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Assessment of Women's Knowledge about Cesarean Section at Maternity and Pediatric Hospital in AL-Samawa City

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ABSTRACT

Objectives:

1. Assessment women's knowledge about caesarean section.

2. Determining women's knowledge in relation to their demographic characteristics (age, level of education, and economic status).

Methodology: A descriptive design was conducted on Assessment Women' Knowledge about Cesarean Section at Maternity and Pediatric Hospital in AL-Samawa City. This study started from 26th of September 2020 up to 16th March 2021. Sample of (100) married women who were at reproductive age, pregnant (prime or multipara) who were planned to have birth by elective cesarean section 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 shows lowest mean of score for most questions were poor significance and other questions shows moderate mean of score for most questions in all domains.

Conclusions: The study concludes that women had a poor knowledge level about cesarean section in the Maternity and Pediatric Hospital.

Recommendations: The researcher recommends providing knowledge for pregnant women by nurses and midwives, during antenatal period regarding methods of delivery, its signs, characteristics, and complications.

KEYWORDS: Knowledge, Women, Cesarean Section.

INTRODUCTION

Cesarean section (CS) is the delivery of an infant through an incision made in the woman's abdominal wall and uterus. CS is a major surgical procedure with possibly serious consequences and should be performed in the presence of specific and

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clearly defined indications. The indications for cesarean sections are usually maternal, fetal, physician related factors or a mixture of the three. The overall CS rates have increased progressively over many parts of the world. The WHO considers CS rates of 5–15% to be the optimal range for the targeted provision of this life saving intervention for mother and infant; In recent years the rate has risen to a record level of 46% in China and 25% or above in many Asian and European countries, Latin America and USA (Ahmed & AL-Tawil, 2018).

Most indications for cesarean section are relative and rely on the judgment of the obstetric care provider. The most common indication for a primary (first) cesarean section is failure to progress in labor. Absolute cephalopelvic disproportion (CPD) refers to the clinical setting in which the fetus is too large relative to the bony pelvis to allow for vaginal delivery even under optimal circumstances. Relative CPD is where the fetus is too large for the bony pelvis because of malpresentation (brow, compound presentation) (Norwits & Schorge, 2013).

The rate of CS in developed countries is rising as there has been a higher rate of acceptability over time while developing countries are struggling with the problems of non-acceptance of CS even in the face of eminent danger on pregnancy (Afaya et al., 2018). Evidence shows that patients who are knowledgeable about their conditions are able to actively participate in shared decision-making. Due to their ignorance about childbirth, they just submissively do what their provider tells them (Ajeet et al., 2011).

A cesarean mortality rate of 22.3 per 100,000 compared with 10.9 per 100,000 for vaginal delivery; however, the rates were comparable excluding medical complications. A British survey reported one death in 78,000 cesarean deliveries, which was lower than the rate for vaginal births. In contrast, a population-based 7-year study (1992 to 1998) revealed cesarean section to be asocial acted with a fourfold increased risk for maternal death, when controlling for various pregnancy complications (Gabbe et al., 2012).

Women's socioeconomic status is one of the individual determinants of cesarean deliveries. the differences in the mode of delivery across socioeconomic groups, often assessed by income, occupation, or education, even after adjustment for medical risk factors (Milcent & Zbiri, 2018).

SUBJECTS AND METHODS:

To achieve the aims of the study, a descriptive design was conducted on Assessment of Women's Knowledge about Cesarean Section at Maternity and Pediatric Hospital in AL-Samawa City. 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

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Morning shift, and the interview with women carried out at the wards (public and private ward), preoperative room, outpatient department.

A purposive and non-probability sample consisted of one hundred married women who were at reproductive age, pregnant (prime or multipara) who were planned to have birth by elective cesarean section or had previous elective caesarian section without medical indication or woman who had caesarian section with medical indication or emergency. For the purpose of the present study, a questionnaire format was constructed and designed through the review of literature and previous studies, and background experience). The study instrument consists of three parts and includes: Socio-demographic information, Reproductive Information, and women's knowledge about cesarean section. Women knowledge about cesarean section consists of 27 questions in three domains. Reliability test of the knowledge questionnaire was (0.829) by using a **Pearson's Ccorrelation Coefficient.**

RESULTS

Table 1: Distributions of the Study Sample According to the Socio Demographic Characteristics:

Demographic data	Groups	Study Sample	
		Frequency	**Percentage (%)**
Age/Years	≤ 24	**33**	**33**
	25-28	20	20
	29-32	13	13
	33-36	18	18
	37+	16	16
		M.= 28.17	Sd.= 7.051
Residence	Urban	39	39
	Rural	**61**	**61**
Level of Education	Not Read and Write	7	7
	Read and Write	19	19
	Primary School	**28**	**28**
	Secondary school graduate	25	25
	Institute degree	11	11
	college graduate	10	10
Occupation	House Wife	**59**	**59**
	Employ	15	15
	Retired	0	0
	Student	20	20

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	Free work	6	6
Monthly Income	Enough	19	19
	somewhat enough	**54**	**54**
	Not Enough	27	27
	Total	***100***	***100***

M= Mean, Sd = Standard deviation.

This table shows that the highest percentage (23%) of the study sample are within age group (≤ 24) years with mean and Sd. (28.17± 7.051), while the lowest percentage (13%) are within age group (29-32).

Table 2: Distribution Of Study Sample According to Reproductive Characteristics:

Reproductive Information	**Groups**	**Study Sample**	
		Frequency	**Percentage (%)**
Gravida	1	12	12
	2	17	17
	3	15	15
	4	**19**	**19**
	5	14	14
	6	6	6
	7	15	15
	8	2	2
	Total	100	100
Para	**1**	**24**	**24**
	2	14	14
	3	22	22
	4	15	15
	5	16	16
	6	8	8
	7	1	1
	Total	100	100
Delivery Mode	Emergency	41	41
	Elective Cesarean Section	**59**	**59**
	Total	100	100
Number of Dead Birth	**0**	**74**	**74**
	1	21	21
	2	5	5

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	Total	100	100
Number of Abortion	**0**	**66**	**66**
	1	29	29
	2	4	4
	3	1	1
	Total	100	100
Number of Living Birth	**1**	**25**	**25**
	2	18	18
	3	23	23
	4	21	21
	5	10	10
	6	3	3
	Total	100	100

This table shows that the highest percentage (19 %) of sample have (4) pregnancies, while the lowest percentages (2%) of them have (8) pregnancies.

Table 3: Knowledge of the study Sample about Cesarean Section:

Variables	Classification	Frequency	Percentage
Mean Women's General Knowledge about Cesarean Section	High	5	5
	Moderate	**40**	**40**
	Poor	55	55
Mean Women's knowledge about the complications of a cesarean section	High	0	0
	Moderate	**28**	**28**
	Poor	72	72
Mean Women's knowledge about promotion of Health after a cesarean delivery	High	0	0
	Moderate	**52**	**52**
	Poor	48	48
Total Knowledge Test	High	0	0
	Moderate	**37**	**37**
	Poor	63	63

This table (Knowledge of Sample) show that the majority of study sample in the first domain are in the poor level (55%), add to that the majority of study sample in the second domain are in the poor level (72%), where most of knowledge in the third domain (52%) were moderate and majority of the total knowledge statistics were poor (63%).

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Table 4: The Relationship between Women's Knowledge Variables and Demographic Data:

Demographic Data	Women's General Knowledge about Cesarean Section	Women's knowledge about the complications of a cesarean section	Women's knowledge about promotion of Health after a cesarean delivery	Total Knowledge Test
Age	Chi-square=9.718[a] df=8 P. value=0.285 **non-significant**	Chi-square=5.739[a] df=4 P. value=0.220 **non-significant**	Chi-square=6.092[a] df=4 P. value=0.192 **non-significant**	Chi-square=10.112[a] df=4 P. value=0.039 **significant**
Level of Education	Chi-square=39.378[a] df=10 P. value=0.000 **high-significant**	Chi-square=23.043[a] df=5 P. value=0.000 **high-significant**	Chi-square=19.353 df=5 P. value=0.002 **significant**	Chi-square=32.817[a] df=5 P. value=0.000 **high-significant**
Monthly Income	Chi-square=11.918[a] df=4 P. value=0.018 **Significant**	Chi-square=0.837[a] df=2 P. value=0.658 **non-significant**	Chi-square=4.537[a] df=2 P. value=0.103 non-significant	Chi-square=7.731[a] df=2 P. value=0.021 **significant**

df: degree of freedom, P. value: Probability value.

This Table (The Relationship between Women's Knowledge Variables and Demographic Data) indicates that the association between women's knowledge toward cesarean section and demographic characteristics (age and economic status) were significant and Level of Education was high-significant.

DISCUSSION:

Discussion Distributions of the Study Sample According to the Socio-Demographic Characteristics (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. This result with Age's findings are agreed with those of Ajeet et al., (2011) who revealed that the studied women (36%) were in age group (20-24) years. This result are agrees with Kadhim, (2019) who shows that the highest percentage (24%) of the study sample are within age group (20-24) years. This result with Age's findings are agreed with those Mungrue et al., (2010) who revealed that of studied women highest percentage (23.9 %) were in age group (21–25) years. The result of age

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statistics found that most women between the ages (17-24) 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. This result agree with study result that carried out by Obeid et al., (2020) who stated that highest percentage (76.9%) of study sample residence are rural. 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.

Level of Education: regarding educational level, the highest percentage (28%) of the study sample graduated from Primary school. The higher level of education for this result agree with study result carried out by Khairi, (2015) who stated that (32%) of women who had the study sample primary school graduates. This results agree also with the finding in a study held in Iraq by Habib & Abdulla, (2011) which the highest percentage reported that (47.3%) of Iraqi women completed their primary education. This results agree also with the finding in a study held in Iraq by Abed-alruda & Khairi, (2017) that shows that the highest percentage (28%) of the study sample graduated from Primary school. The researcher found that the results of the educational level statistics concluded that the educational level for the majority of women are primary school are due to the low economic level that forced many women to leave school.

Occupation: regarding Occupation, the highest percentage (59%) of the study sample were housewives. This result are agree with study results carried out by Khairi, (2015) who stated that he highest percentage (82%) of study sample were house wife. This result are agree with study result carried out by Kadhim, (2019) who stated that the highest percentage (82%) of study sample were house wife. This results agree with the finding in a study held in Iraq by Habib & Abdulla (2015) which reported that (87.4%) were house wife. This results are agree with the finding in a study held in Iraq by Abed-alruda & Khairi, (2017) that shows the highest percentage (82%) of the study sample are housewives. The researcher found that the results of the occupation statistics concluded that the occupation for the majority of women are housewives due to the educational level for most women in the lowest level.

Monthly Income: concerning monthly income, the highest percentage (54%) of the study sample their monthly income were somewhat enough. This results disagree with the finding in a study held in Iraq by Khairi, (2015) that shows the highest percentage 34% of study sample considered the economic status enough. The researcher found that the results of the monthly income statistics concluded that the monthly income for most women are

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somewhat enough and that does not represent AL- Muthanna Governorate, as most of them are of a low economic level.

Discussion Distribution Of Study Sample According to Reproductive Characteristics table (2):

Gravida: the result of the study shows that the highest percentage (19 %) of sample have (4) pregnancies. This results are agree with the finding in a study held in Iraq by Habib & Abdulla (2011) which that the majority (46%) were gravid 4 and more. This results are agree with the finding in a study held in Iraq by Habib & Abdulla (2011) which reported that (38%) of c/s women were multigravida.

Para: concerning the parity, the highest percentage (24%) of the study sample have (1) deliveries. Parity's findings are agreed with those of Ajeet et al., (2011) who revealed that of studied women the highest percentage (40.9%) were in parity group (1). Parity's findings are also agreed with those of Majlesi et al., (2020) who found the highest percentage (71.2%) of the study sample have (1) deliveries

Delivery Mode: concerning the mode of delivery, the highest percentage (59%) of the study sample had elective cesarean section. This results agree with the finding in a study by Ahmed & AL-Tawil, (2018) which the highest percentage (86.6%) of the study sample have elective cesarean section. This results are agree with the finding in a study by Al-Kadri et al., (2015) which the highest percentage (51.0%) of the study sample have elective cesarean section. This results are agree with the finding in a study by Gadeer et al., (2020) which the highest percentage (53%) of the study sample have elective cesarean section.

Number of Dead Birth: concerning number of dead birth, the highest percentage (74%) of the study sample had no history of dead birth. This results agree with the finding in a study held in Iraq by Abed-alruda & Khairi, (2017) which highest (93%) of the study sample do not have dead birth.

Number of Abortions: concerning the number of abortion more than half (66%) of the study sample had no history of abortion. This result is agree with Khairi, (2015) who stated that previous history of abortion were More than half (65%) of the study sample have no abortions previously. This result agree with Kadhim et al., (2019) who stated that previous history of abortion were More than half (66%) of the study sample have no abortions previously.

Number of Living Birth: number of living birth in the highest percentage (25%) of study sample have (1) living child. This results agree with the finding in a study held in Iraq by

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Abed-alruda & Khairi, (2017) which the highest percentage (62%) of the study sample have (1-2) living child.

Discussion Women's Knowledge about Cesarean Section, Table (3) : results of the study in this table (Knowledge of Sample) shows that the majority of study sample in the first domain are in the poor level (55%), the majority of study sample in the second domain are in the poor level (72%), most of knowledge in the third domain (52%) were moderate and majority of the total knowledge statistics were poor (63%). This results are consistent with Ajeet et al., (2011) who found that the majority of women (65.1%) were found to have very little knowledge. These results are also consistent with Mungrue et al., (2010) who found that The majority of women (46.2%) were found to have very little information from which to make informed decisions about selecting C/S as the preferred choice of delivery. These results are also agreed with those of Ashimi et al., (2013) who show results of testing knowledge (59.1%) had inadequate knowledge. These results are also agreed with those of Ghotbi et al., (2014) who show results of testing knowledge the questionnaire related to patients' knowledge are presented (55.6%) mothers attained poor scores. Other studies show that mothers' knowledge of disadvantages and complications of the cesarean section has not reached an appropriate level and there is still a wrong attitude toward cesarean sections (Naeim et al., 2015). The study of Maharlouei et al., (2013) who shows that there is a poor knowledge of mothers regarding maternal and fetal complications of C-section, and women with a lower level of knowledge and higher attitude toward C-section were more likely to prefer this mode of childbirth . Unawareness and deficiency of appropriate education about various labor options are contributing factors for increased cesarean section (Laluei et al., 2009). Although there is an accelerating rate of caesarean section, there was a low level of knowledge on caesarean section. Women's preferred mode of delivery was influenced by their knowledge about the indications for CS and the perceived consequences of the procedure.

Discussion The Relationship between Women's Knowledge Variables and Demographic Data, Table (4): the association between women's knowledge toward cesarean section and demographic characteristics (age and economic status) were **significant** and (level of education) was **high-significance**. This results agree with the findings in a study held in Iraq by Abed-alruda & Khairi, (2017) that shows there is a highly statistical significance between knowledge and (Age group and educational level). Overall, since the 2000s, analyses from developed countries have found that women of lower socioeconomic position are more likely than their better-off counterparts to have cesarean deliveries; In France,

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Guihard & Blondel report that women with a low level of education have a higher risk of cesarean deliveries; German studies point out high rates of surgical deliveries for low-income women. Accordingly, Italian mothers with low education levels consistently give birth by a cesarean delivery more often than highly educated women (Milcent & Zbiri, 2018). The results of the study evidence indicating that under certain supportive conditions it may indeed be older people who hold the greatest knowledge that acquired from peers, consultations and extensive reading in addition to level of education that increase knowledge and economic status that influenced on level of education.

CONCLUSIONS: the present study concluded

1. The results of total knowledge assessment for majority of women were in the poor level.
2. The study concludes that the association between women's knowledge and demographic characteristics (age and economic status) was **significant** where the relationship between the women's knowledge and level of education was high-significant.

RECOMMENDATIONS: the study recommends

1. The researcher recommends providing knowledge for pregnant women by nurses and midwives, during antenatal period regarding methods of delivery, its signs, characteristics, and complications.
2. More researches and programs are needed about cesarean section .
3. The researcher recommended repeating this study to include others provinces.

REFERENCES:

1. Abed-alruda, B., A., & Khairi, S., H. (2017). Association between Awareness Regarding Elective Cesarean Section Complications and (Age, Educational Level) at Maternity and Delivery Teaching Hospital in Holy Karbala City. *Journal of Nursing and Health Science 6*(2), 09-14.
2. Afaya, R. A., Bam, V., Apiribu, F., Agana, V. A., & Afaya, A. (2018). Knowledge of Pregnant Women on Caesarean Section and their Preferred Mode of Delivery in Northern Ghana. *An International Journal of Nursing and Midwifery, 2*(2), 62-73.
3. Ajeet, S., Jaydeep, N., Nandkishore, K., & Nisha, R. (2011). Women's knowledge, perceptions, and potential demand towards caesarean section. *National Journal of Community Medicine, 2*(2), 244-248
4. Ahmed, H., & AL-Tawil, N. (2018). Rate and indications of cesarean section in the Maternity Teaching Hospital in Erbil City, Kurdistan region, Iraq. *Zanco Journal Of Medical Sciences, 22*(2), 148-154.
5. Gabbe, S. G., & et al., (2012). Obstetrics: normal and problem pregnancies e-book (6th ed.). Philadelphia: Elsevier Health Sciences.

6. Gadeer, R., Baatiah, N. Y., Alageel, N., & Khaled, M. (2020). Incidence and Risk Factors of Wound Infection in Women Who Underwent Cesarean Section in 2014 at King Abdulaziz Medical City, Jeddah. *Cureus, 12*(12),12164 . Retrieved March 10, 2021 from: doi: 10.7759/cureus.12164.
7. Habib, H. A. , Abdulla, M. M. , & Yacoub, E. S. (2011). Knowledge and Preference of Mothers Delivering at ALKadhumyia Teaching Hospital Regarding Caesarean Section and Normal Vaginal Delivery Baghdad , Al- Iraq .*The Iraqi Postgraduate Medical Journal,10* (4), 512-518.
8. Kadhim, S. T., Rashash, D. S., & Washeel, O. F. (2019). Pregnant Women Predilection Toward Elective Cesarean Section. *Indian Journal of Forensic Medicine & Toxicology, 13*(3), 285-289.
9. Khairi, S. (2015). Reasons for Pregnant Women to Choose Caesarean Section in Baghdad City. *Journal of Biology, Agriculture and Healthcare 5*(8), 168-176.
10. Milcent, C., & Zbiri, S. (2018). Prenatal care and socioeconomic status: effect on cesarean delivery. *Health economics review, 8*(1), 7.
11. .Majlesi, M., Montazeri, A., Rakhshani, F., Nouri-Khashe-Heiran, E., & Akbari, N. (2020). No to unnecessary caesarean sections': Evaluation of a mass-media campaign on women's knowledge, attitude and intention for mode of delivery. *PLOS ONE, 15*(8), e0235688.
12. Mungrue, K., Nixon, C., David, Y., Dookwah, D., Durga, S., Greene, K., & Mohammed, H. (2010). Trinidadian women's knowledge, perceptions, and preferences regarding cesarean section: How do they make choices?. International journal of women's health, 2, 387.
13. Milcent, C., & Zbiri, S. (2018). Prenatal care and socioeconomic status: effect on cesarean delivery. *Health economics review, 8*(1), 7. Retrieved 9 March
14. Norwitz, E. R., & Schorge, J. O. (2013). *Obstetrics and Gynecology at a Glance* (4th ed.). John Wiley & Sons.