

# The Effect of Spiritual Counseling on Childbirth Self-efficacy to Cope with Labor in Primiparous Women

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| ARTICLE INFO   | ABSTRACT   |
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| <p><i>Article type:</i><br/>Original article</p> <hr/> <p><i>Article History:</i><br/>Received: 02-Feb-2022<br/>Accepted: 14-Mar-2022</p> <hr/> <p><i>Key words:</i><br/>Spiritual counselling<br/>Self-efficacy<br/>Labor<br/>Primiparous woman</p> | <p><b>Background &amp; aim:</b> childbirth and labor pain is physiological condition due to contraction of the smooth muscle of the uterus. Labor contractions vary from person to person in terms of being painful, and its management is of particular importance. This study was conducted to determine the effect of spiritual counseling on childbirth self-efficacy to cope with labor in primiparous women.</p> <p><b>Methods:</b> This experimental study was performed in 2019 on 100 healthy pregnant women at 28-30 weeks of pregnancy in Urmia, Iran. Sample were selected by convenient sampling from two selected hospitals. Demographic questionnaire, Spiritual Well-Being Scale and Childbirth Self-Efficacy inventory were used to collect data. For the intervention group, six spiritual counseling sessions were held weekly and each session lasted 45-60 minutes. Pregnant women in the control group received only usual pregnancy care. The questionnaire was completed after the last counseling session and 12-24 hours after delivery. The data was analyzed using SPSS18 through Chi-square, Independent t-test, Anova repeated measures and Bon Ferroni tests.</p> <p><b>Results:</b> The results showed a statistically significant difference between the mean scores of self-efficacy to cope with labor, after the intervention and 12-24 hours later in the intervention group compared to the control group (P &lt;0.001).</p> <p><b>Conclusion:</b> Based on the results of this study, spiritual counseling can increase childbirth self-efficacy to cope with labor. Thus, using this method as a non-pharmacological and safe method is recommended during childbirth.</p> |

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## Introduction

Pain is a necessary response to the stimulation of stimulus-reactive elements (1). Labor pain is a physiological condition caused by the contraction of the smooth muscle of the uterus, followed by the stimulation of nerve receptors (2). There are several factors affecting the severity of labor pain; these factors include physiological and psychological factors, such as fear and anxiety, demographic and biological characteristics such as race and age, as well as religious affiliations and ethnicity which is different from a person to other person (3-5).

About 60% of primiparous women and 40% of multiparous women experience severe pain during childbirth (6). In addition, primiparous

women have more fear and anxiety toward unfamiliar situations of pregnancy and childbirth due to the fact that they have not yet experienced pregnancy and childbirth (7). Entering the place of labor and dealing with unfamiliar employees, fear, pain and worry about the labor process itself causes the release of catecholamines, cortisol and epinephrine, which in severe cases, leads to insufficient uterine contractions and no progress of labor process and ultimately causes increased pain and prolongation of birth process (8-10). Pain management is one of the physiological and necessary needs (11). Spiritual health is one of the effective factors in controlling impulsive

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behaviors when experiencing pain and anxiety (12). Therefore, spiritual counseling can be a suitable approach to adapt a person to stressful conditions such as childbirth (13).

The World Health Organization suggests the spiritual dimension of health in addition to its physical, mental and social dimensions (14).

Almeida et al. (2006) determined that spirituality and religion affect people's physical and mental health based on seven mechanisms: 1) improving health-promoting behaviors and lifestyle, 2) social support, 3) creating a belief structure and knowledge to facilitate identification and coping to situations, 4) direct influence of psychology with religious practices, 5) creating a spiritual sense, 6) a way to express stress, and 7) a combination of six factors (15).

Today, spirituality is recognized as a suitable method to relieve pain and reduce the anxiety of patients (16). In the study conducted by Tafazoli and colleagues (2019) to measure the relationship between spiritual health and the intensity of post-cesarean section pain showed that there is a direct relationship between spirituality and pain (17). The experience of Russian and Danish women from labor pain was based on the fact that childbirth and giving birth to a baby is a spiritual experience that gives women the opportunity to live again (18). Schwart et al. (2014) stated that it seems that pain is a gateway to enter into all kinds of deep experiences which women experience during childbirth as an ideal bed for spiritual excellence and health, and spirituality as a component based on faith, overcomes fear, increases hope, finds meaning in life, calms people's minds, and ultimately strengthens a person's mental and physical health (19).

Self-efficacy is one of the behaviors which promote spiritual health. Self-efficacy is defined as an internal commitment by a person to perform all the activities assigned to him. Nakashima and Kanda (2015) stated in a research that one of the influencing factors in people's self-efficacy is spirituality and building a meaningful narrative of life (20). In other words, people who are able to recognize order, coherence, ability to pursue goals and have a purpose in their life, show more self-efficacy in their life.

Some research shows that optimism, finding meaning in negative experiences, observing negative experiences from a positive perspective, looking at them as necessary life experiences, believing in the existence of a source, believing in the existence of a higher power and believing that a person is able to solve problems has a correlation with self-efficacy and ability to cope with psychological trauma (21). Pregnancy is also accepting a kind of responsibility. Mother's responsibilities become double during pregnancy. Self-efficacy towards the child and his future includes commitment towards the society, delivery of a good person to the society, responsibility towards the spouse, compliance and attention to reproductive health and physical health and other responsibilities of the mother during pregnancy.

During pregnancy, due to deep physical and psychological changes in mother, spiritual dimension becomes more highlighted in mothers, so that the need for spiritual counseling is clearly seen. Therefore, midwives are placed in unique positions that can be useful in spiritual counseling (22). In fact, in this type of counseling, the midwife provides spiritual support and instills hope in mother by relying on religious beliefs of mother so that she can use the mechanism of spiritual coping to reduce the fear of childbirth and rely on the power of spirituality to deal with fears and concerns and improve self-efficacy and be more successful in coping with the childbirth (23).

However, according to the research conducted, the spiritual health of pregnant women is less considered, and there are few studies on the relationship between spiritual health and adapting to childbirth pain, and most of the studies focused on describing the experience of pain and expressing the positive or negative experiences of pain and ultimately inner growth. Therefore, the present study was performed to determine the effect of counseling with a spiritual approach on childbirth self-efficacy to cope with labor in primiparous women.

## Materials and Methods

This experimental study, which obtained the ethical permission from Urmia University of Medical Sciences, Urmia, Northwest Iran (IR.UMSU.REC.1396.398), was conducted in

2019 on 100 healthy primiparous women with gestational age of 28-30 weeks. The participants were selected by the convenient sampling from two selected hospitals in Urmia and randomly assigned to the intervention and control groups. Letters A and B were written on cards and placed in separate envelopes. Each participant was asked to choose one of the envelopes. People who chose card A were placed in the control group and those who chose card B were placed in the intervention group. The Polotzin and Ellison spiritual health questionnaire were given to the participants who met the criteria for entering the study, then those who scored (100-120) on the daily spiritual health questionnaire were included in the study. Subsequently, a written informed consent and a personal and social questionnaire were completed by the participants.

The inclusion criteria were getting score of 100-120 on the daily spiritual health questionnaire, primiparous pregnant women, singleton pregnancy, no known contraindications for natural delivery, no problem in communication, gestational age of 28-30 weeks, Iranian nationality, having religious beliefs, no recent stressful event (such as death or severe illness of a close relative) in the last six months, no history of specific diseases (such as diabetes, hypertension, cancer) and history of hospitalization due to psychological disease. The exclusion criteria were dissatisfaction to continue cooperation, participation in any training class to prepare for childbirth, absence of more than one or more counseling sessions (these women were excluded from the study, but they were allowed to participate in the classes if they wanted), the diagnosis of fetal abnormality or death, adverse fetal condition (breech presentation), premature delivery and any factor which led to emergency cesarean delivery.

After obtaining the introduction letter for each hospital of the university, the researcher referred to the selected research environments, the perinatal ward of two hospitals in Urmia. Before starting the data collection, the objectives of the research were explained to the participants and the informed consent form was completed by all participants. They were assured that could withdraw from the study at

any stage. Both intervention and control groups received routine pregnancy care. The spiritual intervention sessions were held only in the intervention group. The sessions were held by the researcher with the help of a spiritual counselor during six group counseling sessions by question and answer. The sessions were held weekly and each session lasted 45-60 minutes in the form of groups of 6-10 people. The classes were held in a calm and quiet room in coordination with the management of army hospital.

The first session was familiarization with the group members and with the counselor and knowing the rules of the group and teaching self-awareness technique.

The second session included familiarization with the concept of trust and recourse and the role of trust and recourse in coping with psychological pressure. The strategy of this meeting is how to use trust and recourse as a coping strategy to transform inappropriate negative emotions such as fear and the impossibility of childbirth into positive emotions.

The third session focused on familiarizing with the concept of prayer and supplication, the results of prayer, the effect of prayer in coping with childbirth pain and the strategies of this session included teaching effective beliefs about prayer, discussion about the effect of prayer on emotions, thoughts and problem solving process.

The fourth session focused on familiarizing with the concept of gratitude and the effect of gratitude on changing emotions and thoughts. The strategies of this session included teaching effective beliefs about the effect of gratitude on reducing the negative emotions of mothers regarding the fear of childbirth.

The fifth session focused on familiarizing with the concept of patience and teaching the stages and degrees of patience to endure the pain of childbirth. The strategies of this session included: teaching the use of patience as an effective coping strategy in facing stressful factors during pregnancy, teaching and practicing the stages of resilience to mothers (acceptance of reality (childbirth is painful and its causes), interpretation of the situation,

expectation of comfort, remembering great hardships, avoiding catastrophizing).

The sixth session focused on familiarizing with the concept of forgiveness and the consequences of forgiveness and its effects on emotions. The strategies of this session also included the way to ask forgiveness for yourself and others, knowing and practicing the results of forgiveness, and knowing the role of forgiveness in improving emotional states during childbirth (24).

The questionnaires used in this study included a demographic questionnaire related to the demographic characteristics of the participants, which included age, marital status, number of children, level of education, employment status, and economic status. Polotzian and Ellison's spiritual well-being Scale (SWBS) was also used. The scale was designed by Paloutzian and Ellison (1983) (25). This questionnaire has 10 items on religious well-being and 10 other items, which measure the individual's existential well-being. The spiritual well-being score is the sum of these two subgroups, and its range is 20-120. The answers to these questions are classified as a 6-item Likert scale from completely disagree to completely agree. In the questions 3, 4, 7, 8, 10, 11, 14, 15, 17, 19, 20, answer of completely disagree obtain the score of 1, and in the questions 18, 16, 13, 12, 9, 6, 5, 2, 1, answer of completely disagree obtained the score of 6. Finally, the spiritual health is divided into three categories: low (20-40), moderate (41-99) and high (100-120) (26). This scale has been standardized in Iran by Omidvari et al. and the Cronbach's alpha coefficient of this questionnaire has been obtained as 0.91. Also, Cronbach's alpha coefficient of this questionnaire was reported as 0.82 by Abbasi et al. (27). Validity and reliability were also confirmed in this study and Cronbach's alpha coefficient was 0.78.

The Childbirth Self Efficacy Inventory (CBSEI) was designed by Lowe (1993). According to Bandura's self-efficacy theory, childbirth self-efficacy is a tool which is completed by the individual and has 62 questions and consists of two phases, the first active phase and the second phase of childbirth. Each phase has two parts. The first part contains 15 questions which measures the expectation of outcome related to

the active phase of childbirth. The second part also includes 15 questions that measure the expectation of self-efficacy related to this active phase. The second phase is related to the second phase of childbirth, which includes two parts: the first part is the expectation of the outcome from questions 31 to 46 (16 questions) and the second part considers the self-efficacy related to the second phase of childbirth and includes questions 47 to 62 (16 questions). The total score of self-efficacy is obtained by summing the scores of self-efficacy in each phase, and the total score of childbirth outcome is obtained by summing the scores of outcome expectation, and the total score of self-efficacy is obtained from the sum of these two results (62-620).

The questionnaire was measured with a 10-point Likert scale (completely uncertain to completely certain). (Each question in each section has a score of 1 to 10). A higher score indicates greater outcome expectation and childbirth self-efficacy. In 1993, Lowe defined the English questionnaire of childbirth self-efficacy to measure the mother's belief in the ability to cope with labor. The tool has a Cronbach's alpha coefficient of 86-95% and has high validity and reliability (28). Also, for the validity and reliability of questionnaires in Iran, the study of Khorsandi and colleagues used the Cronbach's alpha to determine internal consistency and construct validity to determine validity. They showed that this questionnaire in Iran has high internal consistency with Cronbach's alpha coefficient of 0.84-0.91, and its validity and reliability was confirmed (29). Validity and reliability were also confirmed in this study and Cronbach's alpha coefficient was 0.82.

It should be noted that the questionnaires were completed before the start of the classes, and the questionnaires were again completed after the sixth session. The questionnaires for the control group were completed at the same time as the case group. The researcher gave her contact number to the participants so that they can contact her if there was any ambiguity or query. They were asked to inform the researcher if they go to the hospital for delivery. Therefore, following the call of the participants, the researcher presented as soon as possible. The post-test questionnaires were again

completed in both groups 12-24 hours after delivery in the presence of the researcher. The sessions were held in the presence of the researcher and the spiritual consultant, so that the topics related to the physiology of natural childbirth and techniques used in each session

were presented by the midwife consultant (researcher) and the topics related to spirituality were presented by a spiritual consultant. The integration of topics was guided and managed by the researcher.

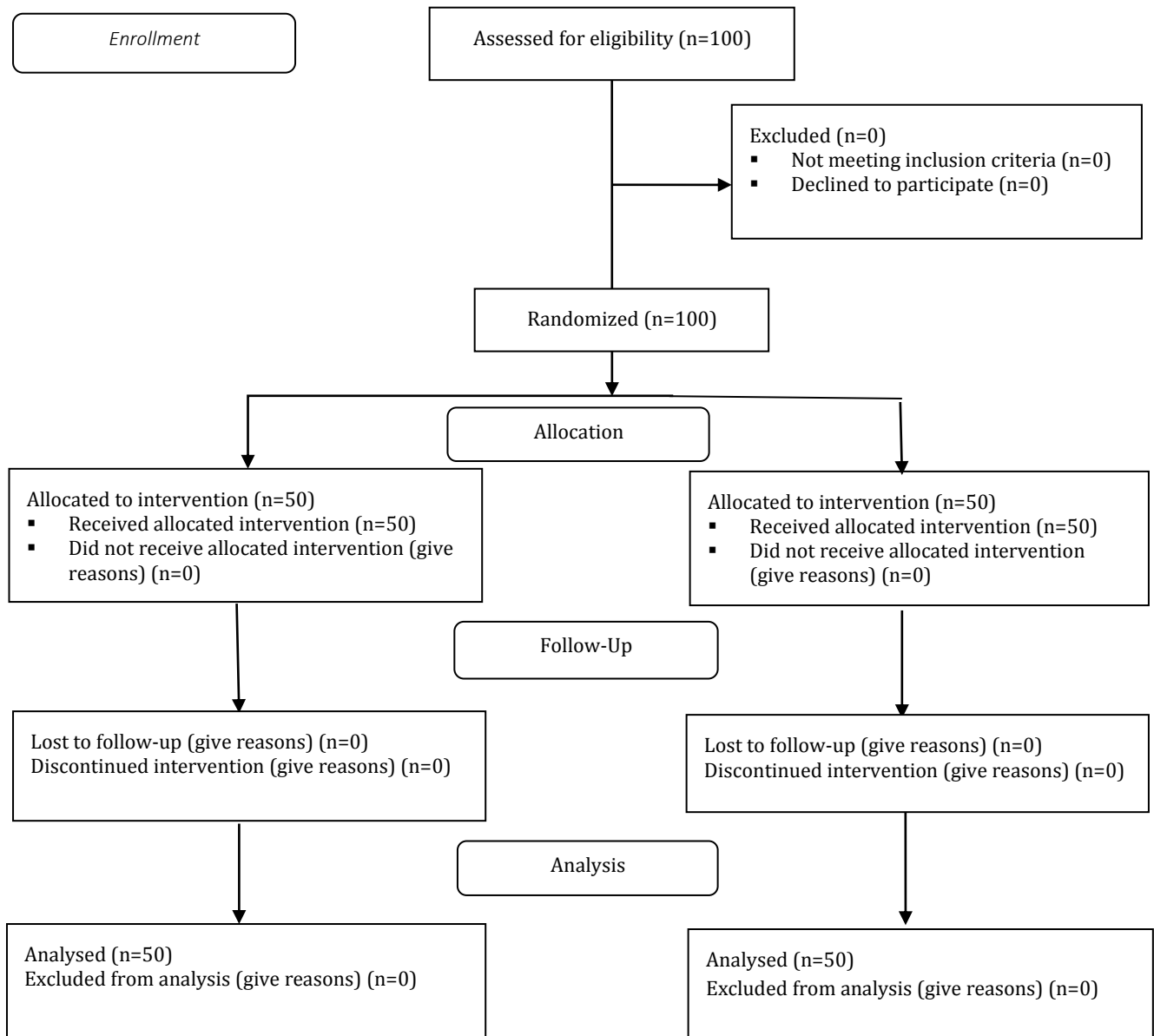


Figure 1. Flowchart of article selection



To analyze the quantitative data, descriptive statistics were used in the form of frequency distribution table. According to the type of data, Chi-square and Independent t-test were used to evaluate the groups in terms of demographic variables and obstetric records. Anova repeated measures and Bon Ferroni tests were used to check compatibility with labor in two groups at different time points during the study.

Analysis was done using SPSS (version 18) and considering Intention to treat.  $P < 0.05$  was considered statistically significant.

## Results

Comparison of the study subjects according to the qualitative and quantitative demographic characteristics of the primiparous women participating in the study showed that the two groups were homogeneous in terms of history of abortion ( $P = 0.69$ ), gestational age ( $P = 0.71$ ), satisfaction with gender of the fetus ( $P = 0.72$ ), education level ( $P = 0.68$ ), spouse's education level ( $P = 0.87$ ), economic status ( $P = 0.71$ ), employment status ( $P = 0.66$ ) and spouse's employment status ( $P = 0.57$ ), women's age ( $P = 0.67$ ), spouses' age ( $P = 0.74$ ), gestational age ( $P = 0.71$ ), marriage duration ( $P = 0.95$ ) and spiritual health ( $P = 0.69$ ) (Table 1).

The results of t-test of independent groups showed that the hypothesis of the equality of means of childbirth self-efficacy to cope with labor and its dimensions (expectation of labor and labor self-efficacy) in the first and second phases of labor was not significant between the two groups ( $P > 0.05$ ). This means that the intervention and control groups were homogeneous before the intervention in terms of the total score of childbirth self-efficacy and its dimensions in the first and second phases of labor. It also shows a statistically significant difference between the intervention and control group in the dimensions of the total score of coping with labor in the first and second phase

of labor and its dimensions (expectation of labor and labor self-efficacy) immediately after the end of the intervention and 12-24 hours after delivery ( $P < 0.05$ ). This means that the use of spiritual counseling intervention program in primiparous women improved the level of coping with labor and its dimensions in the intervention group (Table 2).

The results of the repeated analysis test showed that mean severity of coping with labor in the intervention group was different at least in one of the studied times (before the intervention, immediately after the intervention and 12-24 hours after delivery) ( $P < 0.001$ ), while in the control group, there was no statistically significant difference between the mean scale of coping with labor at different times of the study ( $P < 0.89$ ). The difference observed in the intervention group compared to the control group is due to increasing the level of coping with labor, which can be attributed to the effect of the spiritual counseling intervention. Also, according to the interaction between group and time and based on analysis of variance, it was observed that considering the time changes during the study, there was a statistically significant difference between the two groups in the degree of coping with labor ( $P < 0.001$ ) (Table 3).

Also, according to the Ben Feroni test, it was observed that in the intervention group, there was a statistically significant difference between the mean scores of coping with labor, before the intervention, after the intervention and 12-24 hours after delivery ( $P < 0.001$ ).

So that, the mean score of coping with labor before the intervention in this group was lower than the other three times. That is, the score of coping with labor has increased after the intervention in this group; this means that the intervention of spiritual counseling has been able to increase the coping to childbirth pain in primiparous women (Table 4).

**Table 1.** Comparison of demographic characteristics of primiparous women in the intervention and control group

| Variable                              | Intervention group | Control group | Test statistics<br>P value    |
|---------------------------------------|--------------------|---------------|-------------------------------|
|                                       | N (%)              | N (%)         |                               |
| <b>History of abortion</b>            |                    |               |                               |
| No abortion                           | 45(90)             | 43(86)        | F=0.28                        |
| Once                                  | 2(4)               | 4(8)          | df=2                          |
| ≥2                                    | 3(6)               | 3(6)          | **P=0.69                      |
| <b>Satisfaction with fetus gender</b> |                    |               |                               |
| Yes                                   | 45(90)             | 46(92)        | F=0.12                        |
| No                                    | 5(10)              | 4(8)          | df=1                          |
|                                       |                    |               | **P=0.72                      |
| <b>Educational level</b>              |                    |               |                               |
| High school                           | 1(2)               | 2(4)          | F= 0.66                       |
| Diploma                               | 44(88)             | 41(82)        | df=2                          |
| University                            | 5(10)              | 7(14)         | **P=0.68                      |
| <b>Husband's educationa level</b>     |                    |               |                               |
| High school                           | 2(4)               | 3(6)          | F= 0.41                       |
| Diploma                               | 37(74)             | 38(76)        | df=3                          |
| University                            | 11(22)             | 9(18)         | **P=0.87                      |
| <b>Economic status</b>                |                    |               |                               |
| Income less than expenses             | 25(50)             | 24(48)        | F= 0.66                       |
| Income equals expenses                | 18(36)             | 16(32)        | df=2                          |
| Income more than expenses             | 7(14)              | 10(20)        | **P=0.71                      |
| <b>Employment status</b>              |                    |               |                               |
| Employed                              | 16(32)             | 14(28)        | F=0.19                        |
| Household                             | 34(68)             | 36(72)        | df=1                          |
|                                       |                    |               | **P=0.66                      |
| <b>Husband's job</b>                  |                    |               |                               |
| Employee                              | 19(38)             | 24(48)        | X2= 0.72                      |
| Worker                                | 7(14)              | 5(10)         | df=2                          |
| Free                                  | 24(48)             | 21(42)        | *P=0.57                       |
| Variable                              | Intervention group | Control group | Test statistics P value       |
|                                       | Mean±SD            | Mean±SD       |                               |
| Age                                   | 26.4 ± 56.43       | 26.4 ± 92.05  | t=0.42<br>df=98<br>***P=0.67  |
| Husband's age                         | 30.5 ± 18.07       | 29.5 ± 84.12  | t=-0.33<br>df=98<br>***P=0.74 |
| Gestational age                       | 28 ± 96.83         | 29 ± 2.82     | t=0.36<br>df=98<br>***P=0.71  |
| Duration of marriage                  | 3.2 ± 14.10        | 3.2 ± 8.18    | t=-0.14<br>df=98<br>***P=0.88 |
| Spiritual well-being                  | 67.12 ± 24.31      | 8.14 ± 30.87  | t=0.64<br>df=98<br>***P=0.69  |

\*Chi-square \*\*Fisher exact test \*\*\*Independent Samples T Test

**Table 2.** Comparison of the mean scores of childbirth self-efficacy to cope with labor and its dimensions during the first and second stages of labor before intervention after intervention and 12-24 hours after delivery between the intervention and control group

|                     |  | Variable                                       | Mean±SD      | intervention-control mean difference | Independent t test results |
|---------------------|--|--|--------------|--------------------------------------|----------------------------|
| Before intervention | First phase                                    | <b>Dimensions of waiting to giving birth</b>   |              |                                      |                            |
|                     |  | Control group                                  | 111.11±10.36 |                                      | df=98                      |
|                     |  | Intervention group                             | 110.10±54.99 | 0.6                                  | P=0.80                     |
|                     |  | <b>Childbirth self-efficacy dimensions</b>     |              |                                      |                            |
|                     |  | Control group                                  | 110.9±64.08  |                                      | df=98                      |
|                     |  | Intervention group                             | 103.9±44.08  | 0.2                                  | P=0.91                     |
|                     | Second phase                                   | <b>Total score of childbirth self-efficacy</b> |              |                                      |                            |
|                     |  | Control group                                  | 214.15±74.57 |                                      | df=98                      |
|                     |  | Intervention group                             | 213.14±98.95 | 0.76                                 | P=0.78                     |
|                     |  | <b>Dimension of waiting to giving birth</b>    |              |                                      |                            |
|                     |  | Control group                                  | 125.12±94.14 |                                      | df=98                      |
|                     |  | Intervention group                             | 125.11±8.73  | 0.86                                 | P=0.89                     |
| After intervention  | First phase                                    | <b>Childbirth self-efficacy dimension</b>      |              |                                      |                            |
|                     |  | Control group                                  | 125.10±70.12 |                                      | df=98                      |
|                     |  | Intervention group                             | 125.9±60.83  | 0.1                                  | P=0.92                     |
|                     |  | <b>Total score of childbirth self-efficacy</b> |              |                                      |                            |
|                     |  | Control group                                  | 251.16±64.57 |                                      | df=98                      |
|                     |  | Intervention group                             | 250.15±68.10 | 0.96                                 | P=0.73                     |
|                     | Second phase                                   | <b>Dimension of waiting to giving birth</b>    |              |                                      |                            |
|                     |  | Control group                                  | 111.10±25.33 |                                      | df=85                      |
|                     |  | Intervention group                             | 137.11±6.34  | -25.81                               | P=0<001                    |
|                     |  | <b>Childbirth self-efficacy dimension</b>      |              |                                      |                            |
|                     |  | Control group                                  | 103.10±1.17  |                                      | df=85                      |
|                     |  | Intervention group                             | 125.9±96.68  | -22.95                               | P=0<001                    |
| Second phase        | <b>Total score of childbirth self-efficacy</b> |  |              |                                      |                            |
|                     | Control group                                  | 214.12±26.49                                   |              | df=85                                |                            |
|                     | Intervention group                             | 263.15±2.51                                    | -48.76       | P=0<001                              |                            |
|                     | <b>Dimension of waiting to giving birth</b>    |  |              |                                      |                            |
|                     | Control group                                  | 124.10±71.46                                   |              | df=85                                |                            |
|                     | Intervention group                             | 140.12±4.31                                    | -15.33       | P=0<001                              |                            |
| Second phase        | <b>Childbirth self-efficacy dimension</b>      |  |              |                                      |                            |
|                     | Control group                                  | 125.11±8.34                                    |              | df=85                                |                            |
|                     | Intervention group                             | 138.10±74.18                                   | -13.66       | P=0<001                              |                            |
|                     | <b>Total score of childbirth self-efficacy</b> |  |              |                                      |                            |
|                     | Control group                                  | 249.16±79.67                                   |              | df=85                                |                            |
|                     | Intervention group                             | 274.14±78.98                                   | -24.99       | P=0<001                              |                            |
| Second phase        | <b>Dimension of waiting to giving birth</b>    |  |              |                                      |                            |
|                     | Control group                                  | 111.11±25.33                                   | -25.81       | df=85                                |                            |



|  |                    |  |              |         |         |  |
|--|--------------------|--|--------------|---------|---------|--|
| 12-24 h after delivery                         | First phase        | Intervention group                             | 137.11±6.34  |         | P=0<001 |  |
|  |                    | <b>Childbirth self-efficacy dimension</b>      |              |         |         |  |
|  |                    | Control group                                  | 103.10±1.17  |         | df=85   |  |
|  |                    | Intervention group                             | 125.9±96.68  | -22.95  | P=0<001 |  |
|  |                    | <b>Total score of childbirth self-efficacy</b> |              |         |         |  |
|  |                    | Control group                                  | 214.12±26.49 |         | df=85   |  |
|  | Second phase       | Intervention group                             | 263.15±2.51  | -48.76  | P=0<001 |  |
|  |                    | <b>Dimension of waiting to giving birth</b>    |              |         |         |  |
|  |                    | Control group                                  | 125.10±12.06 |         | df=85   |  |
|  |                    | Intervention group                             | 139.11±58.84 | -14.46  | P=0<001 |  |
|  |                    | <b>Childbirth self-efficacy dimension</b>      |              |         |         |  |
|  |                    | Control group                                  | 124.9±96.76  |         | df=85   |  |
|  | Intervention group | 138.84±9.06                                    | -13.1        | P=0<001 |         |  |
| <b>Total score of childbirth self-efficacy</b> |                    |  |              |         |         |  |
|  | Control group      | 250.11±8.41                                    |              | df=85   |         |  |
|  | Intervention group | 277.15±64.21                                   | -27.56       | P=0<001 |         |  |

**Table 3.** Comparison of the criterion of childbirth self-efficacy to cope with labor before, after the end of the intervention and 12 to 24 hours after delivery in two intervention and control group

| Group                          | Intervention       | Control          | Test result                               |
|--------------------------------|--------------------|------------------|---|
|                                | Mean±SD            | Mean±SD          |   |
| Before intervention            | 464.14±66.95       | 466.15±38.57     |   |
| Immediately after intervention | 537.12±1.31        | 463.14±16.52     | F <sub>Time</sub> = 0.42<br>P=0<001       |
| 12-24 hours after delivery     | 540.15±66.51       | 468.12±34.49     |   |
| Repeated Measures Test result  | F=67.21<br>P=0<001 | F=1.95<br>P=0<89 | F <sub>Group*Time</sub> =57.94<br>P=0<001 |

**Table 4.** Comparison of the scores of childbirth self-efficacy to cope with labor at different points before and after the intervention as well as 12 to 24 hours after delivery in the intervention group

| Group                                 | Intervention    |         |
|---------------------------------------|-----------------|---------|
|                                       | Mean difference | p-value |
| <b>Before intervention</b>            |                 |         |
| Immediately after intervention        | 73              | P=0<001 |
| 12-24 hours after delivery            | 76              | P=0<001 |
| <b>Immediately After intervention</b> |                 |         |
| 12-24 hours after delivery            | 3               | P=0.95  |

Bon ferroni test

### Discussion

The results of the present study about understanding the level of adaptation of primiparous women indicated a significant difference between the intervention and control groups in the post-test. In other words, the score of childbirth self-efficacy to cope with labor of

primiparous women increased in the subjects who underwent spiritual group counseling compared to the subjects who did not receive this intervention. This indicates the effectiveness of spiritual counseling on improving coping with labor, and in other words, it promotes self-efficacy and realistic expectation of childbirth.

In this regard, the results of the study by Khodakarmi et al. (2015), which was conducted to determine the effect of spiritual counseling on depression, anxiety and stress in pregnant women, their results showed that spiritual counseling helps to control depression, control and stabilize anxiety and stress is effective; the findings confirm that providing spiritual counseling to increase the mental health of mothers can probably make them resistant to psychological pressure, anxiety and depression (33).

A systematic review study was conducted by Crowder et al. (2019) with aim to determine the effect of spiritual counseling in coping with labor pain in primiparous women. They evaluated the studies conducted between 2000 to 2018 and the findings showed that through strengthening and institutionalizing spiritual health and emphasizing the development of spiritual health dimensions in pregnant mothers, including communication with God, mother's responsibility towards herself, fetus, her husband and the people around her, self-efficacy in coping with crisis, relationship with child and expressing happiness and gratitude for his existence, relationship with pregnancy and physical, mental and sexual changes increased coping with Labor and ensured the mental and psychological health of mother and fetus (34).

Another study was conducted by Monfardekeshki et al. (2018) with aim to investigate the effect of spirituality-based counseling in improving the coping patterns of pregnant women. Their results showed that spirituality-based counseling is an acceptable approach to improve women's coping patterns to pregnancy challenges and can be a basis for designing intervention programs in this field. Their study showed that spirituality has a special effect on a person's view and attitude towards pregnancy. Based on the available conditions and resources, pregnant women manage their perceived stress during labor with different coping methods, and spiritual and religious counseling affects the cognitive, behavioral and emotional dimensions of women (35). Also, in the study in Turkey (2018), the pattern of coping and self-efficacy of pregnant women was more used in the group receiving spiritual intervention than the control group,

which is in line with the results of the present study (36).

In the study of Faruzandeh et al. (2016), there was a significant but inverse relationship between spiritual health and adjustment style in pregnant women (37). Also, the results of the descriptive study by Rahiminejad et al. (2018) which investigated the relationship between the level of spiritual health and anxiety, depression and stress in pregnant women showed that there is no significant relationship between spiritual health and the levels of anxiety, depression and stress in pregnant women (38). The possible reason for these contradictions can be due to differences in the type of study, different sample sizes, differences in the demographic characteristics, and difference in controlling the effect of confounders, especially the inclusion and exclusion criteria. Possibilities such as the effect of cultural and religious factors, the studied society, the mental and religious status of the samples at the time of the research, the type of tools used and many other influencing factors may affect the results of the studies. In the present study, spiritual counseling was provided to mothers and somehow the level of spirituality has increased in these mothers, so its effect on anxiety is evident, but the study by Rahiminejad et al. is a descriptive research that has investigated the relationship between spirituality and anxiety of mothers in a period of time.

The results of a qualitative study with the aim of explaining the strategies of pregnant women in managing concerns during pregnancy showed that relying on the lever of spirituality and its subsets, the increasing emergence of spiritual connection in pregnancy, placing oneself under the umbrella of spiritual support and transformation towards appreciation and trust are known as the main core of strategies to deal with and cope with pregnancy concerns. Therefore, mothers reduce their worries with spiritual connection in pregnancy and feel this connection stronger as the gestational age increases. Most of the mothers with religious beliefs try to introduce the fetus to the soul-enhancing spiritual sounds of the Quran and prayer during pregnancy, and they believe that this practice will calm them and the fetus. Mother's believe in the infinite power

strengthen her ability to cope with the worries of pregnancy (39).

Also, Borghei and colleagues (2016) by research on the predictors of the empowerment of pregnant mothers concluded that the sense of spiritual support was one of the predictors of different dimensions of the mothers' empowerment and mothers improved their own empowerment by strengthening the sense of inner spiritual support (40).

The use of spiritual coping style is associated with lower levels of tension in pregnancy, and spiritual coping efforts including positive evaluation or religious belief are associated with improved mental status during pregnancy. Therefore, having a purpose and meaning in life, feeling of belonging to a higher meaning, hoping for God's help in problematic situations in life and benefiting from social and spiritual support are all among the methods that spiritual people suffer less damage from stressful events in life. Also, according to Foruzandeh et al., believing that there is a God who dominates the situations and watches over the servants, reduces the anxiety of pregnant women to a great extent; in other words, these pregnant women with high levels of spirituality believe that by relying on God, uncontrollable situations such as painful process of childbirth can be controlled (37).

High levels of spiritual health during pregnancy can be considered a safe haven during this period. Spirituality and connection with a higher power reduces stress during pregnancy, increases psychological well-being, emotional balance and reduces their vulnerability to the emergence of disorders in traumatic situations.

Among other spiritual interventions during pregnancy and its effect on coping with labor, we can point to the effect of listening to the sounds of the Holy Quran and observing its verses. In this regard, the result of the study by Ismaili et al. (2019) showed that listening to the voice of the Qur'an and everything related to strengthening spiritual health can bring peace to mothers during childbirth (41). Considering the strong role of midwives in providing advice and training during pregnancy and psychological support for pregnant mothers, it seems necessary to use counseling methods to improve the mental health of pregnant women. The spiritual counseling is effective on controlling

and reducing the fear of childbirth which can be due to the appropriateness of the spiritual counseling approach with the culture and beliefs of the people of our country and in line with responding to mental concerns and finding meaning in life (42).

The limitation of the present study was that it was conducted on primiparous women who had a low-risk pregnancy, possibly in pregnant women with different conditions, conflicting results will be obtained. Therefore, it is recommended to conduct similar studies in mothers who have a history of pregnancy loss or high-risk pregnancy. In addition, this study was conducted on Muslim women, it is suggested that similar studies be conducted on women in different societies and with different religions and cultures. Other limitations of this study were lack of time and lack of long-term follow-up. It is suggested to conduct studies in this field with long-term interventions and long-term follow-ups in several stages.

## Conclusion

The results showed a statistically significant difference between the mean scores of self-efficacy to cope with labor, after the end of intervention and 12-24 hours after delivery in the intervention group compared to the control group. It means that we can use of the positive effect of spiritual counseling in improving coping with labor in primiparous women. Considering the significant role of midwives in providing advice and training during pregnancy and mental and emotional support to pregnant mothers, it is necessary to try to use appropriate counseling methods to improve the mental health of mothers. In other words, the findings showed that spirituality and especially religion, along with other effective components in adapting to labor pain, such as self-efficacy and realistic expectation from labor process, can be actively influenced by spiritual counseling in the process of adapting and coping with labor pain and the process of delivery should be considered as an effective support in ensuring the health of children and mothers. Therefore, regarding to the role of midwifery counselors in the field of spiritual assistance, care, prenatal training, and mental and emotional support of a pregnant mother, the integration of spirituality-based counseling in the educational content of

childbirth preparation classes can improve mental and spiritual health of pregnant mothers.

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### Conflicts of interest

Authors declared no conflicts of interest.

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