

## Obstetricians' perspective on the Health Section Evolution Plan in Iran: A Quality-Case Study

Alireza Jabbari<sup>1</sup>, Mohammad Hossein Yarmohammadian<sup>2</sup>, Marzye Hadian<sup>3\*</sup>

<sup>1</sup>health Management and Economics Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

<sup>2</sup>health care management, Health management and economics research center, Isfahan University of medical sciences, Isfahan, Iran

<sup>3</sup>Student Research Committee of School of Management and Medical Information, Isfahan University of Medical Sciences, Isfahan

### Abstract

**Background and Objectives:** The Increase of unnecessary caesarean sections has become one of the serious concerns in some health systems. One of the seven packages of the healthcare reform plan that was sent to all Iranian medical universities in 2014 was the "Promoting Natural Delivery," emphasized the need to reduce cesarean delivery and promote more natural delivery. The present study aimed to assess gynecologists' perspective on the Health Section Evolution Plan in Iran.

**Methods:** The research method was qualitative and a half-structured interview was conducted in 2015 to collect information. Participants in the study included gynecologists and Obstetricians of Isfahan University of Medical Sciences. The purposeful and snowball sampling method was used to select the participants and continued until saturation. The interviewees were selected from among the hospitals teaching. 11 people were interviewed. Thematic analysis method was used for data analysis.

**Results:** In this study, after analyzing the content of the interviews, four main themes that included making the "natural childbirth franchise free", "reducing C-section rate", "Motivating service providers(experts)", and "Improving natural childbirth facilities standards", and 5 sub themes that included the "Not giving attention to culture", "Obligatory Increase for natural delivery rate", "Not giving attention to Law reform at the natural childbirth", "An unacceptable Tariff Payment System" and "Payment delays on new tariffs".

**Conclusion:** Promotion of natural childbirth instruction has somewhat realized; however it has significant shortages and limitations. It is possible to solve a lot of problems by increasing the number of normal births by developing legal guidelines for responding to possible problems, and then seeking legal protection from professionals.

**Keywords:** Obstetricians, Gynecologists, promotion of vaginal delivery instruction, Promotion of natural birth, Health section Evolution Plan, pregnant woman..

### Background and objective

One of the main aspects of Health Section Evolution Plan is promotion of natural childbirth. Caesarean is one the crucial and significant services of healthcare system in all communities. Since every kind of service has to be appropriate, low cost, and accompanied with the least physical and mental complications<sup>1</sup>, natural childbirth in many cases is the safest delivering mode for mother and the her child alike<sup>2</sup>. In some cases in which natural childbirth cannot be done or it might cause severe risks for fetus and mother, caesarean can be used<sup>3</sup>. However, doing unnecessary caesarean sections increase mortality, economic costs borne by society. Moreover, it causes complications for mother and her baby including fever and infection, bleeding, aspiration, Atelectasis, Uterine inertia, tummy

\*Corresponding Author: Marzye Hadian

Email: [m.hadian68@gmail.com](mailto:m.hadian68@gmail.com)

adhesion, increasing risk of Hysterectomy, increasing probability need to Blood transfusion, Cardiopulmonary, Thromboembolism, Biliary diseases for the mother, The possibility of damage to the bladder and urethra, Placenta previa, and psychological effects<sup>2, 4-5</sup>. In addition, Mortality rate in elective C-section is 5.9, in emergency C-section is 18.2, and in vaginal delivery is 2.1 out of 100 thousand cases in Iran<sup>6</sup>. Additionally, it has to be noted that the risk of neonatal death in C-section is 4 times more than infants delivered in natural childbirth. Also, the mothers' mortality rate in C-section even under the best circumstances is 5 to 7 times more than in natural childbirth<sup>2,7</sup>. One more Complication of caesarean section is Respiratory problems in newborns caused by birth pain which has a significant role in preparation of infants to breathe outside the womb<sup>8</sup>. On one hand, the start of breastfeeding in mothers with C-sections is reported with a delay. On the other hand, the rate of cutting exclusive breast feeding and use of milk powder for mothers in C-section were more than in mothers involved in natural childbirth<sup>9</sup>.

According to The World Health Organization, the acceptable range for C-section is 10 to 15 percent of all deliveries<sup>10</sup>

, however it is 50 to 60 percent in Iran which 90% of them are performed in private hospitals<sup>11</sup>. According to conducted studies in Iran, C-section is increasing in Iran in 2012 Hamedan 50.2%<sup>12</sup>, Daamghan 50.7%<sup>11</sup>, Gilan 64.3%<sup>13</sup>, 50% (respectively in public and private centers)<sup>16</sup>, Shahre-Kord 44.6%<sup>17</sup>, Shiraz 66.4%<sup>20</sup>, Tehran 44%<sup>21</sup>, and Shiraz 65%<sup>22</sup>. In other words, from each 2 deliveries, one is certainly done through C-section. This significant increasing rate has caused a concern for healthcare system. The reason for this is not the necessity to caesarean. According to conducted research in Iran more than 70% of pregnant women prefer Caesarean for unnecessary reasons. In 92% of cases C-section is preferred due to birth pain and aftereffects of natural childbirth<sup>23</sup>. Also lack of awareness to complications of C-section and negative attitudes toward natural childbirth are the main reasons for tendency toward caesarean<sup>24</sup>. In some cases, one of the reasons to have caesarean was its modern technology in compare with the vaginal delivery. In the developed and the most modern nations, the efforts are made to reduce caesarean and increase natural childbirth rate.

This study aimed to assess the challenges and strategies of “promotion of vaginal delivery instruction” from the perspective of Obstetricians and Gynecologists In 4 domains that include making the natural childbirth franchise free , Reducing C-section rate to 10% , Improving natural childbirth facilities standard, Motivating service providers (particularly specialists ) through rationalize the tariffs in Isfahan.

## Methods

### Research design and setting

This interpretative, qualitative study explored the challenges and strategies of “promotion of vaginal delivery instruction” from the perspective of Obstetricians and Gynecologists In 4 domains that include making the natural childbirth franchise free , Reducing C-section rate to 10% , Improving natural childbirth facilities standard, Motivating service providers (particularly specialists ) through rationalize the tariffs in Isfahan. In This study has been conducted in 2015 through a semi-structured interview. Its population consists of 7 Obstetricians and 8 Gynecologists in hospital teaching in Isfahan.

### 2.2. Sampling

The purposeful and snowball sampling method was used to select the participants. They were selected based on their relevant information about the health system; the crucial factors for participating in this study were having more than 3 years' experience in this field, adequate awareness toward the subject, and having inclination to participate in it. The number of participants was not determined in advance. In the study process, key informant participants were selected to interview to reach saturation in findings. Participants were from the teaching hospital.

### Data collection and analysis

Semi-structured, face-to-face, in-depth interviews were conducted. The interview guide was designed by the main team of the study and based on the objectives of the study, and it was tested on non-study participants to verify the number and order of the questions in the study. Interviews were conducted based on the willingness of participants in any place where they were set, and each interview time ranged between 30 and 45 minutes. Interviews were recorded and then transcribed verbatim, and they were analyzed twice after the interview. In addition to the interviews, some of the related documents were analyzed to understand the content of this issue. The Framework Approach was used to analyze

the data assisted by the MACQDA 10 (VERBI software, Germany). Based on this approach, the data were analyzed in five stages, i.e., familiarization, identifying a thematic framework, indexing, charting or mapping, and interpretation. After coding all texts and extracting issues and sub-themes, the main themes were created by interpretation of the content in categories. Two researchers conducted coding to increase the validity. In addition, we asked researchers and several faculty members who were familiar with the analysis of qualitative research to review some of the interviews, codes, and extracted class to examine the validity of this coding.

#### Ethics statement

An introduction letter was prepared from the Isfahan University of Medical Sciences (IUMS), and it was given to the participants. All participants were informed about the purposes of the study before the interviews. Participation in the study was voluntary, and the participants were free to leave or stop the interview at any stage. Participants were assured that the confidentiality of their information would be maintained.

## Results:

The "promotion of natural childbirth" instruction includes 4 crucial cods are the same goals which their realization of each has been observed by specialists.

**First aim:** making the natural childbirth franchise free

interviewees stated that after implementing the instruction, vaginal deliveries are done free of charge in public hospitals". It is completely free and I'm sure 100%" (interview 10). "It is free and patients are satisfied with it" (Participant 8)."

**Second aim:** Reducing C-section rate to 10%

Although all interviewees noted that the rate of C-section has declined over 10%, most of them believed that, because the instruction is recently begun to implement, it is so soon to make judgment on that. " I can't say generally, but this hospital has reduced C-section rate to 32% (Participant 5). "The rate of C-section has reduced and they have been successful in this field (Participant 13)."

**Third aim:** Motivating service providers (particularly specialists) through rationalize the tariffs

Most specialists stated that tariffs improved compared to the past, however new tariffs are not reasonable and they would not satisfy specialists. "Regarding the motivation of service providers, I personally think that tariffs must be acceptable, because it doesn't fit with the time obstetricians spend (Participant 1)". "It hasn't realized this aim. Natural childbirth is 50k<sup>1</sup> and caesarean is 40k and it is not acceptable. In public hospitals tariffs are unacceptable and we have no motivation (Participant 14). "This aim hasn't been achieved. Natural childbirth requires much time (Participant 12)."

**Fourth aim:** Improving natural childbirth facilities standard

Most of the interviewees stated that no significant changes in facilities have occurred. "Delivery rooms have not changed and if they have it has not been very significant (Participant 3)". "No changes have been noticed yet (Participant 6)". "No improvement on facilities, no enough rooms, no bed, no staff. Nothing has changed (Participant 9)".

### Problems and weaknesses of the instruction

Regarding problems and weaknesses of the instruction, interviewees raised many cases which are classified into 5 codes .

- **Code1: Not giving attention to culture**

Interviewees believed that these guidelines have a limited vision. In fact they have not considered all community except hospitals and specialists. In addition, this instruction has no plan to change public attitudes toward caesarean and natural childbirth. "In my opinion training programs are the missing part of the plan. There are still many pregnant women requesting for elective C-section (Participant 1)." if any increase can be seen in natural childbirth rate it is because of being free. There is no plan to change public attitudes and raise awareness (Participant 4)."

- **Code 2: Obligatory Increase for natural delivery rate**

Experts believe that one of the most important problems of this instruction is obliging specialists to do vaginal delivery which may cause severe complications for mother and her child alike. "The problem is that specialists have to increase natural delivery rate, so they reject pregnant women need caesarean. In some cases, even though they must do caesarean, they do natural delivery. They just want to increase natural

<sup>1</sup> Surgery tariff rates are announced each year

childbirth rate (Participant 4)". "We are obliged to do natural delivery (Participant 2)."Hospitals reject to do caesarean since it increases the rate of C-section. It has created public dissatisfaction (Participant 11)".

- **Code 3: Not giving attention to Law reform at the natural childbirth**

One more problem of abovementioned instruction is not giving attention to the law reform at the natural childbirth which could be considered as a significant factor to avoid natural childbirth. "we are demanded for doing natural childbirth to increase its rate and we ourselves might face the legal consequences of doing vaginal delivery instead of C-section (Participant 15)". "There is no plan for legal consequences. Obstetricians would not like to face legal consequences of natural childbirth may bring, so they prefer C-section (Participant 8)."

- **Code 4: An unacceptable *Tariff* Payment System**

Interviewees believed that tariff payment system has not satisfied specialists. "They must reconsider tariff payment system. A natural delivery takes 24 hours and the payment is not suitable (Participant 14). "Unfortunately specialists must spend much

time on vaginal delivery with a low payment (Participant 7)".

- **Code 5: Payment delays on new tariffs**

A payment delay on new tariffs was another matter which could be considered as a barrier to implement this instruction suitably. "It is not supported financially well; it is the third month we are not paid. Financial affairs really matter (Participant 6). "We work a lot, but we're not paid yet (Participant 8)."

## Discussion :

Finding demonstrated that in terms of 4 crucial codes are the same goals, the instruction of promotion of natural childbirth in Isfahan has achieved the first 2 aims including "making the natural childbirth franchise free" and "reducing C-section rate", however it has almost not realized other aim containing " Motivating service providers(experts)", and " Improving natural childbirth facilities standards". Interviewees believed that although it is so soon to make judgment on reducing C-section rate, its reduction is not due to facilities improvement but doing natural delivery free of charge. Some assumed that hospitals Affiliated to Isfahan University of Medical Sciences have to deal with many

issues in terms of vaginal delivery including lack of physical, financial, and human resources. Interviewees stated that unacceptable payment delays on new tariffs may discourage specialists to choose natural vaginal delivery. Due to this fact that specialists in Iran are well-paid, the reason for this dissatisfaction might be caused by different factors such as culture. So more comprehensible studies could be conducted on this matter. The instruction is just implemented in Iran; therefore no alternative studies have investigated its effects.

One of the main shortages interviewees noted was ignoring the culture. Undoubtedly if the attitudes of mothers toward natural delivery change, in long run we can notice significant reduction in elective C-section rate. The significant role of culture and society in choosing the mode of delivery has been proved by Ghadimi<sup>16</sup> and Sharifi Rad<sup>25</sup>. Ghadimi in his study containing 2521 pregnant women demonstrated that choosing delivery mode is dramatically influenced by social- economic variables. In other words women prefer caesarean due to social-economic reasons rather clinical ones. It is very important than governmental organizations including ministry of health, education, mass media, and others contribute and cooperate in order to improve

public attitudes toward natural delivery. One more challenge is obligation. Since doing natural delivery is unintentionally obligatory, specialists attempt to perform natural delivery even in cases C-section is required. This issue has to be taken into consideration. Bergholt believes that a pregnant woman has the right to choose her delivery mode and lack of obstetrical indications cannot deprived her of the right to choose<sup>26</sup>. Additionally concerns about the legal consequences of natural vaginal delivery is a vital point which has not been considered in promotion of natural childbirth plan. Due to ease in C-section deliveries, specialists are not probably concerned about legal consequences of endangering mother and her baby, therefore they maintain a positive attitude toward C-section mode. In a study conducted by Firoozi investigating obstetricians' perspectives toward C-section and Natural delivery, it was noted that the first obstacle to perform natural delivery is its legal consequences<sup>4</sup>. Dodd & Crowther believe that although the effects of legal consequences on the mode of delivery is not accurately determined, there is no doubt it significantly influence delivery mode selection<sup>27</sup>. In general the findings of the present study prove that promotion of natural childbirth instruction has somewhat

realized its aims in Isfahan, however there are shortages and limitations which have to be taken into account. Since this study a qualitative one and is concerned only with Isfahan, Determining achievements and shortages require more comprehensive studies. There is no doubt determining strength and weaknesses can be positively influential to implement the instruction suitably. Due to sensitivity of evolution plan at the Isfahan University of Medical Sciences, researcher has encountered serious problems which could probably discontinue the study. One more limitation was unwillingness to cooperate, so a few interviewees participated in this study.

### Conclusion:

Given the challenges posed in this study, the following solutions are proposed to improve the existing situation:

1. Increasing the support of gynecologists by writing and communicating the guide lines
2. Focus on culture-building through public education for service recipients (pregnant mothers)
3. Natural childbirth tariff review

### Competing Interests

The authors declare no competing interest

### Authors' Contributions

The authors made equal contributions to the present study.

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