



The Effect of an Empowerment Training Program on the Difficulty of the Transition to Parenthood and Parenting Stress: A Quasi-Experimental Study among Iranian Primiparous Women

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Abstract

Background: The process of becoming a mother is one of the most satisfying and fulfilling events in women's lives. Maternity for the first time can be stressful and also can increase anxiety in women.

Objectives: The present study aimed to determine the effect of an empowerment training program on the difficulty of transitioning to parenting as well as parenting stress of primiparous mothers.

Methods: The sample of this quasi-experimental study consisted of 78 primiparous women who were selected due to convenient sampling. Participants completed the demographic, difficulty in transition to parenting, and parenting stress questionnaires before and after the study. The participants received four training sessions (the first session was face to face at 3-5 days after childbirth and subsequent training sessions were conducted by telephone at 2, 4, and 6 weeks postpartum) based on the self-efficacy model.

Results: The mean age of the participants in the study was 27.012 ± 4.99 years. The results of the Wilcoxon test showed that training significantly reduced parenting difficulty (P value = 0.0001, $z = -7.626$) and parental stress (P value = 0.0001, $z = -7.50$). The mean score of parenting difficulty decreased from 97.02 ± 17.34 to 81.65 ± 15.45 , and the mean parental stress score decreased from 80.08 ± 22.53 to 61.13 ± 12.20 . The results also indicated that education in all four domains (responsibility and commitment, satisfaction, self-esteem, and personal commitment) significantly reduced the difficulty of the transition to parenting (P value = 0.0001). According to the results, training has also been effective in reducing the difficulty of transitioning to parenting in terms of maternal concerns, enjoyment, change in life, new challenges of mother's postpartum feeling.

Conclusions: The outcomes of the present study highlight the effectiveness of empowerment training on the difficulty of the transition to parenting as well as parenting stress in primiparous mothers.

Keywords: Training, Empowerment, Difficulty in Transitioning to Parenting, Parenting Stress, Primiparous women.

1. Background

Parenting is one of the most difficult roles to which adults without any special training commit themselves (1). The transition to parenthood is a very sensitive, psychological, and physical period in the lives of couples. As soon as the first baby is born, couples adopt parental roles, and the community has specific expectations from them for these roles (2). The process of becoming a mother is one of the most satisfying and fulfilling events in women's lives (3).

Being a mother for the first time can be stressful, and

it can increase anxiety in women (4). In the past, motherhood was considered a natural evolutionary stage without any effort in the woman's life, while parenting can be learned, and it did not occur by itself or at the birth of the child. Factors (5), such as age, maternal self-esteem, level of education, depression, number of pregnancies, perceived social support, anxiety, marital status, maternal personality traits, childbirth experience, infant health and mood, social support from spouse, family members, and health care staff influence competence of maternal role (4, 5). One

of the issues considered today in the family is the stress of being a parent (6). The three main sources of stressors for parents include child characteristics, parents' characteristics, and situational life stressors in life (7). Although parenting is a responsible job, most people accept it with love, satisfaction, and dedication (8).

Parental stress can also lead to poor family performance and inappropriate parenting in general (6). Mothers experience greater levels of stress than fathers, which may be due to the structure of their different tasks in the family and the differences in their psychological response (9). Given the impact of parental stress and parenting style on child-rearing as well as children's social adjustments, measuring parental stress is crucial for clinical decision making (1). Health promotion is actually empowering people to have control over the factors affecting their health (10).

One of the strategies to achieve this goal is educational interventions focused on empowering women. From the WHO's view, empowerment as the heart of health promotion is a process through which individuals gain greater control over decisions that affect their health (11). In the empowerment model, health professionals help individuals make the right decisions based on their specific circumstances. In health education, the concept of power is not to overpower or change others. The main concept of this change is the desire for change (12, 13). Perceived self-efficacy is one of the most important predictors of behavior. It reduces fear of failure, raises its level, and improves problem-solving and analytical thinking (14). The feeling of self-efficacy is an important prerequisite for behavior change (15). One of the theories in this field is the self-efficacy theory, which Bandura has introduced as a suitable framework for teaching mothers in the process of parental duties (16). Parents with high self-efficacy consider child-rearing as a challenge, not as a threat. These parents trust their ability, and they are less stressed out and anxious about their needs related to parental role (17).

A number of studies have shown that training during pregnancy is insufficient for maternal role, and it has no effect on parental skills (18). It was indicated in a study by Hamzeh Khani et al. (2014) that mostly 10-15 minutes for the training are dedicated to pregnant mothers (19). According to the study by Esfandiari Zadeh et al. (2012), these trainings were below the optimal standard in Iran, and mothers' questions in 48% of cases were answered incompletely (20). Preparing a pregnant woman to accept the role of a mother is one of the important responsibilities of a midwife. In Iran, most prenatal care has been limited to maternal physical care, and less attention has been paid to her psychological needs (21).

2. Objectives

This study aimed to design an empowerment training program based on increasing mothers' self-efficacy and its impact on the difficulty of the transition to become a parent and parenting stress of primiparous mothers.

3. Methods

3.1. Study Design

The present research is a quasi-experimental one group pre-test, and post-test design, and all of its participants were from postpartum women referring to Garmsar health centers for receiving neonatal screening.

It was performed on 78 eligible women referred to five selected health centers (Safari, Tadbir, Rikan, Ivanaki, and Shomare2) in Garmsar city (a county in Semnan Province situated in the northeast of Iran) from May to October 2019. After selecting health centers randomly, the participants were selected using convenient sampling. Depending on the number of eligible samples in each center, the allocated samples in the centers of Safari, Tadbir, Rikan, Ivanaki and Shomare 2 was 12, 19, 8, 25, and 2 persons, respectively.

The inclusion criteria consisted of having reading and writing skills, Persian language proficiency, married, age of being over 18 years old, being primiparous, singleton birth and delivery of healthy infant, absence of physical and mental illness in mother, lack of postpartum depression, not having a history of drug use, psychotropic substances and alcohol, and filling out an informed consent form.

The exclusion criteria were the mother, and baby get sick during the research process, mother's migration, failure to attend the face-to-face consultation, and incomplete questionnaire.

Seventy-eight participants were selected as the samples, according to a study by Azmoudeh et al. (2015), using a two-mean formula related to a quantitative trait in an independent population (5).

$$n = \frac{\left[Z_{1-\frac{\alpha}{2}} + Z_{1-\beta} \right]^2 \sigma_{\delta}^2}{\delta^2} + \frac{Z_{1-\frac{\alpha}{2}}^2}{2} \quad (1)$$

$$\alpha = 0.05, Z_{1-\frac{\alpha}{2}} = 1.961150826$$

$$\beta = 0.2, Z_{1-\beta} = 0.841623031$$

$$\mu_1 = 39.26, \mu_2 = 35.91$$

$$SD_1 = 4.5, SD_2 = 5.5$$

$$N = 78$$

3.2. Instrument

A brief form of parenting stress and questionnaire of difficulty in transition to parenthood were used for data collection. The parenting stress brief form is a 36-item self-report tool, which was designed by Abidine in 1995 to measure stress in a situation of child-parent relationship and identification of their psychological stress sources. Responses were scored based on the 5-point Likert scale ranging from score 1 (completely disagree) to 5 (completely agree) with a score ranging from 36 to 180. The validity of this tool in Iran was obtained using Cronbach's alpha for parental stress subscales, dysfunctional parent-child interaction, problematic child characteristics, and a total score of 0.90, 0.80, 0.84, and 0.08, respectively (22).

The questionnaire of difficulty in transition to parenthood (Stephen Beyer 1982, Tewis 1989) has 50 items based on the 5-point Likert scale with four dimensions, including A-Parental responsibility and restrictions, B-Satisfaction of parents, C-Marital stability, and D-Personal commitment. Scoring consisted of 50-109, indicating a low level, the score between 110-179 indicated the intermediate level, and the score between 180 to 250 showed a high level of difficulty in the transition to parenthood. This tool was used in the study of Zekotiz and Millet (1997), and its reliability was calculated between 0.75 and 0.82 for the four subscales (2). Content validity of this tool in Iran was done by Seraj et al. in 2013.

3.3. Procedure

The researcher was a postgraduate student in midwifery counseling who had enough experience in postpartum mother teaching. After obtaining permission from the authorities, the researcher referred to the study centers. Participants completed demographic, difficulty in transition to parenthood, and parenting stress questionnaires at the beginning. Also, questionnaires were completed by the mothers again at the 8th week after delivery.

The participants received four training sessions. The first session was face-to-face at three-five days after childbirth, and subsequent training sessions were conducted by telephone at two, four, and six weeks postpartum. Also, at the first meeting, the mothers were given a booklet (containing written and educational illustrations). During the sessions, the mothers were asked to review their training through cyberspace. The content of training was designed Based on the self-efficacy model of Bandura's theory (23) focus on the difficulty in transition to parenthood and parenting stress. The content of sessions was applied after approval by faculty members of Alborz University of Medical Sciences as follows:

First session

Review the total items of the four sessions and booklet, breastfeeding, monitoring growth indicators and their importance, and protecting neonate.

Second session

On-demand breastfeeding of infants, necessary measures for weight loss, supplements, bathing, considering concerns and stress of mother about the adequacy of nutrition, normal weight gain and growth, attention to maternal anxiety, and stress about the auditory, visual, motor, and speech development.

Third session

The importance of breastfeeding, paying attention to normal weight gain of infant, on-demand breastfeeding of infants, protecting infants and its bathing, attention to maternal anxiety, and stress about infant normal development.

Fourth session

Infant oral health, playing and interacting with infants, attention to maternal anxiety and stress about, taking care of an infant, supporting a mother to achieve social support from a spouse, interpretation of maternal feelings, the positive consequences of the "joy of motherhood" and physical self-care in the first year after delivery.

3.4. Ethical Consideration

The present study was approved by the Vice-chancellor for research of Alborz University of Medical Sciences and after obtaining the ethical approval from the Research Ethics Committee of this University (IR.ABZUMS.REC.1397.206). Also, before the beginning of the study, all of the participants signed informed consent and assured of the confidentiality of all their personal information. The researchers tried to observe all the participants' rights.

3.5. Data Analysis

Data were analyzed using SPSS V.21 software after being collected. Mean, standard deviation, and frequency were used for descriptive tests, while the non-parametric Wilcoxon test was implemented for analytical tests.

4. Results

The mean age of the study participants was 27.012 ± 4.99 years, and the age ranged from 16 to 38 years. The pregnancy was wanted in 92.3% of the participants. In addition, all study subjects were married. Other demographic characteristics are listed in Table 1.

In this study, 38.5% of the participants had a normal delivery. More than half of them (71.8%) had postpartum support for activities in their home. Also, 78.2% had support for baby care. The majority of the participants (96.2%)

Table 1. Demographic Characteristics of Participants

Variable	Frequency, Percent
Mother's Educational Level	
Elementary	9
Secondary	11.5
High school	3.8
Diploma	39.7
University education	35.9
Employment Status of Mother	
Housewife	84.6
Employed	15.4
Employment Status of Spouse	
Unemployed	1.3
Worker	30.8
eE	25.6
Freelance job	42.3
The Amount of Income	
Good	15.4
Medium	76.9
Poor	7.7
Family Type	
Nuclear	92.3
Extended	7.7

stated that they had social security. According to the results of the Wilcoxon test, training reduced parental stress significantly (P value = 0.0001, z = -7.50). The mean score of parental stress in the studied group decreased from 80.08 ± 22.53 to 61.12 ± 13.20 . The results of the Wilcoxon test showed that training significantly reduced the difficulty of the transition to parenting (P value = 0.0001, z = -7.626). In the studied group, the mean score of difficulty in transition to parenthood declined from 97.02 ± 17.34 to 81.65 ± 15.45 . Owing to the results of the present study, education training reduced the difficulty of the transition to parenting in all four domains (Table 2). The study also examined the difficulty of the transition to parenthood in terms of maternal concerns, enjoyment, changes in life, new challenges, and the mother's feeling after childbirth. The results indicated that training was effective in most of the mentioned aspects (Table 3).

5. Discussion

The results of the present study showed that empowerment-based training is effective in reducing

the difficulty of the transition to parenthood. The findings of the current study were in line with some other studies (4, 5, 23-26).

During puerperium, women experience changes in their outside and inside world and in how they observe them. If women know what can occur during the postpartum, the related stress reduces, and their adaptation ability increase. Among the choices specified during puerperium, there are self-esteem, previous practices, education, and knowledge. Education contains imitation, support, and awareness and involves the field of essential skills to achieve the maternal role.

In a study conducted by Ahlden et al., it was shown that support in parental training plays a key role in the transition to parenthood. Given that being a parent is a transition from individual life to parenthood and it has a lifelong role, training parents has an important and supportive role in the transition to parenthood as it enhances parental self-esteem and reduces stress against social pressures and expectations from the parental role. It also leads to challenges for parents in accepting their role and thinking about parenting (24). In the study of Carina S. Brixval et al., it was found that pregnant women who received prenatal training had higher self-efficacy and less fear of childbirth as well as being more confident in their duties, which is consistent with the present study (25). It was also indicated in research by Kurdi et al. that the maternal role training program increased the competence of maternal roles in primiparous women with an unplanned pregnancy. Training of maternal role and support of primiparous mothers with an unplanned pregnancy during pregnancy and postpartum period leads to increased maternal competence (4). According to the study by Azmoodeh et al., two training sessions and a telephone-based counseling self-efficacy, based on the theory of Bandura, led to an increase in mother's competence eight weeks after the intervention in primiparous women. Gao et al. indicated in a study that this intervention had no impact on competence of maternal role six weeks later delivery after two 90-minute sessions of interpersonal psychotherapy and a telephone counseling session in the second week after childbirth in primiparous women, but they also reported a significant difference in the maternal competence score, three months after delivery in both groups (26).

In another study by McQueen et al., it was shown that using 4 sources of self-efficacy promotion during two training sessions and one telephone counseling session led to a significant increase in breastfeeding self-efficacy of mothers in the fourth postpartum week (27). According to another research by Perez-Blasco et al., it was shown that training mindfulness techniques led to a significant increase in maternal self-efficacy in breastfeeding mothers

Table 2. Mean and Standard Deviation of Domains of Difficulty in Transition to Parenthood Before and After Training

Domain	Before Training			After Training			The Difference Between Before and After Training		The Significance Level ^a
	Median	Mean	Standard deviation	Median	Mean	Standard deviation	Mean	Standard deviation	
Responsibility and Commitment	35	35.74	6.98	29	29.79	6.71	3.81	2.85	0.0001
pleasure and Satisfaction	28	27.16	5.99	24	24.21	5.86	2.95	3.32	0.0001
Fondness and stability	19	18.87	6.08	15.5	15.52	4.71	3.35	3.45	0.0001
Self-commitment	15	15.24	4.57	12	12.11	3.64	3.13	2.85	0.0001

^aType of test: Wilcoxon.

in the intervention group compared to the control group, which was consistent with the present study (28).

In another study by Bharathi et al., it was found out that pregnant women did not have sufficient knowledge prior to educational intervention, but the results showed that mothers' knowledge of infant care and health status was increased after intervention, which indicates the effectiveness of training intervention (29). According to a study by Bohr et al., reduced parental stress and increased self-esteem, as well as cognitive developmental skills were observed after the training intervention so that training intervention has been effective in raising mothers' awareness (30).

Craig and Dietsch found out in their study that training primiparous mothers was effective during pregnancy, enhancing self-esteem and reducing mothers' anxiety about the transition to parenthood (31). Among the advantages of the present study, it can be pointed to the use of telehealth, a way of providing healthcare distantly via telecommunications technology. The low cost of telephone talk, its convenience, fast handover of knowledge is the priority of telehealth.

5.1. Conclusion

The results of this study can be a step towards empowering women to enter the parental and postpartum phase of their life by emphasizing the continuation of postpartum preparation class sessions.

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Footnotes

Authors' Contribution: Study concept and design: L.Z.CH., M.A.K., M.F., M.S., and S.H; analysis and interpretation of data: M. F., and M.A.K.; drafting the manuscript: L.Z.CH., M.A.K., M.F., M.S., and S.H; critical revision of the

manuscript for important intellectual content: L.Z.CH., M.A.K., and M. F.; statistical analysis: M. F.

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Table 3. Mean and Standard Deviation of Anxiety, Happiness, Change in Life, Postpartum Feeling and Problems of Mothers Before and After Training

Variable	Before Intervention		After Intervention		Z	P Value
	Mean	Standard deviation	Mean	Standard deviation		
Concerns						
Concern about being a good parent	3.38	1.4	2.58	1.15	-5.791	0.0001
Concern over "Adding Responsibility to a Child"	3.42	1.36	2.55	1.07	-5.783	0.0001
Worry about gradual cold Relationship with spouse	2.34	1.29	2.11	1.04	-2.086	0.004
Concerns about 'sexual relations'	2.28	1.18	2.01	0.93	-3.642	0.0001
Concern over "not having enough time to be with their spouse"	2.75	1.25	2.15	0.96	-5.653	0.0001
Concerns about "Changes in Marriage"	2.56	1.25	2.06	0.93	-5.541	0.0001
Worry about not paying enough attention to their spouse's emotions "	2.62	1.33	2.07	0.99	-5.103	0.0001
Concerned about "having appropriate financial situation"	2.67	1.3	2.2	1.03	-4.077	0.0001
Concerns about 'job loss'	1.41	1.06	1.14	0.61	-2.701	0.007
Concerns about "Providing adequate child care and going to work"	1.3	0.85	1.21	0.78	-1.588	0.112
Joy						
Creating a great purpose for life	1.69	0.99	1.57	0.96	-1.74	0.082
Feeling of being complete	1.64	0.92	1.44	0.81	-2.76	0.006
Feeling of being closer to spouse	1.88	1.03	1.67	0.91	-3.043	0.002
Satisfaction of the survival of generations	1.93	1.09	1.66	0.92	-3.444	0.001
Change in life						
Getting together with friends	2.91	1.03	2.51	0.67	-3.731	0.0001
Order in the daily activities of the home	3.16	1.09	2.61	0.88	-4.717	0.0001
Having the opportunity to go out with your spouse for shopping, cinema ,etc.	2.8	1.17	2.42	0.96	-3.728	0.0001
Spouse's attention to their wives	3.05	1.28	2.41	0.9	-4.659	0.0001
Doing things alone	2.83	1.13	2.46	0.93	-3.136	0.002
annoying each other	2.15	0.99	2.01	0.82	-1.24	0.21
Being understood by the spouse	3.06	1.27	2.48	1	-4.268	0.0001
Talking to spouse	2.93	1.27	2.35	0.92	-4.407	0.0001
Having some points in common with friends	2.47	1.04	2.15	0.83	-3.54	0.0001
Having personal improvement and receiving encouragement from others (Such as interacting with others and increasing job awareness)	2.7	1.23	2.34	0.83	-3.219	0.001
Setting a work plan	2.74	1.19	2.28	0.92	-3.631	0.0001
Having the opportunity to do personal activities like doing exercise, studying, watch TV, shopping ,etc.	2.75	1.23	2.25	0.88	-4.492	0.0001
Problem						
To Stop doing something for the sake of the child	3.15	1.31	2.56	1.05	-5.613	0.0001
Inability to leave home during the day	3.23	1.3	2.65	1.05	-5.361	0.0001
Sleep loss	3.87	1.1	2.96	1.02	-6.386	0.0001
Change in prioritizing activities	1.51	1.15	1.25	0.76	-2.84	0.0001
Carping and crying a lot before sleeping	2.87	1.15	2.38	0.29	-4.989	0.0001

Fatigue	3.34	1.05	2.64	0.96	-5.686	0.0001
Changing the view about oneself and their jobs	1.42	1.03	1.28	0.82	-2.232	0.026
Postpartum Mother's Feeling						
Happiness	2.12	0.97	2.05	0.99	-2.121	0.034
Sociability	2.64	1.26	2.37	1.12	-3.042	0.002
Being important	2.83	1.28	2.35	1.16	-4.312	0.0001
Being free	2.29	1.1	2.19	1.03	-1.356	0.175
being satisfied	2.17	0.97	2.11	0.98	-1.127	0.26