

Knowledge of pregnant women in the southwest Iran about complications of cesarean section, 2009

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Abstract

Introduction:

Cesarean section delivery is one of indices in mothers' health care planning. The high rate of elective cesarean is a warning for our country's health management. The aim of this study was to determine the mothers' knowledge on complications of cesarean section delivery.

Materials and Methods:

This cross-sectional study was conducted in 2009. 360 pregnant women (third trimester) were recruited randomly from hospitals in Jahrom, Iran. Data were analyzed using SPSS, version 11.5. Based on their knowledge score, the subjects' level of knowledge was classified into three levels: good knowledge level (score 14-18), moderate knowledge level (score 9-13), and poor knowledge level (score 0-8)

Results:

The levels of knowledge among the pregnant women about complications of cesarean section was good in 43.2%, average in 38.4% and poor in 18.4% of the mothers. 68.1% of them selected vaginal delivery (NVD) and 31.9% delivered using C/S. There was a significant association between the knowledge of pregnant women about complications of cesarean section and choosing the type of delivery ($p=0.04$). The main cause of women's tendency toward C/S was fear of labor pain and ease of cesarean section delivery (43.3%).

Conclusion:

The level of knowledge about complications of cesarean section among the women under the study was good. Also, according to the results of this study fear of labor pain was the important cause for the choice of C/S in pregnant women. It is recommended that painless delivery should be practiced in Jahrom's hospitals and mothers are encouraged to give vaginal birth in their first delivery.

Keywords: Knowledge, Complications, Cesarean Section, Pregnant, Woman

Introduction

Generally, cesarean section is considered a means by which mortality rate of both mother and neonate is reduced. Nevertheless, enormous increase in cesarean delivery is regarded as a

ubiquitous problem in the society. Despite World Health Organization report that proposes cesarean section attempt in only 5 to 15 percent of labors, the rate of this procedure is between 40 to 60 percent in various regions of Iran, according to the

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health education and enhancement office of the Department of Health, significantly higher than the worldwide standards (1). Increasing number of cesarean sections in many countries has brought about serious concerns among public health managers (2). In a study recently conducted in England, the prevalence of cesarean sections had increased from 12.5 percent to 18.3 percent in 1999 (3). In Iran, the rate of cesarean section reached 58 percent in 2005 (4). According to Aram *et al.* (2003, Isfahan) among pregnant women 57 percent and 43 percent chose natural delivery and cesarean section respectively. They showed that the rate of cesarean is reduced by increasing age and increased by higher educational status. They also found that the main reason to choose natural delivery was the fear of generalized anesthesia and the main reason to choose cesarean section was fear of parturition pain (5).

Another study performed in Semnan, 2004, showed that 38 percent of pregnant women preferred their delivery means to be cesarean section mainly because of fear of parturition pain (6). It seems that unawareness and deficiency of appropriate educations about various labor options is a contributing factor for increased cesarean section (4).

Considering this information and the distance to the WHO offer of containing cesareans to 15 percent of the labors, necessitates research into the reason for increased cesarean section and application of strategies in order to reduce its conduct. In this study we tried to demonstrate the level of knowledge of the third trimester pregnant women about cesarean complications in order to figure out the reasons for trend towards this operation.

Materials and Methods

This cross-sectional study was performed in 2009 over 360 third trimester pregnant women. The sample size calculated to be 357 cases based on the number of yearly labors in two Jahrom city hospitals and 95 percent confidence interval and the precision of 5 percent. The cases were selected from population attending Peymanieh and Motahhari hospitals' clinics and presented with a questionnaire. The content reliability of the questionnaire was assessed by specialist opinion and the alpha-chronbach was 0.9. The first section of the questionnaire acquired demographic features including age, education, residence, and the number of pregnancies and parities. The second section contained 18 questions regarding the level of knowledge of the examinees. Here, the correct answers above 75 percent are regarded as good, between 50 to 75 percent as moderate, and below 50 percent as weak. Thus, scores 14-18 correspond to good, 9-13 correspond to moderate, and less than 9 correspond to weak.

Mean and standard deviation of scores were calculated. The significance value was less than 0.05. The data introduced to SPSS software version 11.5 and analyzed by chi-square test.

Results

In the present study 360 third trimester pregnant women with the mean age of 25.9 ± 5.1 years participated. Most of them (40.7%) were between 21-25 years of age. Of the study population 67.2 percent (217 cases) were resident in city and most of them (40.2%) had been educated less than high school diploma. Evaluation of the cases showed that most of the pregnant women were in their first pregnancy and labor.

The knowledge level of pregnant women about complications of the cesarean section delivery is presented in table 1 based various age groups. The results show that the knowledge is moderate or good in all age groups except for women above 30 years of age (47%) who had weak knowledge. We found that most of the residents in urban or rural areas had good knowledge (table 1). The cesarean preference was 33.2 percent in urban residents and 32.8 percent in rural residents.

The correlation between educational status and knowledge of the participants was significant ($P=0.05$). In other words, the higher the educational level, the better the knowledge level (table 1).

In this study, 43.2 percent had good knowledge and 38.4 percent had moderate knowledge. In general, 31.9 percent

preferred cesarean delivery. Interestingly, 47.5 percent of those inclined to natural delivery had good knowledge of cesarean section complications while good knowledge was detected in only 33.9 percent of those inclined to cesarean section. There found to be a significant correlation between knowledge level and the preferred choice of delivery (either natural or cesarean) ($P=0.04$).

We noticed that the number of pregnancies was not affecting knowledge level and most of the individuals had good knowledge about the complications of the cesarean section. It is noteworthy that women with the first, second, third, or more pregnancies had good knowledge of the cesarean section complications while knowledge of those inclined to cesarean section was moderate.

Table 1. Knowledge of the third trimester pregnant women about cesarean complications, according to their demographic features, inclination toward either cesarean or natural delivery in Jahrom hospitals

Variables	Knowledge level	Good (%)	Moderate (%)	Weak (%)
Age	<20y	17 (41.5)	18 (43.9)	6 (14.6)
	21-25y	58 (42)	52 (37.7)	28 (20.3)
	26-30y	55 (53.4)	32 (31.1)	16 (15.5)
	>30y	20 (24)	24 (29)	12 (47)
Residence	city	94 (43.5)	85 (39.4)	37 (17.1)
	village	46 (43.4)	39 (36.8)	21 (19.8)
Educational level	under diploma	50 (35.5)	59 (41.8)	32 (22.7)
	diploma	57 (44.5)	49 (38.3)	22 (17.2)
	above diploma	47 (56.6)	24 (28.9)	12 (14.5)
Choice of delivery	vaginal delivery	116 (47.5)	88 (36.1)	40 (16.4)
	cesarean	39 (33.9)	50 (43.5)	26 (22.6)
Number of pregnancies	1 st	85 (42.9)	72 (36.4)	41 (20.7)
	2 nd	40 (46.5)	32 (37.2)	14 (16.3)
	3 rd or more	30 (41.7)	30 (44.4)	10 (13.9)

Overall, 43.3 percent of the women mentioned fear from natural delivery and less pain and more readiness of the operation as the main reason for their

inclination to cesarean. Fear from natural delivery was observed in 24.3 percent of women. In decreasing order were less pain and more readiness of cesarean (19%),

maternal factors (18%), previous tubal ligation (2.7%), infertility (1.8%), and other factors (29.7).

Discussion

Most of the participants of the current study had good knowledge. Arjmandi's research (Tehran, 2005) demonstrated that 33.5 percent of participants had very good or moderate knowledge and 55.6 percent had good knowledge. They concluded that the knowledge of pregnant women resident in Tehran was relatively appropriate (7).

Yarandi (Tehran, 2003) showed that knowledge about options for delivery was good only in 2.2 percent of cases and 67.3 percent had moderate knowledge (8). In another study conducted by Porheidari (Quom, 2006) on pregnant women presented to the primary health care facilities, knowledge about methods of pregnancy termination was good in 59.46 percent and moderate in 40.4 percent (9).

The results of current study illustrated that 32 percent of pregnant women are inclined to cesarean delivery, fairly congruent with similar studies.

Yasaii studied 160 pregnant women in 2006 and found that 58.8 percent were inclined to natural delivery whereas 41.2 percent preferred cesarean section (10).

MohammadiTabar performed a study in Tehran hospitals, 2007, and showed that 44 and 56 percent of participants were in favor of cesarean section and natural delivery respectively (11). Similarly, Hasanpor in Tabriz reported that 66 percent of pregnant women considered natural delivery as the first choice while 34 percent primarily thought of cesarean section (12). They numbered reasons for trend towards cesarean in the following order: fear from natural delivery (24.3%)

and less pain and more ease associated with cesarean section (18.9%). The main factor contributing to women's preference toward cesarean delivery in Salmani study (Yazd, 2007) and jamshidimanesh (Tehran, 2007) was fear from pain and unawareness about natural delivery (13, 14).

Negahban conducted a study in Rafsanjan, 2004, and reported that the main reason for turning to cesarean section is intense fear from pain associated with natural delivery and unawareness about cesarean complications (15).

The choice to the means of delivery is an intrinsic right for the mother. Proper education of mothers with provision of correct information either by physicians in charge for patient care or public media plays critical role in their appropriate decision making. Awareness of the pregnant woman about both natural delivery and cesarean section pros and cons are important factors regarding the means of pregnancy termination and what makes this choice more informed is the confidence about the chosen practice. This confidence occurs if the natural delivery conditions advance consistent with current universal standards and fair facilities deployed to it. Taking into account the significant increase in the number of cesarean procedures during last decades, strategies should be devised in order to enhance maternal information.

Conclusion

As a conclusion it should be remembered that the major trend towards cesarean section is the fear of pain associated with natural delivery, not the knowledge about its complications. Thus, by introducing painless labor and propagation of methods

for reduction of fear, pain, and increasing self-confidence it is possible to affect the choice of delivery and persuade them especially for natural delivery. It is suggested that the facilities for painless labor is made available in hospitals.

Limitations

This study is performed in a defined length of time and the participants were limited to

pregnant women presented to Peymanieh and Motahhari hospitals' clinics.

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References:

1. Sharifi Rad GR, Fathian Z, Tirani M, et al. Study on Behavioral Intention Model (BIM) to the attitude of pregnant women toward normal delivery and cesarean section in province of Isfahan – Khomeiny Shahr, 1385. *J Ilam Univ Med Sci* 2007; 15(1): 19-23. (Persian)
2. Rahimikian F, Mirmohamadali M, Mehran A, et al. Effect of education design based on Health Belief Model on choosing delivery mode. *J Fac Nurs Midwif* 2009; 14(3-4): 25-32. (Persian)
3. Black C, Kaye JA, Jick H. Cesarean delivery in the United Kingdom: time trends in the general practice research database. *Obstet Gynecol* 2005; 106(1): 151-5.
4. Laluei M, Kashanizadeh N, Teymouri M. The influence of academic educations on choosing preferable delivery method in obstetrics medical team: investigating their viewpoints. *Iran J Med Edu* 2009; 9(1): 69-78. (Persian)
5. Aram S, Allame Z, Zamani M, et al. The relative frequency of the delivery method in the pregnant women referring to medical centers of Isfahan in 2002. *Iran J Obstet Gynecol Infertil* 2001; 4(8-7): 79-74. (Persian)
6. Moradan S. Evaluation of selection of route of delivery and its causes in patients referring to medical centers of semnan from april till September 2004. *Iran J Obstet Gynecol Infertil* 2004; 7(2): 44-9. (Persian)
7. Arjmandi Rafsanjani B, Farzin Moghaddam S. Assessment of the level of the pregnant womens knowledge towards the advantages and disadvantages of normal vaginal delivery and cesarean section, Tehran, 2005. *J Iran Univ Med Sci* 2007; 14(55): 13-22. (Persian)
8. Yarandi F, Rezaee Z, Eftekhar Z, et al. The knowledge and attitude of pregnant women about delivery methods in health centers in Tehran. *J Med Fac Guilan Univ Med Sci* 2002; 11(42): 15-20. (Persian)
9. Poorhidary M, Sozany A, Kasaeyan A. The survey of knowledge and attitude of pregnant women referred to medical centers of Qom towards type of delivery. *Journal of Knowl Health* 2007; 2(2): 28-33. (Persian)
10. Yassae F, Mohseni B. Role of mother's preference for the type of delivery. *J Shahid Beheshti Univ Med Sci* 2007; 31(2): 129-32. (Persian)
11. Mohammaditabar Sh, Kiani A, Heidari M. Survey on tendencies of primiparous women for selecting the mode of delivery. *J Babol Univ of Med Sci* 2009; 11(3): 54-9. (Persian)
12. Hasanpour Sh, Bani S. Preference method of delivery and it's relevant causes in view of pregnant women referring to the obstric clinic of Alzahra hospital in Tabrez City. *Nurs Midwif J* 2008; 3(10): 51-6. (Persian)
13. Salmani N. Study of the viewpoint of pregnant women about factors affecting in selecting giving birth method in Shohaday Kargar hospital. *J Urmia Nurs Midwif Fac* 2008; 5(4): 156-61. (Persian)
14. Jamshidi Manesh M, Haghdoost S, Joybari M, et al. The process of women's decision making for selection of cesarean delivery. *Iran J Nurs* 2009; 21(56): 55-67. (Persian)
15. Negahban T, Ansari Jaber A, Kazemi M. Preference method of delivery and it's relevant causes in view of pregnant women referring to public and private clinics in Rafsanjan city. *J Rafsanjan Univ Med Sci* 2006; 5(3): 161-8. (Persian)