# Effect of Childbirth Counseling on Pregnant Women Requested for Cesarean Delivery

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#### Abstract

Aim: The study was carried out to test the effect of childbirth counseling on pregnant women requested for cesarean delivery.

*Method:* One arm intervention study was carried out at two private clinics at Mansoura, Egypt, Using the clinics database. A purposive sample of 40 women was identified based on who had planned for on demand primary Caesarean Section between October 2014 and Jan 2015.

**Results:** A total of 40 eligible women were identified from the clinics database. Most of women in the study were requested cesarean delivery because it is less pain, easier and for the safety of the baby and for their sexual health. After counseling, 75% of women switched their decision to normal vaginal delivery and actually 80% of women who were planned for cesarean delivery experienced vaginal delivery, in addition they were more satisfied with their birth experiences than other women who experienced cesarean delivery.

**Conclusion:** Counseling pregnant women who were planned for on demand cesarean delivery with adequate information and knowledge helped them moving to normal delivery and saved them from avoidable harm.

Keywords: women's preferences, Requested CS, on demand cesarean delivery, antenatal, counseling

#### I. Introduction and Background

Cesarean delivery is a surgical procedure in which incisions are made through a woman's abdomen and uterus to deliver her baby (1). Cesarean delivery is an important medical management in emergency situation when there are medical indications. It is offering significant benefits for mothers and babies when used appropriately (2). Back to the olden days, 16th and 17th centuries caesarean section was used to save the baby's life from a dying mother. In the 19th century this perception has been changed and cesarean delivery was used to save mothers lives as well when vaginal delivering could be fatal to them. In Egypt, during 20<sup>th</sup> century, cesarean delivery rate reached 10.3 in year (2000). During 21<sup>st</sup> century, cesarean delivery rate has been raised dramatically from 27.6, in 2010 to 52% in 2014. It is far exceeding the acceptable rate of 10 to 15 percent recommended by World Health Organization. (3,4)

Rate of cesarean section is increasing however, women undergo Cesarean delivery at surgical and anesthesia related risk and may experience long term consequences on future pregnancies such as placenta previa, placenta accrete, thrombo-embolism, endomyo-metrities, hystrectomy, infertility, re-hospitalization, infection & poor birth experiences than women who are having vaginal birth . Also, babies at significantly higher risk for surgical cuts, respiratory problems, asthma and breast feeding problems (5,6).

The high rate of cesarean delivery may be attributed to many factors such as medical causes, fear of malpractice liability lack of offering epidural anesthesia in labour ward, obstetricians liberal views of cesarean delivery as an acceptable mode of delivery in addition to lack of using instrumental delivery where it may be successful and the medicalization of childbirth. Also, there is a growing perception that cesarean delivery is safe & protecting women from long lasting pelvic floor disorders (7).

Nowadays, elective primary Cesarean delivery which is performed on maternal request without medical indication is increasing (8). Cesarean delivery on maternal request is defined as a primary pre labour cesarean delivery on maternal request in the absence of any maternal or fetal indication (9). Cesarean delivery on maternal request is often associated with anxiety, fear of labour, negative birth experiences, and for avoiding urogenital lacerations (10).

It is challenging to achieve the recomended cesarean delivery rate as it require performing the indicated cesarean delivery and avoiding cesarean delivery on request that do not provide better health outcomes and can cause harm for mother and the baby (11). Women are assuming that cesarean delivery is the easy way however its risks are out weight its benefits. Women are misslead by calling cesarean delivery is an easy and a safe management which can be called avoidable harms (7). If the main concern behind the requested cesarean delivery is the fear from labour pain then prenatal education should be offered (4).

## **1.1 Significant of the study:**

Cesarean delivery on maternal request has been identified as a crucial factor for raising cesarean delivery rate (4). Until now, there is no approved strategy to reduce cesarean delivery rate but there is an agreement that avoiding primary elective cesarean delivery is a good way to reduce cesarean delivery rate (4). In addition, A Healthy People 2020 calls for reducing cesarean deliveries by 10% among low risk primi gravid women by increasing the numbers of women attending a series of prepared childbirth classes (12).

Childbirth classes, or in other terms, childbirth education or childbirth counseling are not applied in the health care system in Egypt (13). Consequently pregnant women are fallen under the threats of inadequate information, negative attitude to normal childbirth, fear of childbirth which often implies requested cesarean delivery despite its risks on mothers and babies (14). This study would be essential in the process of reducing requested cesarean delivery and achieving the aim of a Healthy People 2020 by enlightening pregnant women and equipping them with adequate information which is crucial for protecting pregnant women from avoidable harm such as requested cesarean delivery.

## II. Methods

**2.1 Study aim:** This study aims to test the effect of childbirth counseling on pregnant women requested for cesarean delivery.

#### 2.2 Hypothesis

It is expected that childbirth counseling would change women's request form primary elective cesarean delivery to vaginal delivery.

**2.3 Study design:** One arm intervention study design was carried out between October 2014 and January 2015 in two of the major private clinics at Mansoura city, Egypt.

**2.4 Sampling:** A purposive sample of 40 women was identified from the clinics database based on who had planned for requested cesarean delivery during the period of 34 to 40 wks of gestation.

**2.5 Data collection:** To achieve the aim of the study two tools were used for data collection.

#### Tool 1: A semi structured interview questionnaire

It was deigned to assess

- 1- General characteristics and obstetric history of women such as, age, residence, educational level, occupation, financial level, duration of marriage and obstetric history & details of the current pregnancy.
- 2- An open question related to the causes & factors associated with choosing cesarean delivery.

**Tool 2: A satisfaction questionnaire,** it was designed to assess the rate of women's satisfaction after delivery. It included state of satisfaction regarding the baby's general condition, early holding the baby, early initiation of breastfeeding, early ambulation, early hospital discharge and the overall general satisfaction of childbirth experience. Each item scored as not satisfied=1, to some degree=2, satisfied=3

#### 2.5 Pilot study

Pilot study was conducted on 4 women to assess the tools used as well as to evaluate the settings of the study. According to the analysis of the pilot study the satisfaction questionnaire was decreased to 6 items and accordingly the time of the interview was cut to 5 minutes postpartum.

#### 2.6 Field work

During the study period the researcher attended the study settings after confirmation from the clinic secretaries by the weakly numbers of women who booked for the visits among the studied women.

The researcher met each woman separately, a full explanation of the aim and the scope of the study was given to retrieve woman acceptance and written consent. The complete instruction about the tools of data collection was given. Tool one was used to collect the general characteristics, obstetric history and causes of demanding cesarean delivery from women's point of views. Each woman was counseled for two sessions separately ( each session lasted half an hour discussion about different mode of delivery, advantages and disadvantages of normal labour and cesarean delivery for both mothers and babies, physiology of labour, process of labour, scientific evidence and supporting materials such as ( "what every woman needs to know bout cesarean delivery") was translated and used during counseling (15).

After conducting the 2 sessions with each woman, the researcher went back to the clinics in the day of giving birth to confirm woman's mode of delivery and to collect data related the satisfaction with the mother mode of delivery.

## 2.7 Ethical approval

- Informed consents were retrieved from women's participated in the study and they assured about their rights to withdraw from the study at any time.
- Women were counseled and interviewed individually to ensure confidentiality.
- Data collection tools did not touch women's religious, cultural, ethical aspects and did not harm women's reproductive health.
- All ethical issues were considered in dealing with the collected data

## 1.8 Data analysis

Information regarding general characteristic, obstetric history and satisfaction were tabulated. Women's point of views expressed in answering the open question were analyzed using principles of frame work approach used in qualitative research.

## III. Results

Table one presents the distribution of general characteristics of 40 women whom preferred to give birth by cesarean delivery. All the 40 women were requested for cesarean delivery and booked for antenatal visits between October 2014 and January 2015 in the two of the major private clinics at Mansoura city, Egypt. Women's mean age was  $23\pm5.1$ , the duration of their marriage were ranging from 1.5 to 5 years of marriage and the vast majority of them were from urban and all of them were highly educated. Three quarter of women were working and more than 60 percent reported high level financial status and three quarter of them has been paid for their labour by their health insurance while only 25 percent of them were self paid. The majority (82.5%) of them were gravidea one and (17.5%) of them experienced abortion, the mean age of gestation was 36 weeks. Box one presents quotes illustrating the causes of requested cesarean delivery from women's point of views. The main quotes were related to the fear of normal delivery and the miss-concepts that cesarean delivery is less painful, easier, more safe and less risks for both of them . Also the quotes presents that it is not fully women's demand but many women reported that their physicians whom initiated the idea of the possibility of cesarean delivery. Also, the quotes highlighted the effect of others previous experiences such as peers, sisters and relatives experiences of cesarean delivery" so why not me ...".

Table two shows the distribution of post counseling women's preferences and experienced mode of delivery. It is clear that women's preferences has been changed after counseling, three quarter of woman (75%) switched from requested cs and ask for vaginal delivery moreover, (80%) of participants actually experienced vaginal delivery.

Table three describes women's satisfaction for both experienced mode of deliveries. The table highlighted a strong statistical significant among the experience of women who give birth vaginally and those who give birth by cesarean delivery in relation to early holding the baby, early initiation of breast feeding, early ambulation and early hospital discharge. In general, women who switched from the request of cs and give normal birth were more satisfied than those who experienced cesarean delivery (p<0.05).

## IV. Discussion

The study aimed to test the effect of childbirth counseling on women's requested for primary elective on demand cesarean delivery. This aim was supported by the present study hypotheses because the study results highlighted changing in women's requests and experiences from primary elective cesarean delivery to normal vaginal delivery after counseling.

Regarding the general characteristics of women requested for cesarean delivery. The study revealed that women were young and newly marriage. This is in agreement with Bako et al, (2014) they studied women's preferences for mode of delivery after primary cs, they concluded that most of women who preferred cesarean delivery were younger (16), it may be due to lack of experiences and knowledge available. Regarding women's educational level, the study highlighted that all women requested for cs were highly educated however Bako et al, found that high rate of cs were among less educated women (16). The majority of women in the study were primi gravidea, this is in consistent with Faisal et al,2013 they studied only the primi gravidea women who requested cs (17).

When women asked why they requested cesarean delivery. The causes of requesting cesarean delivery from women's point of views reflecedt women's fear of normal labour and delivery. This fear is well documented and supported by many studies (18,19,20,21,22). Also, safety, less physical damage and less risk for mother and the baby were highlighted strongly in the study. This study results is in consistent with (17,23)

they present horror stories about negative experiences and risks of vaginal birth and that TV programs revealed the childbirth as risk for mother and baby. Surprisingly, the study explored that some physicians were behind women's request for cesarean delivery, this is in agreement with Faisal et al 2013, they also found that physicians were bushing for primary cesarean delivery (17)

In agreement with the study findings of Moor et al, they reported that vaginal delivery fosters mother and baby bonding and successful breast feeding (24). Also, the study revealed more satisfaction among women with vaginal delivery, regarding early bonding and early breastfeeding. Regarding the health condition of the baby again this study result is supported by other studies (24,25) they stressed better satisfaction of the VBAC women with neonatal physical condition, first bonding and early initiation of breast feeding.

Regarding to the preferred mode of delivery, the majority of women switched from primary elective cesarean delivery on demand to planned vaginal delivery and actually experienced vaginal delivery. This is in consistent with many studies in which the majority of women reported preference for vaginal birth after a primary cesarean delivery(16).

Study result stress the importance of counseling in shaping women's experiences of vaginal birth by offering the proper adequate simple enlightening information and knowledge to women which will enable for making the right decision. Maria et al, reported that attendance of childbirth preparatory courses and educational programs would affect the satisfaction with childbirth experiences (14).

The present findings show that women preferences for primary elective cesarean delivery were based on lack of accurate and detailed information and knowledge and when they exposed to the needed information and knowledge, they went for normal delivery. It is consistent with other studies (7,26) in which it has been reported that antenatal education and classes are shaping women's experiences in labour and delivery. Maintaining women rights for accurate information and knowledge is helping women taking the right decision which maintain their reproductive health rights and improve their experience of childbirth (27,28).

## V. Conclusion

Based on the study findings, it is concluded that, women's demand for cesarean delivery was based on miss led information that cesarean delivery is easier, less painful and safe for mother and baby. Also, the results highlighted the role of some physicians in encouraging women to demand cesarean delivery. Childbirth counseling with adequate information needed for reaching the right decision helps those women to go back to nature and give birth normally with greater satisfaction with their birth experiences. In the absence of cesarean delivery indications normal delivery should be encouraged for its safety and satisfactory experiences.

#### VI. Recommendations

#### Based on the study findings, the study is recommending the following:

- 1- Translating the booklet of "what every woman needs to know bout cesarean delivery". Into Arabic language and distributed through private and different affiliated antenatal clinics. It is available at <a href="http://www.maternitywise.org/cesareanbooklet/">http://www.maternitywise.org/cesareanbooklet/</a>.
- 2- Moving from medicalization of childbirth to humanistic and low intervention midwife-led care which is empowering women of Egypt.
- 3- Development of childbirth educational programs suited and tailored to the culture of the Egyptian women.
- 4- Working on changing attitudes and beliefs of health care providers regarding normal vaginal delivery.
- 5- Including antenatal educational program into maternity nursing undergraduate curriculum
- 6- Further studies are recommended to explore nurses and physicians perceptions and attitudes toward applying childbirth counseling and education.

#### References

- [1] Gibbons Luz, José M. Belizán, Jeremy A Lauer, Ana P Betrán, Mario Merialdi and Fernando Althabe. (2010) The Global Numbers and Costs of Additionally Needed and Unnecessary Caesarean Sections Performed per Year: Overuse as a Barrier to Universal Coverage World Health Report, Background Paper, No 30.
- [2] Marwan Khawaja, M., Jurdi, R., MS, Kabakian-Khasholian T., (2004) Rising Trends in Cesarean Section Rates in Egypt. Birth, 31(1): 12–16.
- [3] MOHP (2014) Egyptian Demographic and Health Survey. Retrived at <u>http://dhsprogram.com/pubs/pdf/PR54/PR54.pdf</u>.
- [4] Naeem,M., Muhammad Khan,Z., Abbas,S., Khan, A., Adil, M., Khan,M., (2015) Rate and Indication of elective and emergency cesarean section: a study in a tertiary care hospital of peshawar. J Ayub Med Coll Abbottabad ;27(1):151–4.
- [5] Miller ES, Hahn K, Grobman WA, Society for Maternal-Fetal Medicine Health Policy Committee. Consequences of a primary elective cesarean delivery across the reproductive life. Obstet Gynecol 2013; 121:789.
- [6] Jackson S, Fleege L, Fridman M, et al. Morbidity following primary cesarean delivery in the Danish National Birth Cohort. Am J Obstet Gynecol 2012; 206:139.e1.
- [7] Emma LB.,Lisbet L.,Kathleen B.,ChristianMB.,Edmund F., (2011) Contributing Indications to the Rising Cesarean Delivery Rate. Obstet Gynecol. 2011 Jul; 118(1): 29–38.
- [8] Ecker J. Elective cesarean delivery on maternal request. JAMA 2013; 309:1930.

- [9] American College of Obstetricians and Gynecologists (2013). Cesarean delivery on maternal request. Committee Opinion No.559. Obstet Gynecol, 121, 904-7.
- [10] Declercq, E. M., Barger, M., Cabral, H. J., Evans, S. R., Kotelchuck, M., Simon, C., Heffner, L. J. (2007). Maternal outcomes associated with planned primary cesarean births compared with planned vaginal births. Obstetrics & Gynecology, 109(3), 669–677. http://dx.doi.org/10.1097/01.AOG.0000255668.20639.40.
- [11] Souza JP, Gülmezoglu A, Lumbiganon P, Laopaiboon M, Carroli G, Fawole B, et al. WHO Global Survey on Maternal and Perinatal Health Research Group. Caesarean section without medical indications is associated with an increased risk of adverse short-term maternal outcomes: the 2004-2008 WHO Global Survey on Maternal and Perinatal Health. BMC Med 2010;8:71.
- [12] Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services (2010). Healthy People 2020, 2020 Topicesarean delivery and Objectives: Maternal, Infant, and Child Health. Retrieved from <u>http://www.healthypeople.gov/</u>2020/topicesarean deliveryobjectives 2020/objectiveslist.aspx?topicId=26.
- [13] Egyptian Initiative for personal rights (2010) The Right to Reproductive Health Services and Information. Articles 10,12,14 (2) b and 16 (1).
- [14] Maria AM., José GC., Maria YM., 2013. Antenatal education and the birthing experience of Brazilian women: a qualitative study. BMC Pregnancy and Childbirth 2013, 13:171 <u>http://www.biomedcentral.com/1471-2393/13/171</u>.
- [15] Childbirthconnection.org. http://www.maternitywise.org/cesareanbooklet/.
- [16] Tamim H1, El-Chemaly SY, Nassar AH, Aaraj AM, Campbell OM, Kaddour AA, Yunis KA. (2007) ,Cesarean delivery among nulliparous women in Beirut: assessing predictors in nine hospitals. Birth:34(1):14-20.
- [17] Faisal, I., et al., Why do primigravidae request caesarean section in a normal pregnancy? A qualitative study in Iran. Midwifery (2013), <u>http://dx.doi.org/10.1016/j.midw.2013.08.011i</u>.
- [18] Salomonsson B., Gullberg MT., Alehagen S., and Wijma K. (2013) Self-efficacy beliefs and fear of childbirth in nulliparous women Journal of Psychosomatic Obstetrics & Gynecology 34 (3),116.
- [19] Fenaroli, V., Saita E., (2013) Fear of childbirth: Acontribution to the validation of the Italian version of the Wijma delivery expectancy/experience questionnaire (WDEQ). TEM. 20(2):1-24
- [20] Handelzalts JE., Fisher S., and Lurie S, et al (2012) Personality, fear of childbirth and cesarean delivery on demand. Acta Obstetricia et Gynecologica Scandinavica 91:16–21.
- [21] Nieminen K., Stephansson O., and Ryding EL (2009) Women's fear of childbirth and preference for cesarean section-a crosssectional study at various stages of pregnancy in Sweden. Acta Obstetricia et Gynecologica Scandinavica 88:807–13.
- [22] Laursen, M., et al. (2008) Fear of childbirth: predictors and temporal changes among nulliparous women in the Danish National Birth Cohort. BJOG: An International Journal of Obstetrics & Gynaecology, 115(3), 354–360.
- [23] DeJong J, Akik C, El Kak F (2010) The safety and quality of childbirth in the context of health systems: mapping maternal health provision in Lebanon. Midwifery, 276:549-557.
- [24] Moore, E.R., et al. (2012). Early skin-to-skin contact for mothers and their healthy newborn infants. Cochrane Database Syst Rev, 5, Cd003519.
- [25] Lee L. and Holroyd E (2009) Evaluating the effect of childbirth education class: a mixed-method study. International Nursing Review 56(3):361–368.
- [26] Gagnon AJ, Sandall J. Individual or group antenatal education for childbirth or parenthood, or both. Cochrane Database of Systematic Reviews 2007, Issue 3. Art. No.: CD002869. DOI: 10.1002/14651858.CD002869.pub2.
- [27] Regan, M., McElroy, K., RN, Moore, K., (2013) Choice? Factors Influencing Birth Decisions Making for Childbirth. The Journal of Perinatal Education, Volume 22, Number 3.
- [28] Zhang J, Liu Y, Meikle S, Zheng J, Sun W, Li Z. Caesarean delivery on maternal request in southeast China. Obstet Gynecol 2008;111(5):1077–82.

Table one: D	Distribution of w	vomen's general	characteristics and	obstetrics history
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General characteristics	No %		
Age (years) mean $\pm$ SD	$23.3 \pm 5.1$		
Residence			
Urban	37 (92.5%)		
Rural	3 (7.5%)		
Educational level			
Higher education	40 (100%)		
Occupation			
Working	30 (75%)		
Housewife	10 (25%)		
Financial status			
High level	25 (62.5%)		
Moderation	15 (37.5%)		
Duration of marriage / years	1.5 to 5 (min-max		
Mode of payment the coast			
Private	30 (75%)		
Insurance	10 (25%)		
Obstetric history			
Gravidity 1	33 (82.5%)		
Abortion	7 (17.5%)		
Gestational age/wks (34-40	36 (34-40) mean(min-max)		

# Box one: Selected quotes illustrating causes of on demand cesarean delivery from women's point of views

Causes of elective cesarean delivery				
Fear of normal delivery:				
"Cesarean delivery is less pain	ful than normal delivery" (All women)			
"Easier"				
"No suffer because you are und	ler anesthesia"			
"to get red of my pains"	"to get red of my pains"			
No risk:				
"Cesarean delivery is reducing the risk of genital and sexual problems"				
"Will not affect my sexual relation"				
"ill not hrm my body"	(30 woman)			
Physicians push:				
"It is recommended by my physician"				
"Convenience to my time"				
Physician told me"				
"Less duration"	(20 woman)			
Safety:				
"For the safety of my baby"				
"It is safe "	(20 woman)			
"As my sister/ relatives"				
"so why not me" (15 woman)				

#### Table two: Distribution of post counseling women's preferences and experienced mode of delivery

Mode of delivery	After counseling preferences	Experienced mode of delivery	
Primary elective cesarean delivery	10 (25%)	8 (20%)	
Vaginal Delivery	30 (75)	32 (80%)	

## Table three: women's Satisfaction after both mode of deliveries

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State of satisfaction	Normal delivery	Cesarean delivery	Chi square test		
	N =32 %	N=8 %	X2 P		
Baby's physical condition					
Satisfied	20 (62.5%)	6 (75%)	1.19 0.551		
To some extent	12 (37.5%)	2 (25%)			
Dissatisfied	0	0			
Early holding the baby					
Satisfied	17 (53.1%)	2 (25 %)	7.77 0.020*		
To some extent	15 (46.9%)	4 (50%)			
Dissatisfied	0	2 (25 %)			
Early initiation of breast feeding					
Satisfied					
To some extent	20 (62.5%)	0	22.42 0.001**		
Dissatisfied	7 (21.9%)	0			
	5 (15.6%)	8 (100%)			
Early ambulation					
Satisfied	15 (46.9%)	2 (25 %)	6.78 0.030*		
To some extent	10 (31.2%)	2 (25%)			
Dissatisfied	7 (21.9%)	4 (50%)			
Early hospital discharge					
Satisfied	25 (78.1)	2 (25%)	5.98 0.040*		
To some extent	7 (21.9%)	4 (50%)			
Dissatisfied	0	2 (25%)			
General satisfaction					
Satisfied	20 (62.5%)	4 (50 %)	6.23 0.033*		
To some extent	10 (31.2%)	2 (25%)			
Dissatisfied	2 (6.3%)	2 (25%)			