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The effect of individual counseling on attitudes and decisional conflict in the choice of delivery among nulliparous women

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Abstract:

BACKGROUND: The most important reasons for choosing cesarean include negative attitude of pregnant women toward natural childbirth, and it is not easy for many women to make a decision about the choice of delivery, Midwives as responsible individuals, play an important role in providing maternal counseling and care during pregnancy and childbirth and the postpartum period. This study was carried out to determine the effect of individual counseling on attitudes and decisional conflict in the choice of delivery among nulliparous women.

MATERIALS AND METHODS: This clinical trial was performed on 90 nulliparous women with 28–30 weeks of gestational age, who were referred to health-care centers in Mashhad. They were divided randomly into intervention and control groups. The intervention group received the counseling program individually during three sessions, while the control group received routine care, childbirth attitudes, and decisional conflict on choice of delivery were compared on women of 34–36 weeks of pregnancy. Data collection tools included demographic details form, Childbirth Attitudes Scale and Decisional Conflict Scale; data were analyzed using Chi-square tests, Fisher's exact test, Mann–Whitney test, *t*-test, parried *t*-test, and ANCOVA in SPSS v. 16, and $P < 0.05$ was considered statistically significant.

RESULTS: After consultation, there was a significant difference in attitude score between the intervention group (86.577 ± 13.531) and the control group (69.955 ± 19.858) ($P < 0.001$), And there was a significant difference in decisional conflict score between the intervention group (0.614 ± 0.626) and the control group (1.216 ± 0.949) ($P < 0.001$), and there were significant differences between the two groups in terms of preferred delivery ($P < 0.001$).

CONCLUSION: According to the results of this randomized control trial, individual counseling in nulliparous women during pregnancy leads to a positive attitude toward natural childbirth, informed decision-making, and increase in the selection of natural childbirth.

Keywords:

Attitude, childbirth, counseling, decision

Introduction

The most important reason for choosing cesarean is pregnant women's negative attitude toward natural childbirth, and the decision about the choice of delivery method is not easy for many women. According to the World Health Organization, about 10%–15% acceptable is limited to cases where delivery is not possible through the natural childbirth and in general in condition when life of the mother and the fetus in the absence of surgical intervention is compromised. However, according to studies, the rate of delivery of cesarean delivery in Iran is still reported to be 3–4 times higher the

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global standard, and based on the systematic review and meta-analysis, Azami-Aghdash *et al*. showed that the prevalence of cesarean section (C-section) is 48% in Iran and these statistics were based on information registered in university hospitals. However, this study is reported to be 87% of total deliveries based on private hospitals statistics.[1] Shariat *et al*. reported that 70% of pregnant women had decided to have a C-section, and finally, 67% had C-section.[2] According to the study of Sharifirad *et al*., 70% of pregnant women have a negative attitude toward natural childbirth.[3] Attitude is one of the factors affecting the choice of delivery. If the person has positive beliefs about the outcome of her behavior, there is a positive attitude about that behavior; but if the person has negative beliefs about the outcome of her behavior, there is a negative attitude about the behavior, that will not actually change the behavior, Increased knowledge and awareness enhances the individual's perception and leads to positive attitude and behavioral change.[4,5]

in the study of Yousefzadeh *et al*. five training sessions in the third trimester of pregnancy led to creating a positive attitude toward natural childbirth.[6] The results of the study by Bagherian-Afrakoti *et al*. showed that group counseling had effected to improve knowledge, attitude, and decision of mothers toward natural childbirth.[7] but, the study of Toughyani *et al*. showed that group training had no effect on the attitudes of pregnant women in the selection of natural childbirth.[8]

Many factors affect the decision to choose the method of delivery, including fear of childbirth, place of delivery, medical interventions, women's perceptions and preferences, social, cultural, and economic factors. The decision-making process is defined as choosing one way out of several ways and measuring the pros and cons of a particular issue, and the ambiguity and inconsistency that is caused in this process is called decisional conflict.[9] In the study of Kjærgaard *et al*. showed that training had no effect on the decision to choose natural childbirth.[10] Counseling is one of the best midwifery interventions to raise maternal awareness and changing attitudes and help women make decisions about the delivery. In other words, counseling deals with individuals' deep problem.[11] Individual counseling provides warm and welcoming environment for the individual so that she/he talks comfortably and gives necessary information about him/herself. In addition, the patient is assigned the responsibility to lead an important part of the activities of the counseling session, and the consultant merely attempts to reflect his/her feelings and thoughts behaviors so that he guides the patient toward self-awareness raising and right insight about the problem.[12] In the study of Sharifzadeh *et al*. (2018), in a group who received counseling in addition to the classes for childbirth preparation, the intention for normal vaginal delivery was significantly higher than that of the group who only participated in the delivery preparation class.[13] There are contradictory findings about the role of counseling as a way to choose the type of delivery. The results of the study by Ryding *et al*. showed that counseling by the midwife had no effect on the choice of delivery.[14] Moreover, in the study of Larsson *et al*., Counseling did not affect the choice of delivery type and even increased the delivery of cesarean section in the intervention group.[15] In the study of Sydsjö *et al*., individual counseling treatment program in a participant with fear of delivery did not affect the reduction of delivery fear and the choice of natural vaginal delivery.[16]

The results of the study of by Toohill *et al*. showed that two BELIFE counseling through phone call at the 24th and 34th weeks of pregnancy in pregnant women reduced the decisional conflict among pregnant women on the choice of delivery in the intervention group, but there was no significant difference between the intervention and control groups.[17] Considering the high prevalence of cesarean delivery in the country and contradictive studies as well as limited studies in the field of attitude and decision-making regarding the choice of delivery type, further interventions are necessary. As a responsible person, midwife plays an important role in providing counseling, support, care, and advice during pregnancy, childbirth, and postpartum period. BELIEF counseling program is designed based on the framework that aims to provide midwifery care, and its content is based on the counseling model used in Gamble's study. BELIFE consulting strategies include: good relationship between midwife and mother, accepting the mother's perception, supporting her to express her feelings, resolving maternal ambiguities, linking events with maternal feelings and behaviors, providing information, promoting social protection, strengthening mother's positive thoughts for adaptability purposes and discovering solution; that do not require complex skills and psychology and midwife alone can implement[18] BELIEF is a counseling approach conducted by midwives who want to review the current women's expectations and feelings, support expression of feelings and provide a framework for identifying stressful elements in any childbirth. It is to strengthen and support women's flexibility, self-confidence, and a sense of competence for natural childbirth.[19] Considering the fact that there has not been any individual counseling program based on BELIFE in Iran and this intervention can be carried out by the midwife. Therefore, the present study was carried out to determine the effect of individual counseling by a midwife on attitudes and decisional conflict on the choice of nulliparous women in health-care centers in the city of Mashhad.

Materials and Methods

This is a clinical trial study conducted on 90 pregnant women who were referred to health-care centers in Mashhad from March 2015 to January 2016. After the approval of the research by the Ethics Committee of Mashhad University of Medical Sciences (IR.MUMS.REC.1394.720), the study was carried out in four centers randomly selected by drawing among the health-care centers in Mashhad. The two groups were also randomly assigned to these centers by drawing. The nonprobability easy sampling method was performed in each center. The sample size was calculated to be 48 individuals in each group based on a pilot study on 20 subjects in each group of 10 people, with 95% confidence interval, the test power was 80%, and mean comparison formula was used. Considering 15% loss, the sample size of 48 individuals was determined in each group. The criteria for entering the study included: being Iranian, Persian speaker, aged 18–35 years old, 28–30 weeks' gestational age. Exclusion criteria included: confronting with traumatic and stressful events in the 6 months before the start of the study, and speech and hearing disorders.

Data collection tools included demographic details form, Childbirth Attitude Scale, and Decisional Conflict Scale. In order to assess the childbirth attitudes, Childbirth Attitude Scale was used, this scale contains 21 questions used by Khorsandi *et al.* (2008) with 5-point Likert scale, in which each statement was scored as follows: completely agree (1), agree (2), no idea (3), disagree (4), and completely disagree (5). Higher scores reflect the positive attitude to childbirth. Minimum and maximum scores assigned to this questionnaire were 21 and 105, respectively. Negative, neutral, and positive attitudes were indicated by 21–42, 43–63, and 64–105 scores, respectively.[20]

Decisional conflict scale was used to assess the level of uncertainty in pregnant women's decision-making as regards to delivery type, and it consists of 16 questions with 5-point Likert scale from 1 to 5, including completely agree, agree, no idea, disagree, and completely disagree. This scale also consists of 5 subscales (ambiguity and uncertainty, being aware, clarity of benefits-risks and complications, decision support, and effective decision) in choosing the type of delivery average scores were obtained in any subscales, and an overall average was achieved based on 5 subscales to obtain the overall score. If the overall average of this scale is higher than 2.5, then there is the highest decisional conflict level or uncertainty levels about the decision-making. The score of 2 or <2 shows a lack of decisional conflict and conflict in implementing decisions.[17] These questionnaires were completed by the participants at weeks 28–30 and 34–36. The validity of the questionnaires was tested using content qualitative validity. Meaning that after the preparation and translation of questionnaires under the supervision of the guidance and counselor professors, the questionnaires were delivered to seven experts and professors of the Mashhad University of Medical Sciences for assessment. The final tool was used after considering the suggestions and necessary revisions. The reliability of Childbirth Attitudes Scale was confirmed by Khorsandi *et al.* (2008)with Cronbach's alpha coefficient of 0.73.[20] In the present study, the reliability was confirmed using Cronbach's alpha coefficient of 0.94. The reliability of Decisional Conflict Scale was confirmed by Toohill *et al.* with Cronbach's alpha coefficient of 0.78.[17] In the present study, the reliability of the Persian version of the scale was confirmed using Cronbach's alpha coefficient of 0.93.

Nulliparous pregnant women referred to healthcare centers in the week (28–30) who met the inclusion criteria, after obtaining their informed consent, were enrolled in the study. Then, the study objectives were explained to them in the right place (a room where sessions were held). The intervention group, in addition to the routine health centers services, received individual counseling, as face-to-face based on the content of the BELIEF counseling (Its content is based on a midwife protocol that was prepared by Gamble and Creedy (2009). The study strategies included good communication between the midwife and the mother, acceptance of the mother's perception, supporting the mother in expressing her feelings, resolving maternal ambiguities, promoting social support, strengthening positive thoughts to adapt mothers and discover solutions. Counseling was carried out by the researcher) after confirmation of the researcher's ability by a specialized consultant with a PhD in counseling (during 3 sessions (45–60) minutes every 2 weeks based on the referral days in weeks (28–30, 30–32, 32–34). The counseling contents in each session were as follow First session (28–30 weeks' gestation): Encouraging them to express their feelings and thoughts about childbirth through open-ended questions after making initial contact with pregnant women, active listening and feedback on the maternal concerns. The second session (30–32 weeks gestation): Providing information about the labor stages, clarifying and resolving misunderstanding and reinforcing positive thoughts in mothers. Third session (32–34 weeks' gestation): Reinforcing positive approaches to pregnancy, offering positive solutions (to change attitudes) and solutions to women regarding decision-making about potential solutions, such as the selection of delivery type questions and providing help and support for maternal decisions. The control group received routine care services provided by health-care centers. Attitudes and decisional conflict were re-evaluated and compared in the intervention and control groups in weeks 34–36 of pregnancy.

Statistical analysis was performed using descriptive statistics (mean, standard deviation, median, and frequency distribution) and Chi-square tests, Fisher's exact test, Mann–Whitney test, *t*-test, parried *t*-test, and ANCOVA were conducted in Statistical Package for the Social Sciences, version 16, SPSS Inc, Chicago, Illinois, USA (SPSS. The statistical significance level was considered at $P < 0.05$.

Results

Flow chart of participants' progress through the phases of the trial is as shown in Figure 1. At the beginning of the study, each group consists of 48 individuals, but some individuals in two groups were excluded from the study: 3 individuals from the control group due to lack of completing the questionnaire in 34–36 weeks of pregnancy and 3 individuals from the intervention group due to failure to attend one of the counseling sessions [Figure 1].

In this study, there was no significant difference in the two groups in terms of maternal education level ($P = 0.382$), mother's job ($P > 0/99$), socioeconomic status ($P = 0.542$), and abortion ($P = 0.714$) [Table 1].

In this study, 29 (64.4%) participants in the intervention group and 23 (51.1%) participants in the control group did not participate in safe childbirth classes. Chi-square test results showed that there is no significant difference between the two groups in terms of safe childbirth classes ($P = 0.832$). The mean age of participants in the intervention and control groups was 27.28 ± 3.95 and 27.42 ± 4, respectively. The independent *t*-test results showed that there was no significant difference between the two groups ($P = -0.876$).

Chi-square test results showed that before the intervention, there was no significant difference between the two groups in terms of preferred delivery ($P = 0.058$). However, the results showed that after the intervention, there were significant differences between the two groups in terms of preferred delivery ($P < 0.001$) and the results of Chi-square test showed that 71.1% of those with individual counseling had natural childbirth and 44.4% of those in the control group had natural childbirth. Furthermore, 28.9% of those with individual counseling had cesarean section, while 55.6% of those in the control group had cesarean section, and this difference was statistically significant ($P = 0.010$) [Table 2].

Comparing the mean scores of two groups of pregnant women by independent *t*-test showed that there is no significant difference between the two groups in terms of mean scores of childbirth attitude before the intervention ($P = 0.754$). The results of the same test in the week 34–36 of pregnancy showed that there was statistically significant difference between the two groups in terms of mean scores of childbirth attitude ($P < 0.001$). The study of changes in average scores of childbirth attitude during the study (mean difference in childbirth attitudes before the intervention and 34–36 weeks' gestation) by independent *t*-test shows that changes in mean scores of childbirth attitudes in the two groups was statistically significant ($P < 0.001$) [Table 3].

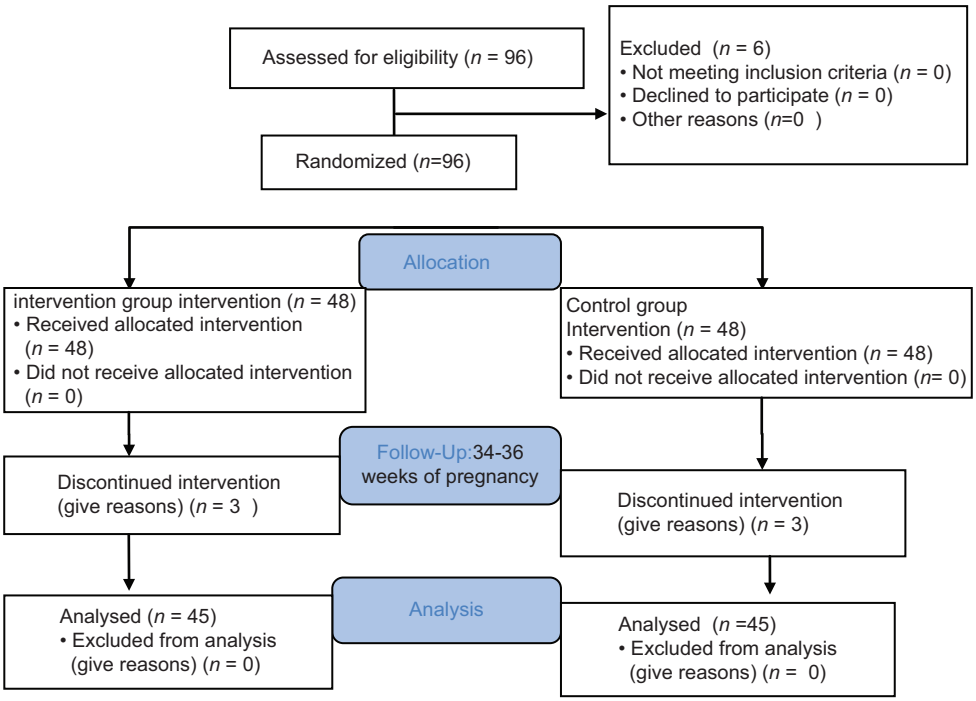

Figure 1: The framework of the study sampling

Table 1: Frequency distribution of subjects in terms of pregnant women's level of education and occupation, socioeconomic, abortion in the two groups

Variable	Group			Test results
	Intervention, *n* (%)	Control, *n* (%)	Total, *n* (%)	
Women's education level				
Diploma	4 (8.9)	3 (6.7)	7 (7.8)	Fisher's Exact, χ^2=3, *P*=0.382
Associate degree	12 (26.7)	7 (15.6)	19 (21.1)	
Bachelor	18 (40.0)	26 (57.8)	44 (48.9)	
Masters	11 (24.4)	9 (20.0)	20 (22.2)	
Woman's job				
Housewife	38 (84.4)	39 (86.7)	77 (85.6)	Fisher's Exact, χ^2=0.475, *P*=>0/99
Employee	5 (11.1)	5 (11.1)	10 (11.1)	
Student	2 (4.4)	1 (2.2)	3 (3.3)	
SES				
Low	6 (13.3)	5 (11.1)	11 (12.2)	Mann-Whitney, *Z*=−0.609, *P*=0.542
Average	18 (40.0)	16 (35.6)	34 (37.8)	
Higher than	20 (44.4)	23 (51.1)	43 (47.8)	
Average high 1	1 (2.2)	2 (2.2)	2 (2.2)	
History of abortion				
Yes	3 (6.7)	5 (11.1)	8 (8.9)	χ^2=0.549, *P*=0.714
No	42 (93.3)	40 (88.90)	82 (91.1)	

SES=Socioeconomic status

Table 2: Frequency distribution of subject sin the two groups in terms of the preferred method of delivery

Variable	Group		Test results (χ^2, *P*)
	Intervention, *n* (%)	Control, *n* (%)	
The preferred method of delivery			
Before intervention			
Natural delivery	18 (0.40)	27 (0.60)	3.600, 0.058
Cesarean delivery	27 (0.60)	18 (0.40)	
34-36 weeks of pregnancy			
Natural delivery	43 (95.6)	22 (48.9)	24.425, <0.001
Cesarean delivery	2 (4.4)	23 (51.1)	
Delivery			
Natural delivery	32 (71.1)	20 (44.4)	6.559, 0.010
Cesarean delivery	13 (28.9)	25 (55.6)	

Table 3: Comparing the mean and standard deviation of childbirth attitude score and decisional conflict on the choice of delivery in nulliparous pregnant women in the intervention and control groups

Variable	Groups, mean±SD*		Test results Independent *t*-test (*t*, *P*)
	Intervention	Control	
Child birth attitude			
Before intervention	74.111±17.157	72.955±17.730	0.314, 0.754
34-36 weeks of pregnancy	86.577±13.531	69.955±19.858	4.640, <0.001
Mean changes before intervention and 34-36 weeks of pregnancy	12.466±16.159	−3.000±14.924	4.717, <0.001
Decisional conflict			
Before intervention	0.984±0.694	0.875±0.683	0.750, 0.455
34-36 weeks of pregnancy	0.614±0.626	1.216±0.949	−3.547, <0.001
Mean changes before intervention and 34-36 weeks of pregnancy	−0.349±0.724	0.340±0.671	−4.823, <0.001

SD=Standard deviation

According to the results shown in Table 2, changes in childbirth attitude scores were significantly different between the two groups. To eliminate the effect of confounding variables, all confounding variables were entered in the general linear model using ANCOVA so that the group effect is determined after eliminating their effect. Insignificant variables with the highest *P* value, respectively, were excluded from the model using backward method. The mean childbirth attitude score variable was identified as the confounding variable. Furthermore, there was statistically significant difference between the two

groups in terms of mean childbirth attitude scores after counseling by eliminating its (mean childbirth attitude score before counseling) effect ($P < 0.001$) so that in the intervention group an increase of 15 scores was observed in childbirth attitude score compared to the control group (B = 15/95, T = 5/49).

Comparing the mean scores of the decisional conflict scores in two groups using independent *t*-test showed that there is no significant difference between the two groups in terms of mean scores before the intervention ($P = 0.455$). The results of the same test in the week 34–36 of pregnancy showed that there was statistically significant difference between the two groups in terms of mean scores of the decisional conflict scores ($P < 0.001$). The study of changes in average decisional conflict scores in selecting delivery type during the study (mean difference in decisional conflict scores before the intervention and 34–36 weeks' gestation) by independent *t*-test shows that there is statistically significant differences between the two groups in terms of changes in mean scores of decisional conflict ($P < 0.001$) [Table 3].

According to the results shown in Table 3, changes in decisional conflict scores were significantly different between the two groups. To eliminate the effect of confounding variables, all confounding variables were entered in the general linear model using ANCOVA so that the group effect is determined after eliminating their effect. Insignificant variables with the highest *P* value, respectively, were excluded from the model using backward method. The mean decisional conflict score in choosing the delivery type variable was identified as the confounding variable before counseling. In addition, there was statistically significant difference between the two groups in terms of mean decisional conflict scores after counseling by eliminating its (mean decisional conflict score) effect ($P < 0.001$) so that in the intervention group a decrease of 0.674 score was observed in decisional conflict score compared to the control group (B = −0/064, T = −4/803).

Discussion

This study showed that individual counseling by a midwife, is effective in increasing the selection of natural childbirth, so that the selection of natural childbirth in nulliparous women at 34–36 weeks of pregnancy in the intervention group was significantly increased higher than the control group and 71.1% in the individual counseling group and 44.4% in the control group had natural childbirth. The results of study by Rasouli *et al*. showed after the 2 session intervention motivational interviewing, awareness, attitude, and choose natural childbirth significantly increased in the intervention group,[21] which was consistent with the results of the present study.

Consultation can enhance self-awareness, self-confidence, insight, helping in accepting yourself and others, helping to solve a problem and making decisions, and facilitating a change in behavior of pregnant women.

In the study of Sydsjö *et al*., individual counseling treatment program in a participant with fear of delivery did not affect the reduction of delivery fear and the choice of natural vaginal delivery.[16] This is not consistent with the results of this study. The present study was different from Sydsjo's study was attributed to the counseling content which required complex psychological skills in Sydsjo's study while in the present study, counseling was carried out by midwives without the need to psychological skills and midwives alone could do the counseling in the present study. Counseling provides appropriate information. It also helps mothers make informed choices and is considered the best option for them. Considering the role of midwives in the reproductive health process, especially their counseling, training, and support role in providing proper care during pregnancy, on the one hand, their relationship with mothers paves the way for better and more effective relationship.[22,23]

In the study of Ryding *et al*., four counseling sessions by the midwife had no effect on the choice of delivery by women and the selective cesarean rate in the intervention group was higher than the control group after the counseling,[14] which was inconsistent with the results of the present study, that inconsistent with the present study can be due to nulliparous and multiparous women participated in the study by Ryding *et al*. and multiparous women could affect the results with previous childbirth experience; while participants of the present study were nulliparous women. In the study of Rouhe *et al*. (2009), there was a correlation between the numbers of pregnancy with the choice of normal delivery; the proportion of elective cesarean section in women with Primiparous was more than that of women with multipararous, Because Primiparous women have not experienced delivery, they have fear and anxiety regarding unfamiliar birth situations and consider normal delivery as inaccessible, which is why they prefer cesarean deliveries.[24] Another reason for this inconsistency could be due to cultural differences in the type of delivery. Latifnejad (2015) referred to wrong cultural beliefs about childbirth as the main reason for the refusal of NVD by women. The cultural, social, and psychological roots play an important role in choosing the cesarean labor in pregnant women.[25]

The present study showed that an individual counseling program by a midwife is effective in enhancing the attitude to choose the type of delivery, so the attitude to choose natural childbirth in nulliparous women at 34–36 weeks of pregnancy in the intervention group was significantly increased compared to control group, and the counseling program was able to increase the mean of childbirth attitude 15 score in the intervention group compared to the control group.

The results of the study by Asefi *et al*. showed that childbirth preparation classes were more effective in the attitude of pregnant women in the intervention group than the control group[26] and The results of study by Bagherian-Afrakoti *et al*. showed that group counseling had effected to improve knowledge, attitude, and decision of mothers toward natural childbirth.[7] These studies were consistent with the results of the present study. Among the differences between the present study and the study of Asefi and Bagherian was the difference in how the sessions were organized, so that in the present study, the sessions were held individually, but in the study of Asefi and Bagherian, interventions were conducted in a group. Although there were many benefits to use group counseling, this type of advice is not suitable for anyone, because people who do not want to be part of a group or are not prepared to participate in the group can cause harm or disturb the group work. In addition, in some cases, due to time constraints, people's problems cannot be addressed as they should. In an individual BELIEF counseling program, the mother was first asked about the problem, and support was given to expressing the emotions of the mother. Then, based on the diagnosis of the mother's problem, the misconceptions were clarified for the mother, and she was asked that she examined the issue from the other side. Then the information was provided according to the main problem so that for each mother, based on the level of literacy, the understandable words were used. The mother was helped to recognize and believe in herself and her abilities and believed and thought the mother involved in searching solution, then the benefits and disadvantages of each solution were investigated, and ultimately, the best solution was chosen according to the mother conditions and with her own opinion.

Increased knowledge and awareness enhances the individual's perception and leads to a positive attitude and behavioral change. Attitude affects individuals' selection throughout life in a variety of conditions. Attitude is also one of the factors affecting the choice of delivery, including pregnancy. Counseling is a contributing factor in changing attitudes, increasing awareness, and increasing confidence. Researchers believe that individual counseling is one of the most powerful ways of influencing references and educators.[4,5]

In the study by Toughyani *et al*. to determine the effect of prenatal group care training on knowledge, attitude, and practice of pregnant women. The results showed that there was no significant difference between the two groups in terms of attitude scores;[8] the results of this study were inconsistent with the results of the present study. This inconsistency is attributed to the differences in content and duration of sessions. Toughyani *et al*. held 15–20 min sessions as a group, while individual counseling was carried out in the present study for 45–60 min. The benefit of individual counseling as compared to group counseling is that the former provides bilateral relations and opportunities for contact and exchange information between the counselor and the clients. It also provides an absolute confidential opportunity to raise and discover solutions for the problems. Counseling and training are helpful processes that play a role in changing attitudes, raising awareness, and increasing self-confidence. Researchers believe that individual education and counseling is one of the most powerful ways to impact on trainees and clients.[10] Considering that today, one of the most important decisions about choosing the type of delivery is the mother's desire. Therefore, by giving the right information to the mothers, they can be empowered to choose the right decision the consultation is appropriate when it can bring the positive attitude so that the best decision is made by the mother. In order to change the attitude, it should be possible to provide this issue and appropriate behavior by using counseling programs to raise the level of information.

The present study showed that individual counseling by a midwife is effective in reducing the decisional conflict on the choice of delivery, so that the decisional conflict rate is effective on the choice of delivery so that the decisional conflict rate in nulliparous women at 34–36 weeks of pregnancy in the intervention group was significantly decreased compared with the control group and the counseling program was able to reduce the mean of decisional conflict 0.674 score in the intervention group compared to the control group in the study of Halvorsen *et al*. findings revealed that counseling approach affects women's willingness to change their priorities on the delivery method[27] and the results of this study were consistent with the results of the present study. The present study was different from Halvorsen *et al*. study, which was attributed to the counseling content so that counseling was carried out by therapist in Halvorsen *et al*. study while the counseling was carried out by midwives without the need to psychological skills and midwives alone could do the counseling in the present study. Counseling provides appropriate information. It also helps mothers make informed choices and is considered the best option for them. Considering the role of midwives in the reproductive health process, especially their counseling, training and support role

in providing proper care during pregnancy, on the one hand, their relationship with mothers paves the way for better and more effective relationship, counseling on issues related to pregnant mothers requires good listening skills and a sense of companionship to increase confidence and woman's self-control sense. Counseling is one of the most midwifery interventions to raise awareness, change attitudes, and help women make decisions about the delivery. In other words, counseling deals with individuals' deep problems.[28] Giving the right information to people reduces decisional conflict and informed choice. Giving the right information, supporting express of feelings, resolving misunderstandings about the delivery type by healthcare providers as well as awareness of the risks and complications of cesarean delivery enable individuals to make decisions based on their awareness and empowerment which could reduce the decisional conflict. Toohill *et al*. studied 339 pregnant women in Australia and concluded that BELIEF telephone counseling reduced the decisional conflict among pregnant women on conflict mode of delivery in the intervention group, but there was no significant difference between the intervention and control groups,[17] which was inconsistent with the results of the present study. This inconsistency could be due to the fact that the counseling procedure was different. Individual BELIEF counseling was used as face-to-face in the present study. One of the most important principles of counseling is the proper use of communication skills. There are two types of communications classified as nonverbal and verbal. Nonverbal communication plays an important role in counseling and attracting clients. Previous studies have emphasized on the constructive role of nonverbal communication in counseling for counselors and clients. One of the most important components of nonverbal messages is eye-to-eye contact that is an easy way to show attention and builds trust in clients.[29]

This study is the first of a series to examine the impact of the individual BELIEF counseling program on Iranian nulliparous women. Among the strengths of this study is consultation by the midwife and without the need for psychological skills. The midwife can use this counseling program to increase the positive attitude of women and the choice of natural childbirth in pregnant women. Moreover, among the limitations of the study is that: the results of this study cannot be generalized to all pregnant women since this study was conducted on nulliparous women.

Conclusion

Individual counseling by a midwife to nulliparous women during pregnancy leads to a positive attitude toward natural childbirth, informed decision-making, and enhanced natural childbirth.

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Conflicts of interest

There are no conflicts of interest.

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