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Egyptian Women Attitude toward Mode of Delivery: What do Women Prefer and Why?

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Abstract: While only 10-15% is the appropriate rate of cesarean delivery based on the World Health Organization; cesarean birth has become the prevalent mode of delivery in Egypt; understanding the women's attitude and preference toward certain method of delivery is essential to avoid the undesirable consequences of cesarean birth. Aim: To explore the attitudes of the Egyptian pregnant women toward modes of delivery and identify the reasons of preferring cesarean or vaginal birth. Design: descriptive correlational research design was utilized. Sample: a convenient sample of 200 pregnant women 100 from private maternity hospital and 100 from antenatal clinic at El Manial Maternity Hospital, Cairo University Hospitals were recruited. Tools: women had interviewed using a structured interview questionnaire Results: 65.5% of women reported cesarean birth as their preferred method of delivery, labor pain, avoidance of labor position and frequent vaginal examination, as most of relatives and friends, to avoid episiotomy, CS is more safe and has less incidence of complications and vaginal delivery affect interest in sexual relation 67.9%, 54.2%, 52.7%, 45.8%, 45% and 42.7% respectively were reported as reasons for selecting CS as preferred method of delivery. Age, place of data collection, place of residence, financial level, mother's and husband's education were found to be correlated to preference of certain method for delivery (p ≤.05). Conclusion: pain and lack of autonomy and privacy in vaginal delivery were the most common reasons reported by the Egyptian women to prefer cesarean birth. Recommendation: Increase awareness regarding the beneficence of normal vaginal delivery and consequences of cesarean birth, educate pregnant mothers about available pharmacological and non-pharmacological measures to reduce labor pain during prenatal classes, advocate the laboring woman's rights in privacy and refusing or accepting any kind of care are recommended to improve the attitude of Egyptian women toward vaginal delivery decision.

Keywords: Attitude, preference, women- cesarean- Vaginal.

1. INTRODUCTION

A significant proportion of women giving birth undergo emergency or planned CS. Caesarean sections should be performed when vaginal delivery poses a risk to the mother or baby as in case of prolonged labor, fetal distress, or fetal mal-presentation [1]. Vaginal delivery is known as the best but unfortunately because of development of caesarean section, the prevalence of vaginal delivery is declined in recent years by over 60% [2]. Numerous studies showed a growing trend in cesarean section rates throughout the world reaching higher than 50% in some countries [3]. Private practice has contributed to the increased cesarean rate internationally. In Egypt; between 2002 and 2012, the C-section deliveries increased significantly over time, from 18.2% in 2002 to 30.3% in 2012; and increase by 70% in C-sections was in the private hospitals [4]

The high cesarean rates in university and private hospitals are alarming. 10-15% is the appropriate rate of cesarean delivery based on the World Health Organization as that associated with a notable decline in maternal mortality ratio and neonatal mortality rate [5]. However, based on the data from several regions; cesarean delivery without any medical indication has increased dramatically worldwide; estimated to be 8-14% of all cesarean deliveries [6, 7] which places mothers and their babies at risk of short and long term health consequences [8] and pose further economic burden in a resource-limited setting [9]



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The rise in CS rates is multi-factorial and under the influence of numerous underlying causes that include improved surgical techniques, increased maternal age at pregnancy, higher frequency of repeat CS, obstetricians' attitude towards CS, demand from women who may believe that cesarean birth is less painful and protects against possible complications such as urinary and fecal incontinence, uterine prolapse, sexual dysfunction [4, 10, 11].

The Egyptian ministry of health and population MOHP had applied some measures to reduce incidence of cesarean deliveries such as training and counseling of women before pregnancy and during pregnancy, painless delivery, labor preparation classes, C-section cultural change and elimination of misunderstandings, raising awareness about birth methods and their side effects and risks, and improving facilities and safe equipment for vaginal delivery. Nevertheless, further effective measures and more effort is necessary in this respect [2].

Significance of the study

Worldwide rise in cesarean section (CS) rate during the last three decades, has been the cause of alarm and needs an in depth study since 1996, CS deliveries have increased by more than 40% [12]. According to Egypt demographic and health survey EDHS, 2014 [2]; cesareans had been increasing steadily in recent years and reached in quadrupled the maximum threshold recommended By WHO to reach 60% However, Home-based deliveries declined by over 60%, medically assisted births raised sharply from 35% in 1988 to 92% in 2014, and 90% of mothers received antenatal care (ANC) services from a trained provider [5]

High incidence of C-section in Egypt and its negative consequences indicated the importance of further studies on this health problem. Investigating the causes of cesarean delivery in order to identify the common unnecessary causes especially those related to women themselves and which can be corrected through raising awareness and educating women about the benefits of vaginal deliveries and risks of cesarean birth can improve the attitude of Egyptian society toward natural birth. Therefore, this study was conducted with the aim to explore the attitudes of the Egyptian pregnant women toward modes of delivery and identify the reasons of preferring certain mode of delivery.

2. SUBJECTS AND METHODS

Design

Descriptive correlational research design wasutilized to achieve the stated aim.

Research questions:

To achieve the aim of this study, the following research questions were formulated:

- 1. What is the Egyptian women's attitude towards mode of delivery at governmental and private hospital?
- 2. What are the reasons of preferring cesarean or vaginal birth?

Setting

This study was conducted at two hospitals, firstthe antenatal clinic at El Manial Maternity Hospital, Cairo University Hospitals. It is a university affiliated hospital providing free health care to maternity as well as gynecological and family planning services. Being a large university hospital in a metropolitan city, it attracts patients from all over Egypt, including Upper and Lower Egypt areas especially complicated cases. The total annual admission to the antenatal clinic was 94.350 women with various levels of socioeconomic status [13], second; a private hospital at Capital Egypt. The hospital is providing paid maternity as well as gynecologicalservices. The total annual admission for the antenatal follow up was 6250 according to private hospital Statistics.

Sampling

A convenient sample of 200 pregnant mothers 100 from private maternity hospital and 100 from antenatal clinic at El Manial Maternity Hospital, Cairo University Hospitals, was recruited and interviewed using maternal a structured interviewing questionnaire. Criteria: primiparous pregnant women, their age between 18 and 40 years and attending outpatient clinic for follow up. Exclusion Criteria: history of primary infertility or using assisted reproductive technology to getting pregnancy. The sample size was determined by using the following sample size equation*P (1-P) N-1*d/z) + p (1-p), N=total population, Z= standard value related to alpha error at 5% equal 1.96, D = alpha error at 5%, P= proportion of interested characteristic.



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Tools

A structured interview questionnaire was developed and filled by the researchers based on extensive electronic review of literatures. The questionnaire consisted of three parts namely: part (1) Demographic data. This section was concerned with data related to pregnant women such as age; occupation; residence; educational level; weight; height; as well as husband demographic dataage; occupation; residence; educational level; economic status, and duration of marriage. Part (2) Medical history, and. It included data about chronic disease as diabetes, hypertension, and bronchial asthma. Obstetric history and current pregnancy data. It included data about number of abortion, regularity of antenatal follow up, and problems of current pregnancy. Part (3): It included data about preferable mode of delivery and reasons of preferring this mode

Ethical Consideration

An official permission was obtained from hospital administrators. Also, all pregnant women were informed about the purpose of the study. Benefits were discussed; pregnant women were informed that the study posed no risks or hazards on their health. The researcher emphasized that the participation in the study was voluntary and that pregnant women have the right to withdraw at any time without giving any reason and without affecting their care. Measures were taken to insure confidentiality through coding the data, and pregnant women were informed that data collected will be used only for the purpose of the study, and oral consent was obtained.

Procedure

Data was collected over a period of 8 months started from the January to August, 2018. The researchers explained the purpose and nature of study to pregnant women to obtain the informed oral consent from those who agreed to participate and met the inclusion criteria. Each woman was interviewed individually in the waiting room at the antenatal clinic collect data related to personal demographic data, obstetrical and medical history as well as data about preferable mode of delivery and reasons of preferring this mode was collected. The interview last for 15-20 minutes, the questions were asked in simple Arabic language and answers were recorded in the sheet.

3. RESULTS

Age of study participants ranged from 18-37 years with mean age of 25.4±4.0 years, 71% live in urban, 62.5% are housewives and 45% had primary education. The duration of marriage ranged from 1-8 years with mean of 2.05±1.30 years while financial level as expressed by the women themselves reported as weak 3%, moderate 65%, good 21.5% or excellent 10.5% (table, 1)

The studied sample represented all gestation weeks from 1-40 weeks with mean of 20±9.4 weeks, 11% had chest asthma, 45% had experienced abortion before and 82% attending antenatal visits regularly. The problem encountered in current pregnancy included threatened abortion 9%, hypertensive disorders4% and gestational diabetes 1% (table, 2).

Unexpectedly; 65.5% of women reported cesarean birth as their preferred method of delivery. Fear of labor pain, avoidance of labor position and frequent vaginal examination, as most of relatives and friends, to avoid episiotomy, CS is more safe and has less incidence of complications and vaginal delivery affect interest in sexual relation 67.9%, 54.2%, 52.7%, 45.8%, 45% and 42.7% respectively were reported reasons for selecting CS as preferred method of delivery (figure, 1).

On the other hand; 34.5% of women reported the normal vaginal delivery NVD as their preferred method of delivery. Avoidance of cesarean birth complications, early recovery after delivery and early contact with the baby, not having a cesarean scar and inability to pay for CS 69.6%, 68.1%, 53.6% and 36.2% respectively were reported as reasons for preferring CS as a method of delivery (table, 3).

Testing the correlation between socio-demographic data, medical and obstetric history, current pregnancy data and preferred method childbirth revealed that age (χ 2=27.29 at p=.026), place of data collection (governmental/private) (r=.300 at p=.000), place of residence (urban/rural) (r=.178 at p=.012), mother's education (r=.162 at p=.022), husband's education (r=.251 at p=.000) and financial level (r=.142 at p=.0450) were the variables found to be correlated to preference of certain method for delivery (table, 4).



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Table (1): Distribution of the study sample according to socio-demographic characteristics (n=200)

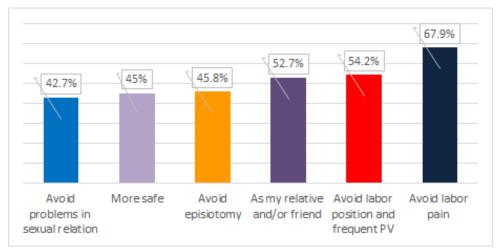
Items		F	%	
Pla	ce of residence	58	29	
•	Urban	142	71	
Mo	other's work			
-	Working	75	37.5	
•	Housewife	125	62.5	
Mo	other's education			
-	Can't read and write	8	4	
•	Primary	90	45	
-	Technical	49	24.5	
•	College	53	26.5	
hus	sband's education			
-	Can't read and write	16	8	
-	Primary	75	37.5	
•	Technical	58	29	
•	College	53	26.5	
husband's work				
-	Employee	68	34	
-	Worker	103	51.5	
•	Has own business	29	14.5	
Fir	Financial level			
-	Weak	6	3	
-	Moderate	130	65	
-	Good	43	21.5	
-	Excellent	21	10.5	

Table (2): Distribution of the study sample according to their medical history, obstetric history and current pregnancy data (n=200)

Item	F	%	
Presence of chronic illness			
■ No	146	73	
Asthma	22	11	
 Cardiac disease 	14	7	
 Diabetes 	12	6	
Hypertension	6	3	
Number of abortion			
 No abortion 	110	55	
One time	56	28	
Twice or more	34	17	
Antenatal follow up			
■ Regular	164	82	
 Irregular 	36	18	
Problems of current pregnancy			
■ No	152	76	
 Threatened abortion 	38	19	
Hypertensive disorders	8	4	
 Gestational diabetes 	2	1	
Preferable mode of delivery			
• CS	131	65.5	
■ NVD	69	34.5	



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^{*}Numbers are not mutually exclusive

Fig (1): Distribution of the study sample according to reasons of preferring CS *(n=131)

Table (3): Distribution of the study sample according to reasons of preferring NVD *(n=69)

Item	F	%
 Avoid CS complications Early recovery after delivery and early contact with the baby 	48 47	69.6 68.1
Avoid cesarean scarCan't pay for CS	37 25	53.6 36.2

Table (4): Relationship between socio-demographic characteristics, medical and obstetric history, current pregnancy data and preferred mode of delivery

	r.	χ^2	P-value
Place of data collection	.300	-	.000**
■ Age	-	27.29	.026*
Place of residence	.178	-	.012*
Mother's education	.162	-	.022*
Husband's education	.251	-	.000**
Financial level	.142	-	.045*

^{*}p is significant at ≤0.05

4. DISCUSSION

The current study aimed to assess the attitude of Egyptian women toward cesarean birth and reasons of preferring it as a method of delivery. Near two thirds of current study participants reported cesarean birth as their preferred method of delivery; this result is considered the highest among what reported by available literature. Similar results reported by [14] who reported that near one third of women preferred cesarean birth and with [15]; who studied knowledge and attitude of Iranian women toward mode of delivery and reported that fifth of women had delivered by cesarean delivery based on their request. On the other hand, current study findings is inconsistent with Yamasmit & Chaithongwongwatthana, 2012 who studied attitude of Thai women and found that most of them prefer vaginal delivery mainly because of their desire to go through natural birth experience [16].

^{**}p is significant at ≤0.01



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Avoidance of labor pain has been reported as the first reason of preferring cesarean birth over normal vaginal delivery which is consistent with all previous research findings [3,15,16,17,18]. This fear from pain might be received from relatives or friends stories of not having enough pain relief measures and support in labor [19] or from their own experience in previous abortion also, pregnant mother doesn't have enough preparation for the labor to be familiar with phases of labor, nature of labor pain and pain relief measures that can be used. As well, there is an inadequate use of pharmacological and non-pharmacological pain relive methods in Egyptian health care settings [20]. Moreover; Episiotomy identified as another reason. It is closely related to pain, moms usually afraid from perineal discomfort caused by sutures that could affect ability to urinate or defecate after birth [21,22]

The laboring woman, especially in governmental and teaching hospitals, usually exposed to frequent and sometimes unnecessary vaginal examination. Moreover, supine position is almost the only allowed position [23] and this is might be the reason that avoiding labor position and frequent vaginal examination came as second cause of preferring cesarean birth among studied women. Moreover, the cultural and religious background of Egyptian woman make them embarrassed of being naked or examined frequently especially in front of others or by male practitioner [24].

Expression of "like my relatives and friends" is the third motive to select cesarean birth. The result is congruent with findings of [19] who reported that positive narration about cesarean and negative stories about vaginal delivery told by family, friends and internet had great impact of cesarean birth decision. Furthermore; families are translating CS mode of delivery as having the ability to pay for increased cost of the operation which is more prestigious than vaginal birth.

Some of studied women believed that vaginal delivery could affect their sexual relation. This result is congruent with Haines et al., 2012 who reported that women prefer cesarean because it will not affect their future sex life [17]. Moreover, Utomo et al., 2018; and Barbara et al., 2016 found that women experienced some degree of female sexual dysfunction after episiotomy which could be resulted from scaring, tight suturing and dyspareunia [25,26].

Additionally, the participants perceived the caesarean as more safe for both mother and baby and could prevent some complications that may be result from vaginal delivery such as urinary incontinence. This result is congruent with Haines and associates who reported that women tend to prefer method of delivery that will decrease their risk for urinary incontinence [17]. Moreover, Age, educational and financial level also found to be linked to cesarean section preference. Same results reported by Ghotbi and his colleagues [15]. In addition, Maharlouei et al., 2013 reported that higher educational level of mother's and husband's education found to be correlated to selecting cesarean birth as a preferred method of delivery [14]. Also, Leone, 2008 reported that high socioeconomic level were associated with increased preference of cesarean birth [27].

5. CONCLUSION

It can be concluded that pain and lack of autonomy and privacy in vaginal delivery were the most common reasons reported by the Egyptian women to prefer cesarean birth.

6. RECOMMENDATIONS

Increase awareness regarding the beneficence of normal vaginal delivery (NVD) and consequences of cesarean birth, educate pregnant mothers about available pharmacological and non-pharmacological measures to reduce labor pain during prenatal classes, advocate the laboring woman's right in privacy and refusing or accepting any kind of care is recommended to improve the attitude of Egyptian women toward vaginal delivery decision. Moreover, educating pregnant women about the risks and benefits and indications of different modes of delivery may raise the awareness toward benefits of NVD. Finally, conducting the same research using a qualitative research design might reveal other aspects and in-depth understanding of women's attitude toward childbirth.

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