

Indications Associated with Primary Cesarean Section among Women in Al-Diwaniyah City, Iraq

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ABSTRACT

Background: The most common obstetric surgical procedure performed worldwide is a cesarean section. When performed properly, C-sections can enhance maternal and/or newborn outcomes. However, if a C-section is performed improperly, there is a chance that more harm than good will result.

Material/Methods: In order to evaluate the various indications for primary caesarean sections over the time frame of 1 May 2020 to 4 December 2020, a descriptive study was carried out on (100) women who delivered by CS at Maternity and Pediatric Hospital in Al-Diwaniyah City.

Results: The findings revealed that the majority of women there (68%) were between the ages of 20 and 35, (36%) were college or institute graduates, (93%) were stay-at-home moms, (67%) lived in urban areas, and (22%) had cephalo-pelvic disproportion as the primary maternal indication for primary cesarean section. Fetal distress was the primary fetus indication in (11%) of the primary cesarean sections performed at the hospital, while maternal request was the second indication of PCS and had (20%).

Conclusions: According to the study's findings, the leading maternal indication for primary cesarean section was cephalo-pelvic disproportion in (22%) of the cases. Fetal distress was the primary fetus indication in (11%) of the primary cesarean sections performed at the hospital, while maternal request was the second indication of PCS and had (20%).

Recommendations: It is recommended to improve health education to the mother about the risk of CS and possibility of normal delivery after primary CS in order to decrease incidence and decrease maternal request for that.

Keywords: Indications, Primary Cesarean Section, Women, Al-Diwaniyah City, Iraq

INTRODUCTION

The most frequent obstetric surgical procedure performed globally is a cesarean section. When performed properly, C-sections can enhance mother and/or newborn outcomes. However, if a C-section is performed improperly, there is a chance that more harm than good will result^{1,2}.

The rate is seen to consistently rise. The disparity is the result of several intricate causes, including the characteristics of obstetric women, the accessibility of human and technological resources, and, most importantly, the clinical care protocols utilized in each site^{3,4}.

The rates of Caesarean sections vary between nations and are correlated with socioeconomic conditions. In contrast to those seen in highly impoverished locations, the percentages are higher in more developed areas (27.2 percent) (6% of the whole)⁵⁻⁷.

Cesarean sections are carried out for a number of fetal and maternal reasons, including anomalies in labor and delivery, placental and cord abnormalities, and recurrent CS deliveries. Cesarean sections (CS) have recently been done to fulfill women's desires; as a result, cesarean deliveries requested by mothers were added to the list of recognized frequent CS indications⁸.

MATERIAL/METHODS

100 women who gave birth via CS at the Maternity and Pediatric Hospital in Al-Diwaniyah City were the subject of a descriptive research. Method of taking the sample was random sampling. The inclusion criteria were woman delivered by CS and the exclusion criteria were woman delivered by vaginal delivery, instrumental deliveries and any woman refused to participate in the study. The information was collected from women after verbal agreement with written consent were taken to assess the different indications of primary caesarean sections during the period from 1st May 2020 to 4th Dec 2020.

A questionnaire format was constructed that consist of divided into two sections and apportioned as follows: Socio-demographics in Part One Characteristics: Identification of the sample's sociodemographic characteristics, which include the following factors, is a concern "age, education level for women, occupation for women and residency". Part Two: Fetal and maternal signs that a caesarean section is necessary. The interview technique was used to gather the data for the current investigation. The statistical program (SPSS) version was used to examine and evaluate the study's findings. The following statistical data analysis techniques were employed (25)⁹⁻¹².

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RESULTS

Table 1: Summary of study sample distribution by demographic information

	Rating	F.	%	Cumulative Percent
Age /years	less than20	16	16	16
	20-35	68	68	80
	35+	20	20	100
Level of education	Illiterate	28	28	28
	Intermediate	36	36	64
	Secondary school	21	21	85
	College or institute	15	15	100
	Employ	7	7	7
Occupation	House wife	93	93	100
	Urban	67	67	67
Residence	Rural	33	33	100

This table demonstrates that the study's findings (68%) represent the bulk of the study sample for the 20-35 age range. When it comes to education, the majority of the study sample (93%) is made up of housewives, and when it comes to occupation, the majority of the sample (67%) resides in cities.

Table 2: Summary of the study sample's distribution based on responses to questions about maternal and fetal symptoms

Maternal Indications	Frequency	Percent	Cumulative Percent
C-sections are performed at the mother's request and for no medical reason.	20	20	20
Lack of progress in labor	8	8	28
Cephalo-pelvic disproportion	25	25	53
Multiple pregnancy	5	5	58
When the length of the labor surpasses 24 hours, it is considered prolonged or obstructed.	4	4	62
PIH- pregnancy induced hypertension	5	5	67
Medical disease as DM or heart diseases	7	7	74
placenta problems (Previa, abruption, accrete)	3	3	77
Cord prolapsed	3	3	80
Fetus Indications			
Fetal distress	11	11	91
Mal presentation	8	8	99
Fetal anomaly	1	1	100

Cephalo-pelvic disproportion was the maternal reason for cesarean section in the highest percentage of women who underwent cesarean section (22 percent), according to this data. While in (11%) of the hospital's cesareans, fetal distress was the primary fetus explanation.

DISCUSSION

The distribution of sociodemographic data had shown that the majority (68%) of the study group was between the ages of 20 and 35. (Table 1).

This study's result that cesarean sections are strongly connected with older mothers is consistent with research done in Nigeria in 2011 and the United Kingdom in 2013. Numerous maternal and newborn problems have been linked to advanced maternal age¹³.

More than half of the study sample had poor education levels, as evidenced by the fact that the level of education (36 percent) is intermediate grade (Table 1).

According to¹⁴ women who have finished five to ten years of formal education or more are much more likely to give birth via cesarean section than women who never attended school. In fact, having more knowledge gives women more authority to make decisions about their own health care, and many highly educated women are thought to choose for elective cesarean sections.

The majority of the study sample's housewives (93 percent), as displayed in (Table 1)¹⁵, indicated that compared to other demographic factors, mother work had less of an impact on the decision to have a cesarean section.

The majority of the study sample's residents (67%) came from urbanized areas (Table 1).

Though the number fluctuates depending on the patient's age, location, and sociocultural context, there is a noticeable rise in the rate of CS births overall. Particularly among those who live in cities and women over 35, this growth is especially noticeable¹⁶.

Social scientists have expressed worry over cesarean deliveries in the majority of urbanized nations and many developing nations in recent years¹⁷.

Women who reside in metropolitan areas are more likely to undergo a cesarean section than those who don't¹⁸⁻²⁰.

The primary indicator of PCS performance, which accounts for 25% of cases, is cephalo-pelvic disproportion. This is in accordance with²¹ Tita ATN. (2012), which states that CPD topped the list of indications. The aforementioned five indications account for 88.5 percent of the sample and are thought to be the most common reasons for doing a primary cesarean section.

The second indication of PCS in our study is according to maternal request had (20%), unnecessary CS due to maternal request in this study could be related in most of the women to the fear of vaginal delivery, believing of more safety to the mother and the newborn and to avoid delivery pain. In the current study CS on maternal request constituted higher than the rate reported in the United States as reported 2.5%²². This finding goes with²³ Sri and Kekhashan (2016) who said that due to inadequate and insufficient antenatal education, most women based their opinions on the media and the experiences of other women who had given birth vaginally.

In 11% of the hospital's cesareans, fetal discomfort was the primary cause. With a total of 8% of cesareans, any type of mal presentation was generally one of the causes in our data.

The primary causes of a CS in the late 20th century and the present were prolonged labor, (suspected) fetal distress, atypical fetus presentation, placental abnormalities, and maternal factors. Breech presentation is now frequently a sign of a CS since fetal welfare has received more attention^{24,25}.

In Norway, protracted or difficult labor accounts for 21% of cesarean sections. In addition, 4 percent of pregnancies end in failure to initiate labor. Fetal distress was a sign for many of the women who ultimately underwent cesarean sections due to poor progress or protracted labor²⁶.

Although it is unknown to what extent "fear of delivery" overlaps the term "maternal request," a Swedish study on the topic revealed that 43% of women who requested a CS displayed a clinically significant fear of birth²⁴.

The most common reason for a planned cesarean in 2005 was psychological, which is defined as maternal worry or request without any corresponding medical reason. The main causes of urgent and emergency cesareans remained presumed fetal compromise and extended labor^{20,27,28}.

CONCLUSIONS

According to the study's findings, the leading maternal indication for primary cesarean section was cephalo-pelvic disproportion in (22%) of the cases. While the major fetal indication for a primary cesarean section at the hospital (11%) was fetal distress, the second reason for a PCS (20%) was a mother's wish.

RECOMMENDATIONS

It is recommended to improve health education to the mother about the risk of CS and possibility of normal delivery after primary CS in order to decrease incidence and decrease maternal request for that.

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