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

Ghasvari M*, Rahmanian V1, Rahmanian K2

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1. Dept. of Statistics, Jahrom University of Medical Sciences, Jahrom, Iran
2. Dept. of social Medicine, School of Medicine, Jahrom University of Medical Sciences, Jahrom, Iran

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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
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 on 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% in urban residents and 32.8% 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% had good knowledge and 38.4% had moderate knowledge. In general, 31.9% preferred cesarean delivery. Interestingly, 47.5% of those inclined to natural delivery had good knowledge of cesarean section complications while good knowledge was detected in only 33.9% 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

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

Overall, 43.3% 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% of women. In decreasing order were less pain and more readiness of cesarean (19%).
Knowledge of pregnant women in the

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
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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: