socio-Demographic Data (Table 1):

Ages of Women:

The findings of the present study have indicated that the highest percentage (33%) of the study sample are at age (≤ 24) years.

In a study conducted in Ghana to investigate knowledge, attitudes and perceptions of pregnant women toward caesarean section among antenatal clinic attendants in Cape Coast, Ghana revealed that the studied women (38.2%) are in age group (20-24) years (7).

In a research conducted in Iraq to assess the instructional labor support behaviors among laboring women at teaching hospitals in Hilla City shows that the highest percentage (32%) of study sample are at age group between (20-24) years (8).

The result of age statistics found that most women between the ages (20-24) years where that due to the highly rates of early marriage.

Residence: Regarding residence, the highest percentage (61%) of the study sample their residences are rural.

In a study conducted in Iraq to Assessment of Instructional Labor Support Behaviors among Laboring Women at Teaching Hospitals in Hilla City that show More than half of them were residents of rural areas (8).

The results of the residency statistics concluded that most of the women coming from rural areas are due to the fact that most of the areas in Al-Muthanna province were rural and because this is the only specialized hospital for maternity in Al-Muthanna province.

Level of Education: Regarding the educational level, the highest proportion (28%) of the study sample graduated from Primary school.

In an ethnographic study conducted to compare women’s perceptions toward vaginal delivery vs. cesarean section in the North of Iran has found that (70%) of women are primary school graduates (9).

In a study conducted in Iraq to assess instructional labor support behaviors among laboring women at teaching hospitals in Hilla City finds that the highest proportion of the study sample (36%) has completed primary school (8).

The study finds that the educational level for the majority of women are primary school which is due to the low economic status that forces many women to leave school.
Occupation: Housewives made up the majority of the survey population (59%) in terms of occupation.

In a study conducted in Iraq to Assessmess of Instructional Labor Support Behaviors among Laboring Women at Teaching Hospitals in Hilla City that showed most of them was house wife \(^{(8)}\).

The study finds that the results of the occupation for the majority of women are housewives due to the educational level for most women in the moderate level.

Monthly Income: In terms of monthly revenue, the survey sample had the largest number (54%) of participants monthly income are somewhat enough.

The study finds that the results of the monthly income statistics concluded that the monthly income for most women are somewhat enough and that does not represent Al-Muthanna Governorate, as most of them are of a low economic level.

Part II: Discussion of Women’s Knowledge about Health Promotion after A Cesarean Delivery (Table 3):

Results of the study show that (52%) of the study sample are moderate.

In a study conducted in Australia to examine women’s knowledge of options for birth after caesarean section that show results of testing knowledge (48.5%) are unaware that a caesarean section could result in complications for the baby before or after delivery \(^{(10)}\).

The study suggests that the moderate level of knowledge for majority of study sample due to the low educational level for majority of women but that knowledge from experience from numbers of birth and instructions of medical staff.

Part III: Discussion of the Relationship between Women’s Knowledge about Health Promotion after A Cesarean Delivery and Demographic Data (Table 4):

The association between women’s knowledge about promotion of Health after a cesarean delivery and demographic characteristics (age and economic status) were non-significant and (level of education) was significance.

In a study conducted in Nigeria to investigate knowledge and attitudes of pregnant women to caesarean section in a semi-urban community in northwest Nigeria that shows there is a highly statistical (p-value 0.43) non-significance between knowledge and Age group \(^{(11)}\).

In a study conducted in Iraq to determine the association between Awareness Regarding Elective Cesarean Section Complications and (Age, Educational Level) at Maternity and Delivery Teaching Hospital in Holy Karbala City that shows there is a strong statistical correlation between intelligence and educational attainment \(^{(12)}\).
**Recommendations**

1. The researcher recommends providing instructions for pregnant women by nurses and midwives about promotion of health after a Cesarean Delivery in Hospital in Al-Samawa City.
2. More researches and programs are needed about promotion of Health after a cesarean delivery.
3. Further study to include another province.

**References**


