Assessment knowledge of pregnant women's toward Cesarean Section at the Gynecology and Pediatric Hospitals in Kirkuk City

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ABSTRACT

Background: Cesarean section (CS) is one of the most commonly performed major abdominal procedures. C-section is a life-saving procedure for both the mother and the baby,but unimportant indications and misuse of C-sections can significantly reduce the quality of life for both the mother and the new baby, and additionally place thefamily in financial difficulty.

Objective: The objective of this research aims to assess the knowledge of pregnant women regarding cesarean section at Gynecology and Pediatric Hospitals in Kirkuk City.

Methods:A descriptive study was carried out to evaluatepregnant women knowledge regarding cesarean section starting from 29th November 2022 to the 29th April 2023.A non-probability sample of (600) was selected. The data were collected through the application of a validated questionnaire, in three parts, the first part related to social and demographic data, and the second part was concern of pregnant women knowledge regarding cesarean section and the final part was about the pregnant women knowledge regarding the complication of cesarean section.

Result:The results showed that the age group (25-29) was the highest group, and (28%) of women could read and write, (82%) were housewives, (70%) lived in urban areas, and (52%) the income during month hadsatisfy to some extent.

Conclusion:The majority of pregnant women were poorly informed about most elements of C/S.

Keywords: Cesarean sections, Assessment knowledge,Complications of Cesarean section.

INTRODUCTION

Cesarean section (CS) is one of the most commonly performed large abdominal procedures(Sanvely and Chan, 2023). The word "caesarean" was derived from a decree in Roman law, which made it mandatory for children to be cut out of mother who had died during delivery. In fact, the term used at the time was 'Lex caesarean' (Britannica, 2020). A caesarean section denotes the use of surgery to deliver one or more babies from a mother's womb(Deshmukh et al.,2021).

(CS) is a life-saving procedure for both the mother and the baby; nevertheless, unneeded indications and misuse of C-section may substantially affect the quality of life for both the mother and the infant, as well as place their family in financial troubles (Cegolon et al.,2020).

Probability of(CS)surgery raised with chang in socio-economic status, high education level, lower birth order,increase mother age, and with more number of Antenatal Care use and presence of bad obstetric history. Eight pregnant mother deaths occurred, of which five were delivered by C-section (Begum, 2017).

Corresponding to the World Health Organization (WHO), since 1985, the acceptable rate of worldwide C-sections has been 10-15% of all deliveries .One of the most critical findings of the American Center for Disease Control and Prevention found that the Cesarean delivery incedince has raised from 20.7% in 1995 to 31.6% in 2016(Yaqoub et al.,2022). The prevalence of CS has rised to more than 50% in some countries (Lee and D'Alton, 2018). The majority of these CS procedures are done without a medical indication, and some are cesarean deliveries at the mom's request (CDMR) (Al-Kareemet et al., 2020). CDMR is predicted to account for 8-14% of all cesarean births globally (Shrestha and Mahato, 2021).

CS is recommended when mother and baby abnormal conditions (such as fetal distress, cord prolapsed, placenta previa and abruption, dystocia, malpresentation, multiple pregnancies, chorioamnionitis, arrested labor, Oligohydramnios, cord prolapse, cephalo-pelvic disorders, and medical diseases such as eclampsia and HELPP (hemolysis, elevated liver enzymes, and low platelets) syndrome, among others complicated delivery, threatening the life of the mother and the baby(Hassan et al ., 2023).the CS procedure saves both the moms and the fetus and chang maternal and perinatal outcome(Belay et al., 2022).

Increasing numbers of caesarean sections may cause different complications that involve previous caesareans, multiple pregnancies, malpresentation, fetal distress, obstructed labor, uterine rupture, and obstetric fistulas, as well as a number of other medical difficulties for mothers (Ahmed, 2022).

Caesarean section is an important procedure related with immediate and long-term risks or complications, which are substantial in current and future pregnancies. These consequences are relevant in environments that lack the facilities to conduct safe procedures and treat surgical complications (Hassen et al., 2023).

On the other hand,anesthesia(medication overdose, a lack of oxygen apnea, and stomach content aspiration); surgical procedures (hemorrhage, urinary or bowel injuries); infection in the (abdomen wall, uterus, urinary tract, chest, and incision); or post-partum heart attack are the reasons for maternal short-term complications (Fabricant et al., 2023). Long-term issues include ectopic pregnancies, adhesion formation, placenta previa and accrete, uterine rapture in a later pregnancy, and infertility (Jauniaux et al., 2023).

In addition, a higher risk of asthma and allergies, as well as increased respiratory and obesity problems, impaired immunological development, diabetes, cardiovascular disease, cancer, and allergies are some of the difficulties for infants delivered via caesarean section (CS) (Papadopoulou et al., 2023).

aincreased frequency of maternal difficulties and a higher risk of death for both women and neonates (Leonard and Carmichael, 2019).

Subject and Method

Design of the study
A descriptive study was conducted to evaluate pregnant women knowledge regarding cesarean section starting from 29th November 2022 to the 29th April 2023.

Administrative arrangement
Befor starting data collection, formal administrative approval was obtained to conduct the study from the Ministry of Health, directorate of health in Kirkuk.

Setting of the study
The study was carrid out in consultation in Gynecology and Pediatric Hospital in Kirkuk City for pregnant women who deliver their babies with cesarean section.

Sample of study
A purposive sample of (600) of pregnantmother was chosen in accordance with the following parameters.
1. Pregnant mothers age ranges between (15 - 40>) years old.
2. Definitely had cesarean section were included from the present study.

Eligibility criteria
women were recured to participate in the study by specific Inclusion criteriawere inclouded pregnant women who delivered their baby in Gynecology and Pediatric Hospital in Kirkuk City and exclusion criteria were inclouded pregnant women who refused the participation in this study.

Data Collection
To collect the study's knowledge about a questionnaire was designed based on the criteria of (the format selected and changed by the researcher) and related literature. It consists of three components.:-

Part One:- This part consist of (5) points which focus on the pregnant women socio-demographic characteristics such as (Age, Education level, Occupation, Residence, Economic level).
Part Two:- This part consists of (11) items focus on the pregnant women knowledge regarding cesarean section
Part Three:- This part consist of (10) items focus on the pregnant women knowledge regarding the complication of cesarean section.

Data analysis
The collected data was prepared, organized, and encoded into a computer file; the Statistical Package for Social Science (SPSS) edition (24) was adopted for data analysis, and the significance level was determined using descriptive statistical analysis. This method of measurement was applied by measuring the following:-
1-Frequencies
2-Percentage

RESULT

Table 1: Distribution of the Socio-Demographic Characteristic of the Study

Items	Variables (V.)	Frequency (F.)	Percentage (%)
Age Group (Years)	15-19	60	10.0
	20-24	156	26.0
	25-29	**168**	**28.0**
	30-34	120	20.0
	35-39	48	8.0
	40 >	48	8.0
	Total	600	100%
Education Level	Don't Read and Write	108	18.0
	Read and Write	**168**	**28.0**
	Primary Graduated	84	14.0
	Secondary Graduated	96	16.0
	Preparatory Graduated	84	14.0
	Institution Graduated	36	6.0
	College Graduated and More	24	4.0
	Total	600	100%
Occupation	Employee	108	18.0
	Housewife	**492**	**82.0**
	Total	600	100%
Residence	Urban	420	70.0
	Rural	180	30.0
	Total	600	100%
Monthly Income	Sufficient	192	32.0
	Satisfy to some extent	312	52.0
	Insufficient	96	16.0
	Total	600	100%

The table (1)presents the socio-demographic characteristics of the study population, comprising 600 individuals. Regarding age distribution, the largest proportion falls within the 25-29 age group (28.0%), followed by the 20-24 age group (26.0%), while the 35-39 and 40+ age groups each represent 8.0% of the total. Education levels vary, with the highest percentage (28.0%) having the ability to read and write, followed closely by those who haven't received any formal education (18.0%). Furthermore, the majority of participants are housewives (82.0%), indicating the importance of gender representation in the study. In terms of residence, a significant majority reside in urban areas (70.0%). Lastly, the monthly income distribution shows that a considerable portion of the population has barely sufficient income (52.0%), while 32.0% have Satisfy to some extent, and 16.0% have insufficient income. These statistics provide valuable insights into the demographic composition of the study group, highlighting key factors such as age, education, occupation, residence, and income distribution.

Table 2 : Pregnant Women Knowledge regarding Complications of Cesarean Section (N=600)

Items	I Know		Uncertain		I Don't Know		Total score	Level Kowledge
	Fr.	%	Fr.	%	Fr.	%		
Delayed woundhealingafter the Operation	384	64	156	26	60	10	924	Good
Bladder perforation during the operation	48	8	276	46	276	46	372	Poor
Early bleeding after the operation (1-14 days)	60	10	168	28	372	62	288	Poor
Late bleeding after the operation (15-40 days)	36	6	228	38	336	56	300	Poor
Urinary tract infection	252	42	264	44	84	14	768	Fair
Blood clots eventually lead to death	132	22	168	28	300	50	432	Poor
Weakness in bowel movement after the operation	276	46	240	40	84	14	792	Fair
Obesity and flatulence of the mother	384	64	120	20	96	16	888	Fair

The placenta progresses in the next Pregnancy	12	2	204	34	**384**	**64**	228	Poor
Endometriosis	60	10	**384**	**64**	156	26	504	Poor

Nott// Sample(600), I Don't Know knowledge code (0), Uncertain Know knowledge code (1) and I Know knowledge code (2), Then) the total score (1200)The knowledge was classified as poor knowledge (<50%) with score (0 – 599), Fair knowledge: (50% - < 75%) with a score (600 – 899) and good knowledge (≥ 75%) with a score (900-1200)

The table(2) presents a breakdown of knowledge items concerning nursing processes, delineating them into poor, fair, and good levels based on the total scores attained. Additionally, the data includes information regarding sample size, knowledge codes for incorrect, unsure, and correct answers, and the resultant total score, which is capped at 194. Knowledge levels were further categorized: poor knowledge, representing scores below 50% (0-599); fair knowledge, encompassing scores between 50% and less than 75% (600-899); and good knowledge, comprising scores of 75% or higher (900-1200). This comprehensive analysis offers insights into the distribution and comprehension levels of various aspects related to nursing processes among the surveyed population. Overall, the results depict a comprehensive understanding among the participants.

The data provided is a summary of knowledge levels regarding various postoperative complications and conditions among a group of respondents. Here's the breakdown:

Delayed wound healing: Good knowledge (64% "I Know," 26% "Uncertain," 10% "I Don't Know").

Bladder perforation: Poor knowledge (8% "I Know," 46% "Uncertain," 46% "I Don't Know").

Early bleeding: Poor knowledge (10% "I Know," 28% "Uncertain," 62% "I Don't Know").

Late bleeding: Poor knowledge (6% "I Know," 38% "Uncertain," 56% "I Don't Know").

Urinary tract infection: Fair knowledge (42% "I Know," 44% "Uncertain," 14% "I Don't Know").

Blood clots leading to death: Poor knowledge (22% "I Know," 28% "Uncertain," 50% "I Don't Know").

Weakness in bowel movement: Fair knowledge (46% "I Know," 40% "Uncertain," 14% "I Don't Know").

Obesity and flatulence of the mother: Fair knowledge (64% "I Know," 20% "Uncertain," 16% "I Don't Know").

Progression of placenta in next pregnancy: Poor knowledge (2% "I Know," 34% "Uncertain," 64% "I Don't Know").

Endometriosis: Poor knowledge (10% "I Know," 64% "Uncertain," 26% "I Don't Know").

Overall, the assessment indicates good knowledge on delayed wound healing and fair knowledge on urinary tract infection, weakness in bowel movement, and obesity/flatulence of the mother. However, poor knowledge levels are observed for bladder perforation, bleeding complications, progression of placenta, blood clots leading to death, and endometriosis.

DISCUSSION

Cesarean section involves the delivery of a fetus via a uterine incision (hysterotomy) and an open abdominal incision (laparotomy) (Elbey et al ., 2024).

In age group the analysis of the results in regard to socio-demographic characteristics of women's discuss that the age between (25-29) constitutes the highest percentage as (28%). Our finding agree withother study conducted in Al-hilla City in Iraq by (Ahmed et al., 2022) who indicate that most of women's age was between (25-29) years and constitute of (36.25%) of total samples. Regarding to Education Level the results indicate that (28%) of women's were read and write, our finding disagree with (Al Sulamyet al., 2019) who indicate that (84.6%) of women's were graduated from universityBecause the majority of the moms polled were uneducated and unemployed, this issue has the potential to influence knowledge.

Regarding to Occupation the study shows (82%) of women's were housewife's, our finding disagree with (Noel, et al., 2016) who demonstrate that most of women's were have jobs or employed. In Residence the study discuss that (70%) of women's live in urban region. Our finding agree with (Ogunlaja, et al., 2018) Who indicate that most of women's prefer living in urban areas. Related to economic status the results indicate that (52%) of women's respond that they have Satisfy to some extent monthly income, This finding disagree with (Yaqoup et al 2022) who indicate that (85.5%) of women's have sufficient monthly income.

The results of our study show that more than half about (64%) of women have agood information about wound healing is delayed after the surgery, alsomore than one third(46%) weakness of bowel movement after labour . This result is consistent with other result done in Bagdad city in Iraq by (Saleh and Wardia,2022).Incontrast more than half about (62%) of mother have poor information regarding bleeding that can be happened after ceasariansuction.This finding agree with previous study had been done in Iran by(Ghasveri et al., 2022) indicated Moms had fair to intermediate understanding regarding maternal complications from planned and emergency cesarean sections.On the other hand, more than half of pregnant femal about (64%) had poor knowlege about bladder puncture during operation can occur this is similar to the study that had been done in Nigeria approved the same result by(Maitanmi et al., 2023). Our results show approximately (64%)

poorknowledge for the development of the placenta in the next pregnancy and endometross.This finding agree with other result conducted in (Iraq)for the researcher(Abood and Alsafi,2023).Haowever, more than half (64%)of pregnants have weakness information aboutObesity and flatulence of the mother also, about(44%)of pregnantf women's had uncertain information about urinary tract infection. The finding of the current study disagreed with study had been don in Babylon by (Al-Kareem et al.,2020).Morever (50%) of pregnant moms had poor information about blood clots eventually lead to death and this finding agree with the result have done by (Afaya,2018).

Finally, the findings of our study indicate that the majority of female participants lacked knowledge about most aspects of the cesarean section.Other research conducted in Iraq by (Salih and Wardia,2020) approved our study, however another study conducted in Iraq by (Ahmed et al.,2022) did not agree with our results.

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