

The Effect of Integrating Midwifery Counseling with A Spiritual content on Improving the Antenatal Quality of Life: A Randomized Controlled Trials

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Research Article

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Abstract

Background: poor pregnancy QoL is associated with adverse outcomes.

Objective: To examine the effect of integrating midwifery counseling with spiritual content on improving the antenatal quality of life.

Method: This randomized controlled trial was carried out on 60 first time pregnant women who were referred to two childbirth preparation centers in Zanjan city, Iran in 2019. The counseling was conducted in eight sessions. The quality of life was measured before and two months after the intervention. Data were analyzed using the chi-square test, independent t-test, paired-samples t-test, and linear regression model. The level of significance was $p < 0.05$.

Results: After intervention based on an independent t-test the total score of QoL was significantly greater in the intervention group compared to the control group ($p=0.001$). After the intervention the mean score of four domains of QoL (Role-Physical, General Health, Vitality, Role-Emotional, and Mental Health) was significantly higher than the control group ($p=0.001$). While in terms of Physical Functioning, Bodily Pain and Social Functioning domains were not statistically significant ($p>0.05$).

Conclusion: Integrating midwifery counseling with spiritual content had a positive impact on improving the psychological aspect of quality of life more than the physical aspect. It can be used by providers for planning childbirth package.

Trial registration:

The study registered at the Iranian Registry of Clinical Trials website under the code IRCT20150731023423N12, Registration date: 2018-11-06, started recruitment start date: 2018-11-11 (<https://en.irct.ir/user/trial/32031/view>)

Introduction

Pregnancy is a physiological phenomenon in a women's life. Physical and psychological changes during pregnancy can affect the social and physical performance, as well as the quality of life (QoL) of pregnant women (Bjelica et al., 2018). The quality of life (QoL) reflects the subjective perceptions of the individual's situation in life based on the cultural and value system, given the individual's goals, expectations, standards and attitudes (Cai et al., 2021). According to the World Health Organization (WHO), health-related QoL refers to the physical, psychological, social, and spiritual dimensions of individuals' well-being (Post, 2014). Furthermore, the QoL of pregnant women could be affected by many factors such as gestational age, social and economic support, and complications before or during pregnancy (Lagadec et al., 2018). On the other hand, poor pregnancy QoL is associated with adverse outcomes for example preterm labor pain, and pregnancy-related symptoms such as fatigue, low back and pelvic pain (Lau,

2013). Additionally, low QoL in pregnancy contributes to low QoL in the postnatal period (Fobelets et al., 2018).

Spirituality and religiosity are known as important components of health and well-being (Ruseckienė et al., 2021). Accordingly, the European Commission recommends that spiritual care be provided to nursing and midwifery care, to meet the spiritual, religious and cultural needs of the people (McSherry et al., 2020).

Childbearing is one of the ideal conditions for enriching spirituality. Some people believe that the process of pregnancy and childbirth is a time to get closer to God and make life more meaningful (Crowther et al., 2020). Spirituality is defined as sensitivity or attachment to religious values, or to things of the spirit as opposed to material or worldly interests. Spiritual experience is a unique experience and includes understanding the meaning of life, positive life experience, feeling happy and life satisfaction (Srivastava & Krishna, 2013).

In Iran, spiritual care has not been routinely included in prenatal care programs, while in recent years, valuable results from the implementation of interventions based on religion and spirituality in improving anxiety, depression and coping with stress have been reported (Jabbari et al., 2020). The use of spiritual counselling alone or in combination with cognitive-behaviour therapy can help with improving QoL in women with a high-risk pregnancy, postpartum depression, and fear of labor pain (Moazedi et al., 2018; Niaz Azari et al., 2017; Zamani et al., 2019). However, there is a gap in the effectiveness of spiritual-based interventions in the culture and context of Iran on health-related QoL in women with the first pregnancy. Given the importance of spiritual care and the presence of limited studies in this field, this study aimed to determine the effect of spiritual counselling on improving the QoL of women with a first-time pregnancy.

Methods

Study design and setting

This parallel randomized controlled trial was carried out on 60 first time pregnant women who were referred to two childbirth preparation centers in Zanzan a city in the northwest of Iran, 2019. There are three childbirth preparation centers in Zanzan. One of the childbirth preparations centers is located in a hospital and covers most high-risk pregnancies, so sampling was done from only two centers that provide services in the urban health community center.

Aims

To examine the effect of integrating midwifery counselling with spiritual content on improving the antenatal quality of life among first-time pregnant women.

Participant

With considering the 95% confidence level ($Z_{1-\alpha} = 1.96$), the test power of 80% ($Z_{1-\beta} = 0.85$) and based on QOL variable in Zamani's study with the mean and standard deviation in the intervention group ($M_1=32,10$ and $S_1=2.63$), control group ($M_2=25/90$ and $S_2=2/33$), an attrition rate of 15% the sample size of was calculated for 30 pregnant women in each group. (Zamani et al., 2019).

Inclusion criteria consisted of living in Zanjan city, gestational age of 20-24 weeks, willingness to participate in the study, obtaining scores ≤ 10 according to Edinburgh Postnatal Depression Scale (EPDS), scores 18 to 36 based on the Cohen Perceived Stress Scale (PSS) and having a normal pregnancy with a singleton fetus.

Exclusion criteria before randomization were the presence of medical or obstetric complications, psychiatric disorders or use of psychiatric drugs, and no access to telephone for follow up. There was no attrition in the study and after the interventions.

Procedure& randomization

Pregnant women who met the inclusion criteria and signed the informed consent form were allocated into two intervention and control groups using randomized a block size of four. To ensure the concealment of the sequence of enrolment, an opaque sealed envelope system was used (Doig & Simpson, 2005). Envelope preparation and random allocation sequencing were performed by a person not involved in the research process. In the present study, participants & researcher were not blinded only outcome assessors were blinded. The research process is shown in [fig1](#).

Intervention

The counselling sessions were held in an interaction between the counselor and the women by the first author and content of sessions developed under the supervision of a spiritual advisor by following the study of khodaKarmari et al.(Khodakarami et al., 2016) and the method suggested by Richard and Bergin's (Richards & Bergin, 1997). The counselling was held in 8 sessions, as a group counselling (8-10 people) for 4 weeks (2 times per week for 45 minutes) at preparation classrooms. The counselling was conducted by a midwife (the first author) who that familiar with counselling approaches under the supervision of a clinical psychologist. Educational content was prepared using the Holy Quran and religious books (Hadis) and integrated with routine midwifery counselling. The main topic of counselling was reported in [table 1](#).

Each session was started with a focus on breathing exercises or the sacred name like "Allah". Next, the counsellor described the subject of the meeting and encouraged the mothers to express emotions, needs, concerns and thoughts on pregnancy. At the same time, the counsellor guided the participants to increase their knowledge to choose the appropriate remedy for emotional reactions during pregnancy and pay attention to spiritual aspects of life. Further advice was given as homework. At the end of each session, explanations and summaries were provided and the women discussed the topic.

According to the guidelines of the Iranian Ministry of Health, routine childbirth preparation classes were held from the 20th week of gestation every two weeks until the 32nd week of gestation. The sessions focused on making the mothers familiar with the different stages of pregnancy from fertilization to delivery, personal hygiene, nutrition, mental and physical changes during pregnancy, pregnancy risks, childbirth planning, postpartum health, breastfeeding, and child care. However, no spiritual content was included. The control group only received routine care.

Outcomes

The main outcome of this study was to determine prenatal QoL of first-time pregnant women which were collected using the SF-36 as a standard questionnaire of QoL, which was completed by the participants before and two months after the last session.

Data collection instruments

Demographic

It included personal information of a woman's age, education, occupation and spouse's occupational status.

Health-related quality of life (HRQoL) -*SF-36*

It is a health-related QoL (HRQoL) questionnaire as a multidimensional measure of health status for self or interviewer administration. It is widely used in clinical research and is a reliable and valid measure of health-related QoL in different populations (Lins & Carvalho, 2016; Montazeri et al., 2005). It measures the perceptions of health-related QoL in 8 domains of Physical Functioning, Role-Physical, Bodily Pain, General Health, Vitality, Role-Emotional, Social Functioning and Mental Health. Responses are scored on a 5-point scale, that is transformed into a score of 0–100 with higher scores indicating better functioning or well-being. The validity and reliability of The Farsi version of the questionnaire have been assessed by Montazeri et al. (Montazeri et al., 2005).

Data analysis

The statistical analysis was performed using the SPSS software version 16. Descriptive statistics were employed to describe demographic data. The chi-square test was used to compare the demographic characteristics between the groups. The Kolmogorov-Smirnov test revealed that the scores of the QoL and its components had normal distributions. Therefore, to compare total scores and all domains between and within the groups in pre-and post-intervention, the independent t-test and paired samples t-test were applied, respectively. The level of significance was $p < 0.05$.

Results

Among 146 pregnant women evaluated by the researcher, sixty women met the eligibility criteria for the study

Baseline characteristic

The demographic data are shown in table 2. Most of the participants were housewives and have academic level education. There were no statistically significant differences between the two groups before the intervention in terms of demographic characteristics. The mean (SD) of gestational age in counseling group and control group were 21.80 ± 1.27 and 21.60 ± 1.40 weeks, respectively. Also, term of the mean age of the participants and gestational age was not statistically significant between the two groups ($p < 0.05$) (Table 2)

Health-Related Quality of Life (HRQoL)

Intervention group before counselling the mean score of overall QoL was 85.66 ± 5.44 that increased to 96.46 ± 4.44 and in the control group it was 86.86 ± 3.36 before intervention that decreased to 85.76 ± 4.04 two months after the intervention. The observed differences between the two groups were statistically significant after intervention ($p = 0.001$).

After intervention based on an independent t-test, the mean score of four domains of QoL (Role-Physical, General Health, Vitality, Role-Emotional, and Mental Health) in the counselling group was significantly higher than the control group ($p = 0.001$). While in terms of Physical Functioning, Bodily Pain and Social Functioning domains were not statistically significant ($p > 0.05$).

Comparing before and after scores of QoL and its domains in the control group showed no statistically significant differences ($p > 0.05$). Comparing before and after scores of QoL and the domains of "Physical Functioning, Role-Physical, General Health, Vitality, Role-Emotional, and Mental Health" in the intervention group showed statistically significant improvements ($p < 0.05$). Only the scores of two domains of "Bodily Pain, Social Functioning" were not statistically significant ($p > 0.05$) (Table3).

Discussion

The study was done to examine the effect of integrating midwifery counselling with spiritual content on improving the antenatal quality of life among first-time pregnant women. Our results showed that integrating midwifery counselling with spiritual content could be improved the overall QoL. However, three domains of QoL (physical function, bodily pain, and social function) showed no improvements. The current study emphasized that integrating midwifery counselling with spiritual content improved the psychological aspects of QoL more than the physical aspects. Limited information is available on the effectiveness of spiritual-based education for improving the QoL of first-time pregnant women. However, our results were consistent with some studies that were conducted on multiparous or high-risk pregnancy samples (Hunter et al., 2011; Moazedi et al., 2018; Niaz Azari et al., 2017; Zamani et al., 2019). Our results were also consistent with the studies that used different procedures for intervention, for example,

Bashirpour et al (2018) showed that the mindfulness-based approach (Bashirpour et al., 2018) and in another study Liu et al (2019) suggested that yoga could be improved the QoL and well-being of pregnant women (Liu et al., 2019). Also, O'Connor et al. (2018) was reported similar results (O'Connor et al., 2018). Our study results emphasized that the spiritual-based approach similar to other methods can be improved the QoL of pregnant women.

Various ideas that have been reported concerning the biological and psychological effects of spiritual experience on diseases have been emphasized in some studies. It can be claimed that some cognitive patterns, psychological characteristics and behavioural patterns created by spirituality-oriented methods lead to strengthening health and improving the physiological function of the body and consequently increase the psychological resistance of the person in poor physical and social situations. Accordingly, religious and spiritual practices lead to increased tolerance, patience, self-control, satisfaction, emotional control, optimism, self-efficacy (based on trust in God's blessing), altruism, kindness and love (Abdollahpour & Khosravi, 2018; Seybold & Hill, 2001; Srivastava & Krishna, 2013). Religion and spirituality can increase QoL through changing people's attitudes, increasing their sense of responsibility towards themselves and others, promoting the search for meaning in life, having a greater sense of happiness and self-esteem (Lent, 2004).

The effectiveness of the spiritual approach on improving QoL in the different populations (Dalmida, 2006; Hamid et al., 2017; Manshaee et al., 2018) has been shown that spirituality is a universal element (O. Harrison et al., 2001). Belief in God creates a change in the perspective toward life (Khodakarami et al., 2016). The spiritual aspects of pregnancy and childbearing are often neglected in the literature. Integration of midwifery-led counselling with the spiritual approach for improving the quality of life of women is necessary.

Limitations

The sample size was small and follow up period was short. Also, sampling was conducted on the participants of childbirth preparation classes, which can affect the generalizability of findings. Also, the long duration of each session could be led to the exhaustion of mothers. However, the women were allowed to have rest and walk for a few minutes during the sessions. Finally, the short follow-up period should be considered by researchers in future studies. The spouses of women not included in this study should be considered in future studies.

Conclusion

This revealed that spiritual counselling had a positive impact on improving the QoL of first-time pregnant women. The integration of spiritual counselling with the educational content of childbirth preparation can improve the psychological aspect of QoL of pregnant women more than the physical aspect. Therefore, it can be used for planning suitable interventions among pregnant women.

Declarations

Availability of data and materials

The dataset used in the present study is available from the corresponding author upon reasonable request

Consent for publication: Not Applicable

Competing interests

No potential conflict of interest relevant to this article was reported

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Authorship

This study was one part of the MSc thesis of M.K, M. The conception, design of the study, and data collection process were undertaken by M.K, M and A.M was the supervisor who also contributed to the design of the study and reporting of the results. K.A and S.F as the second supervisors contributed to all the stages of the study. Analysis, interpretation, and reporting were supervised by S.F and A.M. All authors contributed to the drafting and revising of the article and agree with the final version of the manuscript to be submitted to the journal; they also meet the criteria of authorship. S.F was one of the colleagues, but unfortunately, he is not alive.

Ethical Approval:

This article was a part of the MSc thesis and approved by the Ethics Committee of the Vice Chancellor for Research of Zanzan University of Medical Sciences, Iran, with the approval number IR.ZUMS.REC.1397.024. All procedures of the study were following the protocol of the regional ethical research committee and with the declaration of Helsinki 1964. After informing the study's purposes, written consent was obtained from all women. They were informed that their participation was voluntary, confidential, and anonymous, and was apprised of their right to withdraw from the research at any time.

Trial registration:

The study registered at the Iranian Registry of Clinical Trials website under the code IRCT20150731023423N12, Registration date: 2018-11-06, started recruitment start date: 2018-11-11(<https://en.irct.ir/user/trial/32031/view>)

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Tables

Table 1 Details of the intervention

Counselling content
<p>The first session was to meet the participants and researcher, to explain the aim, the rules, and brief full program, providing pre-test.</p> <p>Talking about concept of quality of life, self-concept in pregnancy, and checking misconceptions.</p> <p>Assessing attitudes and beliefs of the pregnant women on spiritual issues, the role of god and religious in her life.</p> <p>Listening to positive statements of participants based on reading the holy book, and spiritual issues in overcoming or felling calm in stressful situations.</p>
<p>Listening to the physical and mental problems, worries, fears, ambivalence sense in early pregnancy and her actions in daily life.</p> <p>Focus on human creation discuss concerning the status of women in the continuity of creation</p> <p>Talking about the spiritual aspects of the pregnancy and childbearing.</p> <p>Focus on the concept of trust, resort, patience, kindness.</p> <p>Blessings of God and the role of it in reinterpreting concept of pregnancy and overcoming the worrisome symptoms of pregnancy.</p> <p>Book therapy / listening to Qur'an voices for 10 min.</p> <p>Strengthening individuals' inner hope and powers for coping with pregnancy and childbearing.</p> <p>Encourages to create a daily spiritual space of time or place at home.</p>
<p>Encouraging to express their feeling after/ during creating a daily spiritual space.</p> <p>Talking about the experience of participating in religious programs or doing spiritual issues.</p> <p>Discuss to the effect of spiritual's beliefs on eating habits on the fetus, taking care of oneself in pregnancy.</p> <p>Encouraging to refer to people who create a positive sense or comfortable with them.</p> <p>Book therapy / listening to Qur'an voices for 10 min.</p> <p>Listening to the "Nature's Music" the sound of birds, rivers and waterfalls...</p> <p>Illustration and slowly moving tone using meditation relaxation technique along or with listening to relaxing music</p>
<p>Discuss the strategy of prayer therapy to reduce the worrisome symptoms of pregnancy related to pregnancy and increase hope</p> <p>Express the pleasure and responsibility of being a mother from the point of view of the Quran" Divine Responsibility Reward"</p>

Teaching relaxing muscles with deep breathing for getting rid of the stress. Repeat twice daily for 10 to 15 minutes

Table 2: The comparison of socio-demographic characteristics of participants between two groups

Variable		Groups				P value
		Intervention		Control		
		Number (percent)				
		frequency	Percentage	frequency	Percentage	
Woman's Education woman	Guidence	2	6.7	2	6.7	0.44
	High school	1	3.3	1	3.3	
	Diploma	12	40	10	33.3	
	Academic	15	50	17	56.7	
Woman's Employment	Employed	14	46.7	10	33.3	0.43
	Housewife	16	53.3	20	66.7	
Spouses' employment	Employed	17	56.7	21	70	0.42
	Unemployed	13	43.3	9	30	
Age (years)	Mean ± standard deviation	25.80±6.37		24.30±6.80		0.38
Gestational age (week)		21.80±1.27		21.60±1.40		

Table 3: The comparison of quality-of-life scores between two groups

Variables		Intervention		Control		P value
		Mean	SD	Mean	SD	
Physical functioning	Pre test	26.75	8.43	30.25	5.14	0.05
	Post test	31.08	8.29	27.58	5.62	0.06
P value	Paired t test	0.0001		0.07		
Bodily pain	Pre test	32.91	22.62	33.75	16.78	0.87
	Post test	33.75	25.24	38.33	20.74	0.44
P value	Paired t test	0.73		0.34		
Physical role functioning	Pre test	6.25	5.91	5.20	5.46	0.48
	Post test	13.33	7.65	6.25	5.44	0.0001
P value	Paired t test	0.0001		0.16		
Emotional role functioning	Pre test	16.66	8.47	16.66	8.47	1
	Post test	29.16	9.22	16.94	8.32	0.0001
P value	Paired t test	0.0001		0.91		
Social role functioning	Pre test	35.41	12.74	37.08	8.97	0.56
	Post test	38.33	11.80	37.91	8.97	0.87
P value	Paired t test	0.18		0.72		
Mental health	Pre test	57.00	7.61	58.50	6.45	0.41
	Post test	62.33	8.78	57.16	6.78	0.01
P value	Paired t test	0.0001		0.45		
Vitality	Pre test	49.79	8.44	49.16	8.64	0.77
	Post test	63.33	4.85	49.16	8.64	0.0001
P value	Paired t test	0.0001		0.18		
General health perceptions	Pre test	35.16	7.59	33.83	5.20	0.43
	Post test	46.66	7.46	32.33	4.09	0.0001
P value	Paired t test	0.0001		0.34		
Total Quality of Life Score	Pre test	85.66	5.44	86.86	3.36	0.31
	Post test	96.46	4.44	85.76	4.04	0.0001
P value	Paired t test	0.0001		0.23		

Figures

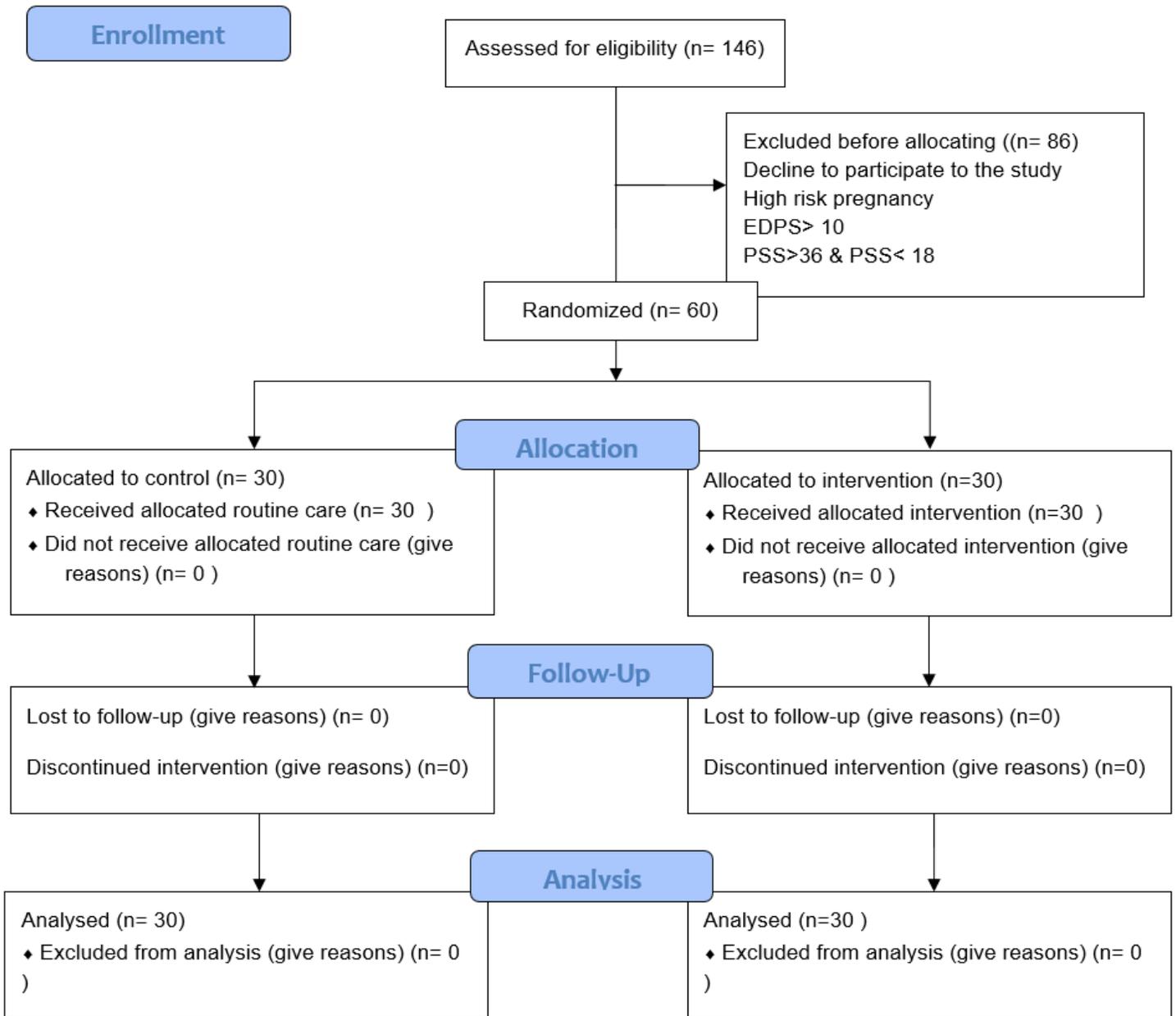


Figure 1

flow chart of participants selection