



Assessment of Women's Knowledge and Attitude towards Modes of Delivery in Al-Elwia Maternity Teaching Hospital in Iraq: A Descriptive Study

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Abstract

Background: Labour pain is one of the most challenging issues for pregnant women. The increasing in prevalence caesarean section, there is a debate as whether a woman should be allowed to choose between the modes of delivery. In the present study, we assessed the women's knowledge and attitude towards modes of delivery.


Materials and Methods: We have conducted a descriptive study by using purposive sampling of 100 women on prenatal and postpartum from the period of March 2021 to Jan 2022 at Al-Elwia Maternity Teaching Hospital in Iraq. A questionnaire was used as a tool of data collection to fulfill with objectives of the study. Data were entered in Microsoft Excel 2016 and analyzed by using SPSS 26.0 version.

Results: In study, the highest percentage 61% of the sample their age was ranged between 20 – 29 years with mean age 26.58 ± 6.2 years, 67% women were finished primary school graduate & less, 70% of cases have family support. High mean score in all items according to women's attitudes about normal vaginal delivery and cesarean section.

Conclusion: From this present study, we have concluded that the overall knowledge of mode of delivery in women's is good with most women having positive attitude towards vaginal delivery than to cesarean delivery, family support, health care provider's and multimedia improving women's knowledge about the risks and benefits of different modes of delivery can lead positive maternal attitude towards the vaginal delivery.

Keywords: assessment, knowledge, attitude, modes of delivery, hospital-based study, Iraq

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Introduction

Cesarean section (CS) is the surgical delivery of fetus through an incision made in the woman's abdominal wall and uterus. This mode of delivery occurs in cases when vaginal delivery unsafe for the well-being for mother and her fetus. WHO considers CS rates of 5–15% to be the optimal range for the targeted facilitate intervention of life saving for mother and fetus. [1] The decision of mode of delivery is explained as preferring either the vaginal or cesarean section delivery. It's important for the pregnant woman to choose between the two modes of delivery. [2] The best way for delivering a baby is vaginal delivery because of the many benefits that it has, such as decreasing the risk of hemorrhage, less infection occurrence, no need for the anesthetic procedure, and hospitalization. However, compared to the CS, normal vaginal delivery no needs costs. [3] The incidence of cesarean sections is increasing globally each year where the rates have increased beyond the recommended level of 10%. Cesarean section rates beyond this level do not further reduce maternal and perinatal mortality. There is considerable variation in the rates of cesarean sections, particularly between high and low-income countries and between different institutions within these countries. Many factors have contributed to the increasing rates of cesarean sections including medical and non-medical factors. Examples of medical factors include increases in maternal age and body mass index and changes in obstetric practices and technologies. Examples of non-medical factors include cesarean sections requested by the mother, fear of litigation among caregivers, the inappropriate organization of maternity and physician care induced demand for cesarean sections. [4] Some researchers recommended to provide scientific information for pregnant women during prenatal visits about modes of delivery. [5] In this study, we have to assess the women's knowledge and attitude towards modes of delivery.

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Materials and Methods

A descriptive study was conducted on non-probability sample of purposive sample of 100 women on prenatal and postpartum period from the period of March 6th 2021 to January 8th 2022 at Al-Elwia Maternity Teaching Hospital in the counseling area in Iraq.

Discription of Questionnaire:

Questionnaire was used as a tool of data collection to fulfill with objectives of the study which consisted of three parts. Part – 1: Socio-demographic variables; Part – 2: Source of knowledge and knowledge; and Part – 3: Attitude of women's regarding modes of delivery.

All questions rated according to the following criteria: I know = 3, Not sure= 2, I don't know =1. So, the cut-off-point= 3 according to Women's Knowledge about Normal Vaginal Delivery and Cesarean Section, for attitude assessment a questionnaire was served in Likert scale format with Agree (score 5), Strongly agree (score 4), Disagree (score 3), Completely disagree (score 2), Neither agree nor disagree (score 1). Hence, the cut-off point was 5.

Data Management and Statistical Analysis:

Data were entered and compiled by using Microsoft Excel 2016 and data analysis was done by SPSS (Statistical Process for Social Sciences) 26.0 version. Categorical variables were expressed as frequency and proportions. Continuous variables were expressed as mean and standard deviation.

Ethical considerations: We obtained properly scientific research committee and ethical clearance approval No: MHESR/CON/UOB/2/22.11.20 before conducted this study from Ministry of Health (MOH), Department of Planning and Health Research Section), Ministry of Planning, Central Statistical Organization and Information Technology, and the from the concern authorities of Al-Elwia Maternity Teaching Hospital, Iraq.

Results

We have recruited and incorporated 100 pregnant women in this present study. The highest percentage 61% of study sample was at age group 20-29 years with mean age was 26.58 ± 6.2 years, 67% was graduated from primary school and less, and 87% of them was non employed as shown in **Table – 1**.

Table – 1 Distribution of Socio-Demographic Characteristic of the Study population

Socio-demographic Characteristics	Frequency	Percentage
Age (Years)		
≤ 19	11	11.0
20-29	61	61.0
30-39	24	24.0
≥ 40	4	4.0
Age (Mean ± Standard Deviation)	26.58 ± 6.2 years	
Educational Level		
Primary school	67	67.0
Intermediate & secondary school	23	23.0
Graduate & more	10	10.0
Occupation		
Employed	13	13.0
Unemployed	87	87.0

Table – 2 Sources of Women's Knowledge about Modes of Delivery

Variables	Responses	Study Sample (n=100)	
		No.	%
Did you have knowledge about modes of delivery	Yes	78	78.0
	No	22	22.0
Source of Knowledge			
Family (husband, patient mother or husband mother)		70	70.0
Health care providers		18	18.0
Multimedia		9	9.0

*More than one answer

The highest percentages 70% of cases have family support, 18% of cases declared that health team support played a role in choice of modes of delivery as shown in **Table – 2**.

Table – 3 Distribution of Study Sample According to Women's Knowledge about Normal Vaginal Delivery and Cesarean Section

No.	Questions	I know		Not Sure		I don't Know		Mean Score
		F	%	F	%	F	%	
1.	Cesarean delivery is less painful	28	28	43	43	29	29	1.99
2.	Maternal complications of cesarean delivery are greater	58	58	15	15	27	27	2.31
3.	Infection risk of cesarean delivery is higher than vaginal delivery	49	49	19	19	32	32	2.17
4.	Emotional relationship between mother and baby after vaginal delivery is better	12	12	30	30	58	58	1.54
5.	Infants born by CS are smarter compared with those born by vaginal delivery	15	15	27	27	58	58	1.57
6.	Infant bone fractures are impossible in CS	38	38	13	13	49	49	1.89
7.	It is reasonable to request CS again for next delivery after the first CS	33	33	42	42	25	25	2.08
8.	Respiratory disorders in infants born by CS are less than vaginal delivery	29	29	30	30	41	41	1.88
9.	Hemorrhage after cesarean delivery is less than vaginal delivery	52	52	14	14	34	34	2.18
10.	CS is reasonable when the baby is in breech presentation	62	62	13	13	25	25	2.37

F: Frequency, %: Percentage, MS.: Mean of Scores (weighted mean)

High mean scores in all items except in item (1,4,5,6, and 8). According to women's knowledge about normal vaginal delivery and cesarean section as shown in **Table – 3**.

Table – 4 Distribution of Study Sample According to Women's Attitude's about Normal Vaginal Delivery and Cesarean Section

Sl. No.	Questions about Normal Vaginal Delivery	Agree		Strongly agree		Disagree		Completely disagree		Neither agree nor disagree		Mean Score
		F	%	F	%	F	%	F	%	F	%	
1.	Vaginal delivery is a natural and acceptable method	45	45	31	31	18	18	0	0	6	6	4.09
2.	It is pleasant for a mother to see her baby immediately after the birth	46	46	38	38	5	5	2	2	9	9	4.10
3.	Emotional relationship between mother and the infant is better after vaginal delivery	48	48	38	38	7	7	4	4	3	3	4.24
4.	Vaginal delivery is much better in long term	33	33	42	42	14	14	0	0	11	11	4.86
5.	Because of anesthesia, vaginal delivery is much better	46	46	22	22	24	24	2	2	6	6	4.00
Questions about Cesarean Section												
6.	If there is no financial problem, CS is much better	46	46	3	3	41	41	5	5	5	5	4.80
7.	I prefer CS	33	33	2	2	49	49	15	15	1	1	3.51
8.	I prefer CS because it is less painful than vaginal delivery	36	36	6	6	43	43	9	9	6	6	3.57
9.	Infants born by CS are healthier than those born by vaginal delivery	30	30	5	5	41	41	2	2	22	22	3.19
10.	If there is an intention for tubal ligation, CS is much better	51	51	7	7	18	18	4	4	20	20	3.65
11.	CS prevents uterine and bladder prolapse	45	45	5	5	24	24	1	1	25	25	3.44
12.	I believe that CS should be done when vaginal delivery is risk	48	48	8	8	30	30	6	6	8	8	3.82

F: Frequency, %: Percentage, MS.: Mean of Scores (weighted mean)

High mean in all items according to women's attitudes about normal vaginal delivery and cesarean section as shown in **Table – 4**.

Discussion

More studies conducted to identify the women's attitudes and preferences about modes of delivery for this study conducted to assess women's knowledge and attitude towards modes of delivery. Although recent studies have shown that the risk of planned CS and planned vaginal delivery

in the short term are low and similar, in subsequent pregnancies, the risk will be higher in a mother who has had a previous CS. [6] Majority of women in the present study were in the age group of 20-29 years and more than half of the study participants with mean age 26.58 ± 6.2 years, this result similar with the study conducted in Thi-Qar, Iraq that shows the highest percentage (34.2%) of the study sample at age group (20-29) years. [12]. And these findings are agreement with Dogra and Sharma was a prospective questionnaire study conducted on 100 antenatal women in third trimester who attended the antenatal clinic were in the age group of 26-35 years nearly fifty percentages. Most of the women are graduated from primary school and less, and were unemployed i.e., house wives, this result similar in in Thi-Qar, Iraq that shows also the highest percentage (83.7%) of study sample are unemployed/housewife. [12]. 91% were house wives. 85% had received education up to High school and above. [7]

Conversely, the prospective study conducted on 100 antenatal women in third trimester who attended the antenatal clinic in Christian Medical College and Hospital, Ludhiana, Punjab from September 2015 to January 2016 nearly 1/3rd of were in the age group of 26-35 years. 94% were house wives. 47% had received education up to secondary school level. Fisher and colleagues believe that in addition to the mother's personality, education and high economic level play a role in choosing the mode of delivery. [10] Present study shows that the highest percentages 70% of cases have family support, 18% of cases declared that health team support played a role in choice of modes of delivery. The most frequently mentioned source of information about mode of delivery was family and friends. [9] Family support, health care provider's and multimedia improving women's knowledge about the risks and benefits of different modes of delivery can lead positive maternal attitude towards vaginal delivery.

High mean scores in all items except in item (1,4,5,6, and 8). According to women's knowledge about normal vaginal delivery and cesarean section. The knowledge status about the modes of delivery was not significantly different between mothers attending private and public hospitals and only a small percent of mothers had good knowledge status in both sectors. [6] The findings are agreement with Varghese et al., show that Majority of women disagreed with the opinion that cesarean section is preferred due to unpleasant pain of vaginal delivery or economic problems. Higher percentage of women did not consider that cesarean section is choice of high-class society. [9]. The study conducted in the Ghana show also that women have good knowledge, perception and attitude about subject of caesarean section. [11].

The high mean in all items according to women's attitudes about normal vaginal delivery and cesarean section. These findings are agreement with prospective study conducted on 100 antenatal women in third trimester who attended the antenatal clinic in Christian Medical College and Hospital, Ludhiana, Punjab show that majority of the women (89%) interviewed had positive attitude towards vaginal delivery. [9] In a study by Alaei and Motamedi in the city of Kerman, more than half of the women regarded vaginal delivery who delivered by CS stated that they had requested a CS. [6] Indeed, empowering pregnant

women with the correct knowledge enhances their involvement in the decision-making process as a natural and acceptable mode of delivery. Another study in South Korea reported that despite the 40% rate of CS, most women showed more favorable attitudes towards NVD than CS and only 10.6% of women who delivered by CS stated that they had requested a CS. [6]. Indeed, empowering pregnant women with the correct knowledge enhances their involvement in the decision-making process towards mode of delivery, and encourages a positive attitude towards vaginal delivery. [13].

In our study, more than half of the mothers with a positive attitude towards NVD described vaginal delivery as a physiologic process. Unlike traditional vaginal delivery, in physiologic vaginal delivery the mother is free to have her favorable position and interventions, such as the IV-line, prescription of oxytocin and episiotomy are not used and the placenta exits spontaneously. It seems that providing the equipment for physiologic vaginal delivery for mothers and encouraging the obstetrical team to attempt physiologic vaginal delivery may lead to a higher percentage of women with positive attitude towards NVD. On the other hand, it has been observed that with increased maternal knowledge the positive attitude towards NVD is raised. This finding reveals the importance of educating mothers and increasing their knowledge about the risks and benefits and indications of different delivery routes. Educating pregnant women during their prenatal visits, organizing group classes by obstetricians and certified midwives and educating reproductive aged women in their preconceptionally counseling sessions may provide some suitable opportunities to achieve this goal. [6]

Conclusion

Based on this present study, we have concluded that the most level of knowledge of women of study sample related to mode of delivery is good and shows high mean score in all items according to women's attitudes about normal vaginal delivery and cesarean section.

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Authors' Contributions: Authors contributed to the conceptualization, write the article and checking all the concepts of the manuscript.

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