

Reasons for Pregnant Women's Choice of Elective Caesarean Section

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Abstract: Background: The worldwide rise in cesarean section (CS) rates is becoming a major public health concern and cause of considerable debate due to potential maternal and perinatal risks, cost issues and inequity in access. The Term Caesarean Delivery on Maternal Request (CDMR) refers to elective delivery by caesarean section at the request of a woman with no identifiable medical or obstetric contraindications to an attempt at vaginal delivery. There for Cesarean sections increase the health risks for mothers and infants as well as the costs of health care when they are compared with vaginal birth.

Objectives: The study aim to determine the reasons for pregnant women to choose elective caesarean section.

Methodology: The descriptive study design was used in this research (quantitative) to determine the reasons for pregnant women to choose cesarean section. The research was conducted at Al-Diwaniyah / Health Directorate of in Maternity and Children Teaching Hospital at Al-Diwaniyah City. The research was conducted from September 27th, 2024 up to March 21th, 2025. A non-probability (purposive) sampling technique was used consisting of (60) pregnant and delivered C/S women and chosen to give birth by caesarean section. An assessment instrument was designed to assess the reasons for pregnant women to choose caesarean section.

Results: Findings indicated that the majority of women were chose as a first line of causes (Fear from labor pain and Fear of dystocia) these items account 43(71.7 %) with a mean of score 1.28.

Conclusion: The research concluded that fearing from labor pain and fear of dystocia were the main causes that stay behind the women who chose to have C/S.

Recommendations: Providing painless NVD in Al Diwaniyah at both public and private maternity hospitals.

Chapter One

Introduction

1.1. Introduction

The worldwide rise in cesarean section (CS) rates is becoming a major public health concern and cause of considerable debate due to potential maternal and perinatal risks, cost issues and inequity in access (Carvalho et al., 2024).

The Term Caesarean Delivery on Maternal Request (CDMR) refers to elective delivery by caesarean section at the request of a woman with no identifiable medical or obstetric contraindications to an attempt at vaginal delivery. There for Cesarean sections increase the health risks for mothers and infants as well as the costs of health care when they are compared with vaginal birth (Cunningham et al., 2022).

It may be life-threatening, or may lead to minor or major short-term or long-term complications. The past 20 years in the US, the maternal mortality rate keeps rising and while the rate of C section continues to rise. It can now be reliably calculated that C section is the number one cause of

maternal mortality in the U.S. at least 45% of all maternal death is associated with a C section (Wagner, 2024).

The choice of elective caesarean section (CS) by women is influenced by a variety of factors, both medical and non-medical. One of the primary reasons women opt for elective CS is the perception of safety for both the mother and the baby. Many women believe that CS is a safer option compared to vaginal delivery, as it is perceived to be a pain-free method of birth and reduces the risk of complications during delivery (Konlan et al, 2019). Additionally, fear of childbirth, including fear of pain and potential injuries during vaginal birth, significantly influences the decision to choose CS. This fear is often compounded by previous negative birth experiences, which can lead women to view CS as a more controlled and predictable option (Colomar et al., 2021).

Social and cultural factors also play a crucial role in the decision-making process. Support from family members, particularly husbands or partners, can heavily influence a woman's choice to undergo an elective CS. In some cases, advice from friends or religious beliefs may also contribute to this decision 1 6. Moreover, societal perceptions and medical discourses that portray CS as a responsible and safe choice further reinforce this preference (Fenwick et al., 2021).

The most serious complications for the babies born by cesarean are fetal respiratory problems such as Transient Tachypnea (TTN) and Respiratory Distress Syndrome (RDS), surgical blade cuts, and increased rates of newborns admission in the neonatal intensive care unit. Also, experts believe that 1 min Apgar score of the newborns by cesarean is less that of the newborns by NVD (Rafiei et al., 2018).

Postpartum maternal complications of cesarean sections include infection of wound and chest, blood transfusion complications, post- partum hemorrhage, burst abdomen, urinary tract infetions (UTI), disseminated intravascular coagulation (DIC), fever caused by infection, and other inflammation like endometritis (Yang & Sun, 2017). The greatest risk of hemorrhage associated with a cesarean birth, especially with a scarred uterus, is with abnormal placentation. Placenta previa is the main risk factor, leading to a 45.5% risk of blood loss >1,000 mL and a 17.5% risk of $\geq 2,000$ mL estimated blood loss (Dunkerton et al., 2018).

1.2. Importance of Study

The phenomenon of patient-initiated elective caesarean section is a touchstone for these trends of increasing maternal choice of birth (Kornelsen et al., 2023). An estimated 18.5 million caesarean sections are carried out annually in the world, and in 3.6% the procedure is performed without any medical or surgical indications (Walana et al.,2017).

The World Health Organization (WHO) recommends caesarean delivery rates should not exceed 10-15%. WHO established that caesarean section is an essential treatment in pregnancy and is recommended at a rate of 5-15% of all births. The caesarian section rate has increased in different parts of the world, both in developed countries and in developing countries (Zhao & Chen, 2013). Increases in cesarean sections worldwide have been well documented over the past two decades (Kornelsen et al., 2023).

The increasing trend of CS has generated much controversy regarding the causes of such tendency (Walana et al., 2020).

In Iraq available statistics indicate a significant increase in the rate of caesarean sections in recent years. In 2022, the Iraqi Ministry of Health recorded 512,746 normal births and 390,270 caesarean sections, meaning that caesarean sections accounted for about 43% of all births that year.

In a semi-annual statistical report for 2023, caesarean sections accounted for about 46% of the total births in government and private hospitals. This rise far exceeds the World Health Organization's recommended figure of between 10% and 15% of all births (INA, 2022).

At the governorate level, the annual statistical report for 2022 showed that Babylon governorate recorded the highest percentage of caesarean deliveries in private hospitals at 100%, followed by

Diwaniyah and Kirkuk at 99%, Salah al-Din at 98%, while Basra recorded the lowest percentage at 53%. At Yarmouk Teaching Hospital, 862 births were recorded during a given period, including 439 caesarean sections, which means that the percentage of caesarean sections exceeded 50% (IMH, 2022).

This increase in the rates of caesarean sections raises the concern of the health authorities, especially with them exceeding the internationally recommended rates, which requires studying the causes and taking appropriate measures to reduce this phenomenon.

1.3. Problem Statement

Reasons for Women's Choice of Elective Caesarian Section.

1.4. Objectives of the Study

To determine the reasons for pregnant women to choose elective caesarean section.

Chapter Two

Methodology

This chapter defines the methods that are used to conduct present study, it includes the study design; the setting of the study; the sampling of the study; the study instrument; and methods of data analysis.

2.1. The Study Design

The descriptive study design was used in this research (quantitative) to determine the reasons for pregnant women to choose cesarean section.

2.2. The Setting of the Study:

The research was conducted at Al- Diwaniyah / Health Directorate of in Maternity and Children Teaching Hospital at Al-Diwaniyah City. It is a specialized hospital established in 1984 and its administrative affairs are directly related to the Diwaniyah Health Directorate.

3.3. The research Duration:

The research was conducted from September 27th, 2024 up to March 21th, 2025.

2.4. Sampling of the Study

A non-probability (purposive) sampling technique was used consisting of (60) pregnant and delivered C/S women and chosen to give birth by caesarean section from Maternity and Children Teaching Hospital at Al-Diwaniyah City according to the following

Inclusion criteria:

1. Adult patient age more than 18 years.
2. Female patient with pregnancy who agree to participate in the study.
3. Pregnant women who attained to have C/S and who delivered C/S.
5. Patients who admitted in Maternity and Children Teaching Hospital.

2.5. The Study Instrument

After an intensive review of related literatures about the interesting phenomena, an assessment instrument was designed to assess

2.5.1. Part I: Female Patients Demographic Data Form:

This part includes (4) item, consisting age, level of education, occupation and economic status.

Part II: Reproductive Characteristics consists of (6) items:

- 1- Number of pregnancy:

- 2- Number of Abortion
- 3- Number of children
- 4- Gestational age:
- 5. Type of previous delivery:
- 6. Would you choose NVD painless if available?

Part III: Reasons of pregnant women for Choosing Cesarean Section consists of (13) items:

2.6. Methods of Statistics

The SPSS (Statistical Package of Social Sciences) version 20, and Microsoft Excel (2010) were used to analyze the collected data of the study

1. Descriptive approach

A. Statistical tables "Frequencies and percent" which are:

$$\% = \frac{\text{Frequency}}{\text{Sample Size}} \times 100$$

B. Mean of scores "MS".

The average score can be calculated by using the following:

$$M.S = \frac{\sum ri = 1Fi \times Si}{\sum ri = 1Fi} \times 100$$

C. The test of standard deviation "S.d.".

$$\text{Standard deviation} = \sqrt{\frac{\sum(x - \bar{x})^2}{n-1}}$$

For causes

$\sum xi$ = sum of the "1x Yes + 2x No" for items.

- (1) Average (mean <1.5) is High cause.
- (2) Average (Mean \geq 1.5) is Low cause.

Chapter Three

Results

Chapter Three

Results of the Study

This chapter presents the analysis of the data after collected and being processed and tabulated then statistically management, and the results is explain scientifically and logically according to the objectives of the study.

Table (3-1): Distribution of Study Sample According to the Demographic Data

Variables Data	Rating	F	%
Age/years (Mean± S.d= 28.73±5.275)	20-24	10	16.9
	25-29	27	44.1
	30-34	15	25.4
	35-39	5	8.5

	More than 40	3	5.1
	Total	60	100.0
Educational level	Collage	10	16.7
	Institute	4	6.7
	Secondary	37	61.7
	Intermediate	3	5.0
	Read and write	4	6.7
	Not read and write	2	3.3
	Total	60	100.0
Occupation	Employed	13	21.7
	Unemployed	47	78.3
	Total	60	100.0
Economic State	Enough	36	60.0
	Enough to some extent	19	31.7
	Not enough	5	8.3
	Total	60	100.0

F=Frequency, %=Percentage, S.d= Stander deviation

Table (3-2): Distribution of Study Sample according to their Reproductive Characteristics.

Reproductive Characteristics	Rating	F=100	%
Number of pregnancy	1	22	36.7
	2	15	25.0
	3	8	13.3
	4	11	18.3
	5+	4	6.7
Number of abortion	Non	42	70.0
	1	11	18.3
	2+	7	11.7
Number of children	1	29	48.3
	2	15	25.0
	3	7	11.7
	4	7	11.7
	5+	2	3.3
Gestational age	≤35	9	15.0
	36	4	6.7
	37	17	28.3
	38	19	31.7
	39≤	11	18.3
Type of previous delivery	S/C	58	96.7
	NVD	2	3.3
Would you choose NVD painless if available?	Yes	45	75.0
	NO	15	25.0

F=Frequency, %=Percentage

Table (3-3): Distribution of Causes of Preference Cesarean Section among the pregnant women

No.	Causes of Preference Cesarean Section	Rating Statistics				M.s
		Yes		No		
		F	%	F	%	
1.	Fear from labor pain	43	71.7	17	28.3	1.28
2.	Fear for episiotomy	41	68.3	19	31.7	1.32

3.	Fear of dystocia	43	71.7	17	28.3	1.28
4.	Fear on baby health	41	68.3	19	31.7	1.32
5.	Previous loss baby because of NVD	10	16.7	50	83.3	1.83
6.	Family Advice to select C/S	18	30.0	42	70.0	1.70
7.	Choosing the day of delivery according to my desire	26	43.3	34	56.7	1.57
8.	Low trust in nursing staff	24	40.0	36	60.0	1.60
9.	Lack information about NVD	18	30.0	42	70.0	1.67
10.	Lack information about the complications of c/s	24	40.0	36	60.0	1.60
11.	C/S is need short time rather than NVD	42	70.3	16	26.7	1.30
12.	Wanted to repeat CS	33	55.0	27	45.0	1.45
13.	Perseveration of sexual function and early resumption of sexual activity after birth	37	61.7	23	38.3	1.38

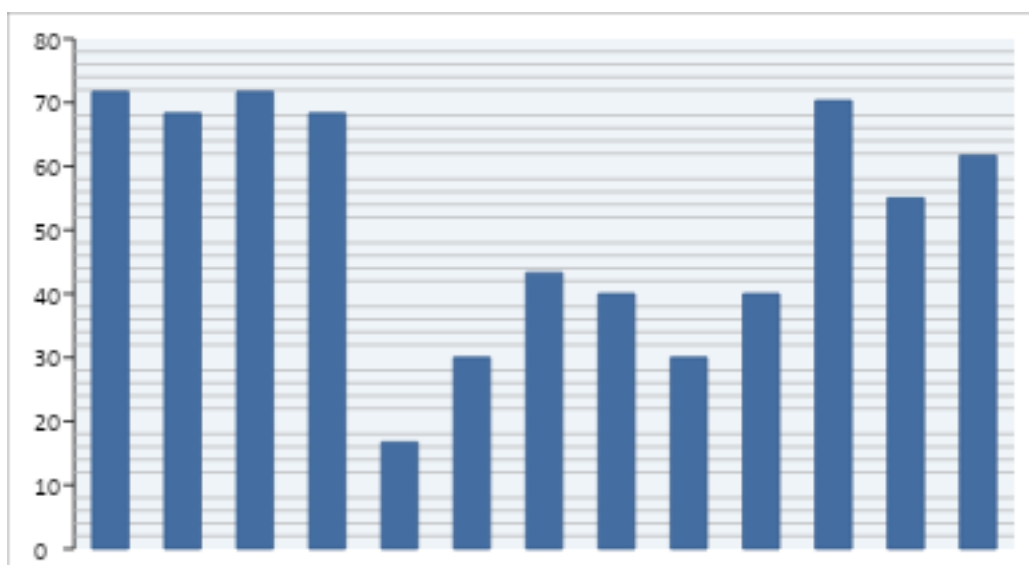
F=Frequency, %=Percentage, M.s = (1.5), High (mean = <1.5), Low (mean= \geq 1.5)

Table (3-4): Summary of Causes of Preference Cesarean Section among the pregnant women

List	Causes of Preference Cesarean Section	N	Mean	Ass.
1.	Fear from labor pain	60	1.32	High
2.	Fear for episiotomy	60	1.32	High
3.	Fear of dystocia	60	1.28	High
4.	Fear on baby health	60	1.28	High
5.	Previous loss baby because of NVD	60	1.83	Low
6.	Family Advice to select C/S	60	1.70	Low
7.	Choosing the day of delivery according to my desire	60	1.57	Low
8.	Low trust in nursing staff	60	1.60	Low
9.	Lack information about NVD	60	1.70	Low
10.	Lack information about the complications of c/s	60	1.60	Low
11.	C/S is need short time rather than NVD	60	1.27	High
12.	Wanted to repeat CS	60	1.45	High
13.	Perseveration of sexual function and early resumption of sexual activity after birth	60	1.38	High

Mean of score = (1.5), High (mean = <1.5), Low (mean= \geq 1.5)

Figure 3-1: Overall Causes of Preference Cesarean Section among the Pregnant Women



Discussion of the Study Findings

This chapter describes the explanation and discussion the results of the chapter four of this study according to its objectives and supported with related literature and previous studies that are available.

4.1. Discussion of the Demographic Characteristics of the Study Sample, as Shown in Table (3.1):

4.1.1. Age

Out of (60) samples who take part in this study, their age between (25-29) years old and represent as (44.1%) and 25.4% were in the age range of 30 and 34 years. These results are compatible with a result obtained from (Diema et al., 2019) study who stated that the study participants between (28-35) years were the highest mortality according to age.

4.1.2. Educational Level

Concerning the level of education, results indicated that more than the two third (61.7 %) of the study sample were with secondary educational level as 10(16.9%) had collage education.

4.1.3. Occupation

Housewives were the highest percentage as on occupation for the participants of this present study. this results agree with the finding in a study held in Iraq by Habib and Abdulla (2011) which reported that (87.4%) were house wife.

4.1.5. Economic State

According to the economic status, most of the study sample (60%) recorded enough economic state. This finding agreed with the study of (Habib and Abdulla (2011) they found (46%) of study sample stated that their economical level were enough from their point.

4.2. Discussion the Distribution of Study Sample according to their Reproductive Characteristics as Shown in Table (3.2):

The results show that the highest percentage (36.7%) of study sample were primigravida as shown in table (3.2), this results was inconsistent with the finding in a study held in Iraq by Habib and Abdulla (2011) which reported that (38%) of c/s women were multigravida, while it agree with the finding in a study held in United Kingdom by Amoa and Kluflo (2020) who reported that most of C-section sample were primigravida. More than half (70%) of the study sample have not abortion previously, while more than one third (48.3%) of study sample have (1) children, and it was similar to the finding that reached by a study held in United State by Riberio (2019) who reported that most mothers with c/s were multiparous. (31.7%) of the study sample show that their gestational age were attempt of c/s or delivery at (38 week).

The results show that the highest percentage (96.7%) of the study sample have history of previous cesarean section this result was similar to the finding that reached by a study held in Baghdad City by Khairi (2015). who reported that most mothers with history of previous cesarean. Finally when we asked the study sample if they Would choose NVD painless if available? a high percentage (75%) of sample showed that would choose the painless NVD. The percentage of CS rate in this study was calculated to be 75 % of all births, which is considered high as compared to the WHO range of 10%-15% of all cases.

4.3. Discussion the Overall Assessment of Causes of Preference Cesarean Section among the pregnant women as Shown in Table (3.3):

Findings demonstrated that the majority of women were chose as a first line of causes (Fear from labor pain and Fear of dystocia) these items account 43(71.7 %) with a mean of score 1.28 respectively most of study sample answer more than one option or cause as shown in table (3.3), this results agree with Khairi (2023) who stated that the highest percentage (17%) and (16.5%) of study sample preferred c/s because of fearing to loss their baby and fear from labor pain. Also this

finding comes along with the result that reached during a systematic review by Jenabi, Khazaei, Bashirian, Aghababaei, and Matinnia (2020) who report that twenty-eight studies met the inclusion criteria and were included in the review, The results of studies on the reasons of maternal request for elective cesarean section were fear of labor pain, anxiety for fetal injury/death, fear of childbirth.

This results coming along with the findings of the study conducted by (Diema et al., 2019) who they revealed that a proportion (37.2%) indicated CS is a pain-free method of birth. Some mothers (57.1%) reported they chose CS for being the safe method of delivery for both mother and baby.

Also they chose as a second line of causes (Fear for episiotomy and Fear on baby health) these items account 41(68.3 %) with a mean of score1.32, this results agree with Abouzhar and Wardlaw (2020), who stated that in many cases mothers want c-section as this is safe procedure for the child.

While the cause with eleven number (C/S is need short time rather than NVD) account 44(71.7 %) with a mean of score1.30, finally more than one third 37(61.7%) of the pregnant women were chose the perseveration of sexual function.

Chapter Five

Conclusions and Recommendations

6.1. Conclusions:

In light of the results discussion and their interpretations, our project research concludes that:

6.1.1. The greater part of the sample of this study patients are at young aged, married female, unemployed, able to read and write had a and enough income.

6.1.2. The research concluded that fearing from labor pain and fear of dystocia were the main causes that stay behind the women who chose to have C/S.

6.1.3. The majority of sample agree to choose the painless NVD .

6.1.4. Most women prefer painless childbirth if it is available in their city of residence.

6.2. Recommendations:

According to the results and conclusions of the present research, the researchers recommend the following:

6.2.1. Healthcare providers should provide women with adequate information about cesarean delivery at the antenatal period, including risks and benefits.

6.2.2. Healthcare providers should support women's choices and encourage them to option for cesarean delivery if there are medical complications.

6.2.3. Studies may be required to determine the untested information about the risks of caesarean delivery

6.2.4. Encourage women to engage in regular physical activity to strengthen their muscles and improve overall health

6.2.5. We recommend placing either a poster in the hospital or an advertisement on screens at intersections so that every woman who passes by can see it.

6.2.6. Providing painless NVD in Al Diwaniyah at both public and private maternity hospitals.

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