Tendency Toward Cesarean on Maternal Request in Fear of Sexual Dysfunction

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Introduction

Cesarean section, as a delivery method, is potentially life-saving and would have its benefits for mothers and neonates when it is performed under critical circumstances. Cesarean section on maternal request or elective cesarean is a relatively new concept, which has been defined as requesting a cesarean when there are no maternal or fetal indications (1). Although cesarean section on maternal request is a challenging issue for obstetricians and gynecologists (OB/GYNs), some consider it ethical by pointing out that the mother is fully informed about the short-term and long-term benefits and consequences (2). However, the International Federation of Gynecology and Obstetrics (FIGO) considers it hazardous and unjustified when it is performed for non-medical indications due to its potential complications and misuse of limited clinical sources (3).

A systematic review and ecological analysis (2015) indicated that the cesarean section rate higher than 10% would not lead to the decline of maternal and neonatal mortality rates (4, 5). Furthermore, cesarean section is a risk factor for placenta previa and the implantation of the abnormally invasive placenta and raises the chances of intra-abdominal adhesion, blood transfusion, and surgical injury each time it is repeated (6, 7). Moreover, globally, the annual cost of cesarean section on maternal request is approximately five times more than the annual cost of cesarean section with maternal or fetal indications (8).
The rise of cesarean section rates around the world is a major global public health concern (4). The cesarean section rate increased from 7% in 1990 to 19% in 2014 worldwide, with variations among religions and regions (9). A report released by the World Health Organization (WHO) showed that 45.6% of all deliveries in 2018 in Iran were via cesarean section (10). Another survey in the southwest of Iran showed that the rate of cesarean section was 51.6% in 2007 and 53.3% in 2010 (11), with up to 87% in some private hospitals (12). The most recent study in 2014 showed that the rate of cesarean section was 78.5% in university-related hospitals and 91.9% in private hospitals in Tehran, Iran (13).

The capital of Iran, Tehran, recorded one of the highest cesarean section rates (74.3%) in the world in 2009 (14). A study showed that one of the main reasons for the high rate of cesarean section in Iran is the physician’s recommendation to perform a cesarean section (15). Other studies have claimed that one of the reasons behind OB/GYNs’ tendency toward cesarean section on maternal request is their fear of legal consequences and litigation (16, 17), and that vaginal delivery is a long process and takes a long time (18).

On the other hand, Iranian women’s views about life and marriage and having children have changed tremendously within the past decade. Unlike the previous generation of women in this country, modern Iranian women prefer to marry at older ages and have no children or one child. In the case of choosing to have only one child, the mother and OB/GYN do not take any risk of any labor complications for the baby and choose cesarean section on maternal request with no hesitation in the first place.

Despite considerable evidence that shows vaginal birth is safer and associated with fewer complications (17), the rate of cesarean section is rising worldwide. A systematic review and meta-synthesis study claimed that “clinician’s personal beliefs” was a significant factor that influenced OB/GYNs’ decisions to perform a cesarean section (17). However, studies on the relationship between OB/GYNs’ knowledge, attitude, and practice about cesarean section are rare. In this regard, we studied the knowledge, attitude, and behavior of Iranian OB/GYNs about cesarean section to understand the main factors that contribute to guiding and fulfilling requests for performing a cesarean section on maternal request.

Materials and Methods

A cross-sectional study was conducted between 2018 and 2019 in Iran. The institutional review board (IRB) approval was received from Shahid Beheshti University of Medical Sciences. A questionnaire, with four sections, was designed based on the aim of the study, experts’ opinions, and previous questionnaires. The first section included demographics (including gender, years of experience, age, and place of practice) and OB/GYNs’ personal experiences of delivery methods. Section 2 covered questions related to OB/GYNs’ knowledge about the advantages and disadvantages of cesarean section and vaginal delivery (three questions). In the third section, participants were asked to answer 10 questions about their attitude toward each mode of delivery, and section 4 (three questions) focused on participants’ professional experiences and their preferred method of delivery.

Items related to each question were scored on a five-point Likert scale (1-5), ranging from strongly agree to strongly disagree. Ten OB/GYN experts confirmed the face and content validity of the questionnaire. The test-retest method was applied to determine the reliability of the questionnaire. Thirty OB/GYNs completed the questionnaire two times within a two-week interval. As 85% of the responses were similar, its reliability was confirmed. The questionnaire was distributed to 153 randomly selected OB/GYNs, who attended the Iranian Society of Obstetrics and Gynecologists conference; 100 participants completed and returned the questionnaire. The data were analyzed using SPSS 25 (SPSS Inc., Chicago, Ill., USA), as well as Mann–Whitney U, Kruskal–Wallis, independent sample, and Fisher exact tests. Spearman’s rho was used to explore the correlations between knowledge, attitude, practice, gender, and years of experience.

Results

There were 87 female and 13 male participants in this study. The average age of female and male participants was 46 (range 33-65) and 57 years old (range 45-70), respectively. The difference between the mean ages of the gender groups was significant (P<0.001). Thirty-three participants experienced a cesarean section on maternal request in their personal lives, 22 had vaginal deliveries, 14 went on emergency cesarean section, 19 had no labor experience, and 12 experienced both vaginal delivery and emergency cesarean section. The male participants had more years of experience (P<0.0001). Figure 1 demonstrates the average age and participants’ workplace.

Fifty-three percent of female OB/GYNs and 38.5% of male participants supported cesarean with no medical indications for their immediate families. Also, 34.5% of female OB/GYNs and 23.1% of male participants encouraged pregnant mothers to have an elective cesarean, and 81% of participants claimed that they would accept the pregnant mothers’ requests for elective cesarean if they insisted on it.

The average score of the three questions about OB/GYNs’ knowledge on cesarean section was 10.59 (range 5-15), which asked the participants which advantages of a cesarean section led them to prefer this method. The average score of the seven questions was
23.88 (7-35), which showed a positive attitude toward cesarean section on maternal request.

As shown in Table 1, OB/GYNs’ knowledge about the benefits of cesarean section guided them to perform a cesarean section on maternal request. Also, their positive attitude toward cesarean section had an important role in choosing a cesarean section for their patients and accepting their requests to perform a cesarean section on maternal request. The results showed that the role of attitude in performing a cesarean section on maternal request is more important than the contribution of knowledge.

Although the obstetricians’ positive attitude toward vaginal delivery had a positive effect on their practice, this effect was not significant. Some obstetricians insisted on the advantages of vaginal delivery, but statistical analysis showed that they did not often follow their knowledge and attitude and practice cesarean section more than vaginal delivery (Table 1).

Table 1. The relationship between OB/GYNs knowledge, attitude, and practice and types of deliveries

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>Performance of cesarean section on request</th>
<th>Knowledge cesarean section</th>
<th>Attitude cesarean</th>
<th>Knowledge-vaginal delivery</th>
<th>Attitude vaginal delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation Coefficient</td>
<td>Correlation Coefficient</td>
<td>Correlation Coefficient</td>
<td>Correlation Coefficient</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.000</td>
<td>.250*</td>
<td>.614**</td>
<td>-.174</td>
<td>.175</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>Sig. (2-tailed)</td>
<td>Sig. (2-tailed)</td>
<td>Sig. (2-tailed)</td>
<td>Sig. (2-tailed)</td>
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<td></td>
<td>.</td>
<td>.012</td>
<td>.000</td>
<td>.083</td>
<td>.081</td>
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<td></td>
<td>N</td>
<td>100</td>
<td>100</td>
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<td>100</td>
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<td>100</td>
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</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

We found a negative correlation between participants’ age and attitude toward cesarean section on maternal request (r=-0.302, P=0.002) and the practice of cesarean section on maternal request (r=-0.215, P=0.032). Our results showed a positive correlation between participants’ knowledge of the advantages of cesarean section and their practice of cesarean section on maternal request rates in public and private hospitals—but not in academic hospitals. There is a similar correlation between participants’ positive attitude toward elective cesarean and practicing cesarean section on the maternal request rate in these hospitals (Table 2).

OB/GYNs who chose elective cesarean in their personal lives (for themselves or their wives) showed a positive attitude toward cesarean section (mean score 25.39) and negative attitude toward vaginal delivery (mean score 2.79), which means they were satisfied with the type of delivery. The data also indicated no significant relationship between the sex of OB/GYNs and their knowledge, attitude, and practice of cesarean section on maternal request (Table 3).
Table 2. The relationship between knowledge, attitude, and practice of OB/GYNs towards cesarean section on maternal request and rate of cesarean delivery to vaginal deliveries in private and public hospitals

<table>
<thead>
<tr>
<th></th>
<th>Cesarean to vaginal delivery (private hospital)</th>
<th>Cesarean to vaginal delivery (public hospital)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance of cesarean section on maternal request to vaginal delivery (private hospital)</td>
<td>Correlation Coefficient: 1.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N: 96</td>
<td></td>
</tr>
<tr>
<td>Performance of cesarean section on maternal request to vaginal delivery (public hospital)</td>
<td>Correlation Coefficient: 0.296**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>N: 95</td>
<td>99</td>
</tr>
<tr>
<td>Knowledge cesarean section</td>
<td>Correlation Coefficient: 0.318**</td>
<td>0.323**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>N: 96</td>
<td>99</td>
</tr>
<tr>
<td>Attitude-cesarean section</td>
<td>Correlation Coefficient: 0.078</td>
<td>0.276**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.452</td>
</tr>
<tr>
<td></td>
<td>N: 96</td>
<td>99</td>
</tr>
<tr>
<td>Knowledge vaginal delivery</td>
<td>Correlation Coefficient: -0.151</td>
<td>-0.049</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.141</td>
</tr>
<tr>
<td></td>
<td>N: 96</td>
<td>99</td>
</tr>
<tr>
<td>Attitude vaginal delivery</td>
<td>Correlation Coefficient: -0.056</td>
<td>0.061</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.591</td>
</tr>
<tr>
<td></td>
<td>N: 96</td>
<td>99</td>
</tr>
</tbody>
</table>

*: Correlation is significant at the 0.05 level (2-tailed).
**: Correlation is significant at the 0.01 level (2-tailed).

Table 3. The relationship among knowledge, attitude, practice of the cesarean section on maternal request and OB/GYN’s sex

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Knowledge- Cesarean section on maternal request</td>
<td>10.59</td>
<td>2.16</td>
</tr>
<tr>
<td>Attitude- Cesarean section on maternal request</td>
<td>24.07</td>
<td>4.82</td>
</tr>
<tr>
<td>Performance of cesarean section on maternal request</td>
<td>7.80</td>
<td>1.77</td>
</tr>
</tbody>
</table>

*Independent sample Test. The other tests in Table 3 are Mann-Whitney

Overall, 51% of obstetricians (54% of female and 30.8% of male OB/GYNs) believed that the lower rate of Erb’s palsy in cesarean section had a role in OB/GYNs’ tendency toward cesarean, whereas 64% of them mentioned that their knowledge about the lower risk of cerebral palsy in cesarean guided them to perform this type of delivery. Seventy percent of the participants stated that since the urinary system and pelvic floor problems are more prevalent in vaginal delivery, they accept cesarean section on maternal request.

On the contrary, 75% of OB/GYNs who preferred vaginal delivery expressed that their awareness about the lower risk of placenta adhesion in future pregnancies played a role in their choice. Seventy-six percent of obstetricians preferred the vaginal delivery method because they were afraid of anesthesia complications, and 44% of them selected vaginal delivery because of rapid recovery time. Furthermore, 68% chose vaginal delivery for their patients because they were aware of the lower rate of trauma and bleeding.

The reason for 54% of participants who expressed a positive attitude toward cesarean section on maternal request was saving time. Also, they do not fear the baby’s health, especially in stage 2 of labor. These doctors do not need to be afraid of the timely presence of pediatricians and anesthesiologists when it is
unpredictably necessary. Further, 64% of elective cesarean fans are frightened of grades 3 and 4 perineal tears during vaginal delivery and their effect on mother’s sexual life; also, they fear legal issues and insurance coverage, which guide them to choose a cesarean section on maternal request for their patients. Furthermore, limitations in having appropriate monitoring and supervision of labor room play a significant role in the attitude of 34% of them toward cesarean section on maternal request. However, 13% of OB/GYNs preferred performing vaginal delivery because they will be paid more.

Further, 52.8% of female and 38.5% of male participants recommended cesarean section to their immediate family. Also, 34.5% of female and 23.1% of male participants encouraged pregnant mothers to have a cesarean section, and 81% of the participants accepted pregnant mothers’ requests for cesarean section. It is worth mentioning that we did not find any correlation between age, gender, and years of experience with the practice of cesarean section on demand.

Discussion

Our results showed a significant positive correlation between participants’ knowledge of the advantages of cesarean section and their practice of cesarean section on maternal request rates in public and private hospitals. We also found a statistically significant negative correlation between participants’ attitude toward cesarean section on maternal request and their cesarean performance in only public hospitals. Some OB/GYNs preferred vaginal delivery due to rapid recovery, lower risk of placenta adhesion in future pregnancies, anesthesia complications, and lower rates of trauma and bleeding. However, in vaginal delivery, the fear of sexual dysfunction and legal issues related to delivery complications are the main factors that shape OB/GYNs’ positive attitude toward cesarean section.

In the past century, cesarean has played a special role in reducing maternal and child mortality rates, but a worrying issue in the modern health care system is the rising number of cesarean sections worldwide (17). Moreover, there is controversy over the effect of vaginal delivery on postpartum sexual dysfunction, and, based on our study, this is the main reason behind the positive attitude and tendency of most OB/GYNs toward cesarean on demand. However, the result of a study conducted by Barrett et al. on 484 British primiparous women showed that women who had undergone cesarean section were less likely to experience sexual dysfunction at three months postpartum, but there was no significant difference at six months (19). Gungor et al. investigated the effects of mode of delivery on postpartum sexual function and found no difference in sexual satisfaction of males between two delivery method groups (20). Moreover, a meta-analysis in 2017 indicated that the mode of delivery was not a major factor in determining sexual satisfaction after delivery (21).

Compared to vaginal delivery, cesarean section is associated with less urinary incontinence and pelvic organ prolapse; however, this should be weighed against the increased risk of subfertility in future pregnancies and adverse outcomes in offspring (22). Other than short-term adverse effects of cesarean section, such as infection, hemorrhage, thromboembolism, and visceral injuries, there are long-term risks associated with cesarean section. Based on a systematic review and meta-analysis, cesarean section is associated with future subfertility and pregnancy risks (such as placenta previa and uterine rupture) and also increases the odds of obesity and asthma in children (22).

Studies have shown that OB/GYNs play essential roles in increasing the rate of cesarean sections with no medical indications (23, 24). In this study, we determined OB/GYNs’ knowledge, attitude, and practice of cesarean section and vaginal delivery and their relationships and found a significant positive correlation between OB/GYNs’ knowledge and attitude toward cesarean section and their practice of cesarean section on maternal request rates.

A meta-analysis in Iran described some factors influencing the rate of cesarean section in three categories, including social factors, obstetric-medical causes (such as previous cesarean), and non-obstetric medical causes (such as doctors’ suggestions) (15). Iranian women’s views about life and marriage and having children have changed tremendously; unlike the previous generation of women in this country, modern Iranian women prefer to marry at older ages and have no children or one child. Furthermore, due to unstable and bad economic conditions, some women prefer to freeze their embryos for a later time in the hope of having a better socioeconomic situation. Therefore, when the time comes to have a child, the mother and OB/GYNs do not take any risk of any labor complications for the baby and choose cesarean section on maternal request with no hesitation in the first place.

We found that OB/GYNs’ knowledge about the benefits of cesarean section and their positive attitude about it guided them to perform a cesarean section on maternal request. Globally, the decision to perform a cesarean section is highly influenced by OB/GYNs and midwives’ believes and preferences, as shown in a systematic review and meta-synthesis (17). In a study conducted in Iran, the researchers found that 62.2% of obstetricians and 57.6% of midwives preferred cesarean section for themselves. Further, 34% of obstetricians and 17.6% of midwives recommended this mode for primiparas with no indication of cesarean (25). Bani et al. (2010) showed a significant correlation between the clinicians’ preferential method of delivery and their recommended mode to pregnant women.

In our study, OB/GYNs who had chosen elective cesarean in their personal lives (for themselves or their
wives) showed a positive attitude toward cesarean section and negative attitude toward vaginal delivery. Although the literature shows that in female sexual function, there is no difference between vaginal and cesarean section deliveries (26), we found that our OB/GYNs believed that the mode of delivery plays an important role in future sexual satisfaction.

The perceived risk of complications of normal vaginal delivery, fear of legal complications, and coping with labor pain are other contributing factors to the increased rate of cesarean section in Iran (15). OB/GYNs’ knowledge and belief about the lower rate of Erb’s palsy and cerebral palsy in cesarean section and higher rates of urinary system and pelvic floor problems with vaginal deliveries guided them to perform a cesarean section. A poor obstetrical technique is often to blame for Erb’s palsy, and the main risk factors for Erb’s palsy are large fetal, shoulder dystocia, and breech vaginal deliveries (27). Effective training of OB/GYNs and labor and delivery nurses and midwives and running regular simulation scenarios can help with reducing the number of Erb’s palsy in Iran.

Globally, some OB/GYNs perform a cesarean section on maternal request or with no indication because of financial motivations. Financial incentives and lack of regulations could contribute to increasing the rates of cesarean section (28, 29). However, in Iran, this is not the case; to encourage vaginal deliveries, OB/GYNs in Iran are paid more for vaginal deliveries than for cesarean sections. However, financial incentives still do not influence OB/GYNs to perform vaginal delivery; our results showed that only 13% of OB/GYNs preferred performing vaginal delivery because they will be paid more.

Based on this study, fear of sexual dysfunction is among the strongest reasons why obstetricians tend to perform a cesarean section on maternal request. Obstetricians engage in counseling couples during the prenatal period and play an important role in choosing the mode of delivery. In this regard, focusing on misunderstandings about the effect of natural delivery on postpartum sexual dysfunction in obstetricians and sex therapists education curriculum may affect the choice of delivery mode all over the world.

Research Implication

This calls for future researches investigating new strategies for controlling the high rate of cesarean section, including effective changes in the education curriculum of obstetricians.

Strengths and Limitations

The strength of this study is that a nationwide sample was used, and obstetricians from different parts of Iran randomly participated in this research. However, it may still not represent rural areas of Iran. In our study, male participants were fewer and older with more years of experience than female participants. This heterogeneity in the population of our study is because of two main reasons: firstly, the number of female physicians who pursue the specialty of OB/GYN is more than the number of male physicians. Secondly, nowadays, OB/GYN residency is restricted to female candidates in Iran. This selection bias resulting from the higher population of female obstetricians might have impacted the results.

Conclusion

Since the majority of obstetricians prefer cesarean section, and they have a strong role in guiding pregnant women to decide their mode of delivery, their views should be taken into consideration. Understanding the reasons behind their choice of elective cesarean section is critical for developing efficient strategies to address the high rate of cesarean. On the other hand, it seems that it is also necessary to reconsider the recommended cesarean rate due to the cultural context and regional health care.

Acknowledgments

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Conflict of Interest

The authors declared no conflict of interest.

References

3. FIGO. Ethical issues in obstetrics and gynecology. 2012;


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