

## Effect of Home-Based Education Program on Mothers' Postpartum Quality of Life After Cesarean Delivery

Sezaryen Sonrası Annelerin Postpartum Yaşam Kalitesi Üzerine Ev Tabanlı Eğitim Programının Etkisi

Nilay ŞENER ÖZOVALI<sup>1</sup>, Filiz OKUMUŞ<sup>2</sup>

### ABSTRACT

The aim of this study was to determine the effect of a home-based educational program on postpartum quality of life in puerperant women after caesarean delivery. The study was designed as a prospective, controlled, single-blinded study. It was conducted in a family health centre in Istanbul with 60 women, including 30 home-based educational group and 30 standard counselling as a control group woman who had a caesarean delivery. The study data were collected by using a questionnaire, namely, the Maternal Postpartum Quality of Life (MAPP-QOL) Tool. The mothers's mean age was 29.55 years. The post-intervention means and standard deviations (SDs) in the total scores of the MAPP-QOL were 17.93 (SD: 1.09) and 19.27 (SD: 0.90) for the control and home-based education groups, respectively, and we found that the difference was statistically significant ( $p < 0.001$ ). The study's results showed that the home-based educational program had an effect on the women's postpartum quality of life after caesarean delivery. These results emphasised the importance of home health care and counselling in the postpartum period.

**Keywords;** Caesarean section, Health education, Quality of life, Postpartum period,

### ÖZ

Bu çalışmanın amacı, ev tabanlı bir eğitim programının lohusalık dönemindeki kadınlarda sezaryen sonrası yaşam kalitesine etkisini belirlemektir. Çalışma, prospektif, kontrol gruplu, tek kör bir çalışma olarak tasarlandı. İstanbul'da bir aile sağlığı merkezinde, 30'u evde eğitim grubu, 30'u kontrol grubu ve standart danışmanlık olmak üzere sezaryen olan 60 kadın ile gerçekleştirildi. Çalışma verileri Doğum Sonu Yaşam Kalitesi Ölçeği (DSYKÖ) aracı kullanılarak toplanmıştır. Çalışmada annelerin yaş ortalaması 29.55'tir. Müdahale sonrası DSYKÖ toplam puan ve standart sapma (SS) kontrol grubu için 17.93 (SS: 1.09) ve ev tabanlı eğitim grubu için 19.27 (SS:0.90) olup gruplar arasında istatistiksel olarak anlamlı bir fark olduğu bulundu ( $p < 0.001$ ). Bu çalışmanın sonuçları, ev tabanlı eğitim programının, kadınların sezaryen sonrası yaşam kalitesini etkilediğini göstermiştir. Bu sonuçlar doğum sonrası dönemde evde sağlık bakımı ve danışmanlığın önemini vurgulamaktadır.

**Anahtar Kelimeler:** Doğum sonu dönem, Yaşam kalitesi, Sağlık eğitimi, Sezaryen,

\*Bu çalışma, birinci yazarın yüksek lisans tezinden türetilmiştir.

<sup>1</sup>Uzman Ebe, Nilay ŞENER ÖZOVALI, İstanbul Halk Sağlığı Müdürlüğü, Ataşehir Aile Sağlığı Merkezi, nilay.sener@hotmail.com, ORCID: 0000-0001-7975-6107

<sup>2</sup>Dr. Öğr. Üyesi, Filiz OKUMUŞ, Ankara Medipol Üniversitesi, Sağlık Bilimleri Fakültesi, Ebelik Bölümü, filizokumush@gmail.com, ORCID: 0000-0002-1855-9190

**İletişim / Corresponding Author:** Filiz OKUMUŞ  
**e-posta/e-mail:** filizokumush@gmail.com

**Geliş Tarihi / Received:** 03.09.2020  
**Kabul Tarihi / Accepted:** 24.11.2021

## INTRODUCTION

The postpartum period or puerperium is a stage that starts one hour after birth and continues for six weeks, and it is characterised by physical and mental health problems.<sup>1</sup> This period is also known as a period in which family relationships change and more social support is needed as women assume new responsibilities regarding their motherhood role.<sup>2</sup> Physical, social and mental changes occurring in the postpartum period can lead to the occurrence of psychological risks, such as various degrees of anxiety, depression, fatigue or stress, which all increase the risk of postpartum morbidity.<sup>3</sup> These changes may negatively affect health-related quality of life in the postpartum period.<sup>4</sup> In addition, maternal and infant statistics are important parameters for a society's development level. Therefore, the protection, maintenance and development of maternal and neonatal health represent the most important factors in creating a healthy and developed society during this period.<sup>3</sup>

Caesarean delivery is associated with a higher risk of morbidity compared with spontaneous vaginal delivery.<sup>5,6</sup> Because of the incision site, after caesarean delivery, women's mobility and participation in their care activities are more limited than they are after vaginal delivery. For this reason, these women need more help with their self-care, and this continues to later in the postpartum period.<sup>7</sup> Furthermore, women who have undergone caesarean operations can have some health problems in the postpartum period due to the additional burden of the surgery. The most common problems are pain, gas problems, bleeding, breast-related problems, cough and movement restriction after caesarean delivery.<sup>8,9</sup> Moreover, the caesarean delivery is associated with more long-term symptoms, such as fatigue, insomnia, bowel problems, headache, chest pain, back pain, joint pain, chills or sweating and anorexia, compared with vaginal delivery.<sup>10,11</sup> Therefore, it is important to identify the effects of postpartum complications from caesarean delivery on mothers and plan care in the maternal care

services according to women's individual needs.

As healthcare has become patient centred in recent years, subjective evaluation of the patient has become more important for clinical decision making and health policy development.<sup>1</sup> As reported by World Health Organization's definition, quality of life is '*individual's perception of their position in life within the context of the culture and price systems during which they live and in regard to their goals, expectations, standards and concerns*' This refers to subjective estimations of health-related quality of life, as well as the physical, mental and social dimensions of wellbeing.<sup>13</sup> Postpartum quality of life is as important as stress, anxiety and depression, which provide a basis for the risk of postpartum morbidity.<sup>14</sup> In studies on determining the quality of life according to women's delivery methods, it was found that the postpartum physical and psychological health outcomes were lower among women after caesarean delivery.<sup>1,6,15,16</sup> In this context, determining quality of life in women post-caesarean period—and planning the care according to their individual needs—may optimise the well-being in postpartum period.

A quality postpartum period is highly important in terms of mother–infant interaction, breastfeeding, infant nutrition, new-born care and the maternal psychosocial status.<sup>4</sup> Physical and psychosocial inadequate care and education in the postpartum period can lead to complications and lifelong gynaecological and psychosocial problems.<sup>17</sup> The healthy and successful adaptation to the postpartum period depends on physical care, education and consultancy services that healthcare personnel provide to the mother, baby and family. The provision of postpartum education and social support will strengthen the maternal and infant relationship and reduce the risk of postpartum depression, thereby increasing women's quality of life.<sup>2,17</sup>

Midwives should thoroughly educate mothers before discharge from hospital to reduce the risk of postpartum complications

and maternal morbidity.<sup>18</sup> Studies on maternal education are generally limited to the hospitalisation in the postpartum period.<sup>19-21</sup> However, the postpartum period does not end upon discharge from hospital.<sup>22</sup> The number of studies on continuing educational activities after discharge is limited.<sup>7,23</sup> The education needs of mothers change over time after birth, and therefore, healthcare providers must be met these education needs by visiting at home.<sup>24</sup> Although it is not clear to what extent they increase the support for women, home visits can help maintain the continuity of care and encourage positive health behaviours in the postpartum period.<sup>25</sup> Maternal health education should include strategies to improve the quality of life by providing mothers with a positive experience.<sup>26</sup> We think that the quality of life after caesarean

delivery can be increased by having more information about maternal and infant health that is specific to the post-caesarean period. Based on this idea, the purpose of this study is determining the effect of providing midwifery care with home-based education on postpartum quality of life in mothers after caesarean delivery.

### The hypotheses of the study

H0: There is no a significant difference between home-based education and control groups in the post-intervention scores of quality of life level

H1: There is a significant difference between home-based education and control groups in the post-intervention scores of quality of life level

## MATERIALS AND METHODS

### Study Design

The study was designed as a prospective, controlled, single-blinded trial. It was conducted at a family health centre (FHC) under the provincial public health directorate in Istanbul between December 2018 and February 2019. While women in the home-based education group were visited at home and provided midwifery care with postpartum education, women in the control group was provided standard counselling at the FHC after caesarean delivery. Women living in only one district of the FHC were included into the study to facilitate follow-up. All participants were selected from women who had a caesarean section. As part of the standard care provided by this FHC, women who were registered with the FHC were called by phone to see if they were giving birth at the end of the pregnancy period. Women giving birth were invited to the FHC for necessary routine registration and new-born screening tests.

### Study Sample

Puerperant women aged 18 years or older who undergone cesarean delivery between December 2018 and February 2019 were recruited during postpartum period. Verbal and written consent was obtained by giving

information about the study to the women undergoing caesarean delivery.

In determining the sample size; A total of 54 participants were required in order to put the t test results at 95% power in dependent groups by taking the effect size 0.5 and the sample error 0.05 in the 95% confidence interval. All calculations were performed using G\*Power software, version 3.1.7.<sup>27</sup> A total of 60 puerperant women agreeing to participate in the research study and meeting the inclusion criteria were included. Patients were randomly divided into two groups as home-based education (n=30) or standard counseling group (n=30), according to the random list created using the computer randomization program. The sample groups specified for performing parametric tests' size must be at least 30 people according to the literature.<sup>28,29</sup> In the follow-up session, a total of 60 women who had undergone caesarean delivery were included in the analysis. The study population included women who met the following criteria: (1) allocation on days 2-5 after caesarean delivery, (2) registered in the FHC where the research was conducted, (3) at least 38 total gestational weeks, (4) having competence to comprehend the education and fill out questionnaires, (5) having a healthy infant with an Apgar score of

7 or more, (6) no antenatal or postnatal complications, and (7) women who volunteered to participate in the research. The criteria for exclusion from the research were as follows: (1) serious maternal or neonatal health problems, and (2) desire to leave the study.

Participants were blinded to their group assignment at allocation and during collection of the baseline questionnaire. As the study intervention was an postpartum educational program, blinding of study participants was not possible after groups were allocated.

### **Ethical Considerations**

Before starting the research, The Istanbul Medipol University Non-Interventional Research Ethics Committee approved the study. (No. 10840098-604.01.01-E.50497), and permissions were given from the Istanbul public health directorate to practice at the relevant FHC. Participation in the study was based on voluntariness. After informing the participants about the study, their Verbal and written consent was obtained, and it was explained that they could withdraw their consent at any time.

### **Interventions**

A handbook was designed based on the 'Postnatal care management guide' to visualise the educational content, and this was given to all the participants at the end of the study.<sup>30</sup> The postpartum education consists of four modules covering the following topics:

- Module 1: The postpartum period and postpartum physiological and emotional changes;
- Module 2: Counselling on family planning, nutrition and hygiene;
- Module 3: Breastmilk and breastfeeding; and
- Module 4: New-born care.

In addition to the standart counselling regarding postpartum midwifery care provided by the FHC, participants in the intervention group also received four postpartum education sessions, between days 2 and 5 after caesarean delivery. The home-

based education modules was divided into 2 days and four sessions, and each participant received one-to-one education. Each session lasted 1 hour, and the duration of the total education was 4 hours. Women in the control group were provided standard postpartum counselling at the FHC. The duration of the counselling was approximately 10 minutes for each participant.

The participants were telephoned at 13–15 days postpartum; at that time, the education content was summarised, and any questions were answered. An education handbook was given to the home-based education and control group participants in the 6<sup>th</sup> week postpartum at the FHC. The home-based education, counseling and standard care of participants were administered by the first researcher who was worked for FHC.

### **Data Collection**

Data were collected using a self-administered questionnaire. Women who volunteered to participate in the study filled out the questionnaire and were allocated according to the FHC registration codes.

This study used the Maternal Postpartum Quality of Life (MAPP-QOL) tool to evaluate quality of life level. The MAPP-QOL tool used to determine the women's quality of life was developed by Hill, Aldag, Hekel, Riner and Bloomfield (2006).<sup>31</sup> This tool consists of five sub-dimensions and a total of 40 items, with the responses scored on Likert-type scales. Validity and reliability assessments were carried out by Altuntuğ and Ege.<sup>32</sup> The scale consists of two parts. The first part focusses on satisfaction, while the second considers the importance of each item. Both parts use a 6-point Likert scale, defined as 1: very dissatisfied to 6: very satisfied; the respondent is asked to choose the most accurate option that defines how satisfied she is with regard to the area described in the questions or how important that area is to her. The lowest score that can be obtained on the scale is 0 and the highest score is 30. A high (low) score correlates with a high (low) quality of life after birth. In our study, the Cronbach's alpha values of the scale were as follows: 0.89 for the entire scale, 0.81 for the

relational/sub-dimension (10 items), 0.79 for the socioeconomic sub-dimension (9 items), 0.75 for the relational/sub-dimension (5 items), 0.57 for the health & functioning sub-dimension (8 items) and 0.65 for the psychological/baby sub-dimension (8 items).

Women who agreed to participate in the study completed the pre-test in the initial session at the FHC before the allocated to groups using the face-to-face interview method. The post-test questionnaires were filled out at the FHC in the home-based educational program and control groups in the 6th week. In the study, the data were collected over 20–30 minutes, with an average of 5–10 minutes spent filling out the questionnaire and 10–15 minutes filling out the MAPP-QOL Tool.

### Statistical Analysis

In the analysis of the data, numbers and percentages were used; the chi-square test was employed for comparing the socio-demographic and individual characteristics of the home-based education and control groups, while the paired t-test was used for independent variables in comparing the intergroups the pre-test and post-test mean scores changes of the MAPP-QOL tool and its sub-dimensions. In all analyses in the study, a  $p$ -value  $< .05$  was accepted as statistically significant.

### Acknowledgements

The authors acknowledge the kind support of Ministry of Health, Istanbul Public Health Directorate. This study was accepted as a master's thesis by the Istanbul Medipol University Health Sciences Institute in July 2019.

## RESULTS AND DISCUSSION

The characteristics of the study participants can be found in Table 1. The mothers's mean age was 29.55 years (standard deviation [SD]: 5.41; range: 20–38). Among them, 33.3% were found to be primary school graduates, 73.3% were housewives, 88.3% had a nuclear family and 83.3% had good economic status. Most (75%) of the mothers were multiparous, and 68.3% had planned pregnancies. In the study, there was no statistically significant difference between the participants in the home-based education and control groups in terms of their employment status, family income, educational level, pregnancy number, type of family and plan status for their pregnancies.

Table 2 shows that the difference between the groups was statistically significant in

terms of the sub-dimensions of MAPP-QOL and the pre-intervention mean scores of the total MAPP-QOL score. The pre- intervention mean MAPP-QOL scores were higher in the home-based education group compared with the control group ( $p = 0.007$ ). This can be considered coincidental, because in our study, the home-based education group and standard counselling group had similar characteristics except for age. In a study among Brazilian women, there was no difference between the quality of life scores of postpartum women in different age groups.<sup>33</sup> However, in another study conducted in postpartum Iranian women, A statistically significant relationship between age and quality of life was observed.<sup>34</sup> Thus, the relationship between age and quality of life is not clear.

**Table 1. Socio-Demographic Characteristics of the Post-Caesarean Section Women**

	Home-based education <i>n</i> (%)	Control <i>n</i> (%)	Total <i>n</i> (%)	$\chi^2$	<i>p</i> value
<b>Age</b>					
20–29 years	16 (53.3)	11 (36.7)	27 (45.0)	6.04	0.049
30–34 years	7 (23.3)	16 (53.3)	23 (38.3)		
35 years and over	7 (23.3)	3 (10.0)	10 (16.7)		
<b>Education</b>					
Primary	11 (36.7)	10 (33.3)	10 (33.3)	0.10	0.991
Secondary	6 (20.0)	6 (20.0)	6 (20.0)		
High school	8 (26.7)	9 (30.0)	9 (30.0)		
College	5 (16.6)	5 (16.7)	5 (16.7)		
<b>Employment</b>					
Employed	6 (20.0)	10 (33.3)	16 (26.7)	1.36	0.191
None	24 (80.0)	20 (66.7)	44 (73.3)		
<b>Income</b>					
Moderate	27 (90.0)	23 (76.7)	50 (83.3)	1.92	0.150
Bad	3 (10.0)	7 (23.3)	10 (16.7)		
<b>Pregnancy number</b>					
1	9 (30.0)	6 (20.0)	15 (25.0)	1.26	0.530
2	11 (36.7)	15 (50.0)	26 (43.3)		
3 and above	10 (33.3)	9 (30.0)	19 (31.7)		
<b>Pregnancy plan status</b>					
Planned	23 (76.7)	18 (60.0)	41 (68.3)	1.92	0.133
Unplanned	7 (23.3)	12 (40.0)	19 (31.7)		

The post- intervention mean scores of MAPP-QOL in the study are shown in Table 3. The post- intervention means and SDs in the total scores of the MAPP-QOL were 17.93 (SD: 1.09) and 19.27 (SD: 0.90) for the control and home-based education groups, respectively, and the difference was found to be statistically significant ( $p < 0.001$ ). The post- intervention test mean scores of total MAPP-QOL and all the sub-dimensions except for relational/husband-partner, were found to be higher in the home-based education group.

In the study, H1 hypothesis was accepted and H0 hypothesis was rejected. This study's data analysis showed that the providing midwifery care with home-based postpartum education, which was about maternal and infant health care after caesarean delivery, positively affected the quality of life of women after caesarean delivery. As Russ-Eft and Steel (1980)<sup>35</sup> revealed in a study examining education's contribution to adults' quality of life, learning and quality of life

exhibited a high association. However, few studies have examined the effect of planned education on quality of life. A study that was conducted by Sis Çelik and Pasinlioğlu (2017)<sup>36</sup> examined the effect of planned health education on the quality of life of 247 climacteric women who had experienced hot flashes in the past month; the quality of life scores of the climacteric women in the experimental group, who were given education, were found to be higher compared with those in the control group. In a study conducted by Bahrami et al. (2013)<sup>37</sup> prenatal education was provided to pregnant women, and the mothers' quality of life was evaluated during the first year after childbirth. The level of quality of life was found to be higher in the women who received the prenatal education. These results showed that planned health education positively affects quality of life.

It was demonstrated in the present research that the mean quality of life score was higher in the education group, which provided midwifery care with home-based postpartum education, compared with the control group.

In a previous study, Aguado et al. (2010)<sup>38</sup> assessed the effectiveness of one home visit

after discharge to provide the education for patients with heart failure.

**Table 2. Comparison of Mean Pre-Intervention Scores for the Mapp-Qol Total and Sub-Dimensions in the Groups**

Sub-dimensions	Pre-intervention			
	Home-based education	Control	t	p
Relational/family-friends	17.56 ± 1.83	16.69 ± 1.86	1.82	0.073
Socioeconomic	18.30 ± 1.63	16.93 ± 1.89	2.98	<b>0.004</b>
Relational/husband-partner	19.45 ± 2.00	18.33 ± 1.95	2.19	<b>0.033</b>
Health & Functioning	17.92 ± 2.81	17.39 ± 2.39	0.78	0.439
Psychological/Baby	19.13 ± 0.99	18.50 ± 1.40	2.02	<b>0.047</b>
<b>MAPP-QOL total</b>	<b>18.11 ± 1.19</b>	<b>17.24 ± 1.24</b>	<b>2.77</b>	<b>0.007</b>

Note. Data are given as the mean ± standard deviation

However, they found that the home-based education intervention did not affect patients' quality of life scores. The fact that the home-based education was given to patients in a single session in this study may be responsible for this lack of effectiveness. In our study, the home-based educational program was given over 2 days and four sessions, and women were telephoned 10 days after the educational program was delivered to summarise the education content, allowing any questions to be answered. In addition, Baker et al. (2011)<sup>39</sup> found no effect on life quality after telephone education and counselling for patients with heart failure. These results showed that the duration and method of education are also important factors for influencing quality of life. We think that using multiple education methods and repetition will provide more positive results.

Few studies have examined the effects of home visiting and home-care services on maternal and infant health. Duman and Karataş (2011)<sup>7</sup> showed that home-care services provided to women after caesarean delivery make important contributions to maternal health and self-care agency. Similarly, in a meta-analysis covering middle- and low-income countries, it was reported that home visits in the antepartum and intrapartum period had a positive effect on maternal and new-born health.<sup>40</sup> In the present study, the effect of home-based education on quality of life in puerperant after caesarean delivery was examined, and the quality of life level was higher in women providing midwifery care with the home-based education. These results emphasised the importance of home health care and education in the post-caesarean delivery.

**Table 3. Comparison of Mean Post-Intervention Scores for the Mapp-Qol Total and Sub-Dimensions in the Groups**

Subdimensions	Post-intervention			
	Home-based education	Control	t	p
Relational/family-friends	18.80 ± 1.36	16.68 ± 1.42	5.90	<b>&lt;0.001</b>
Socioeconomic	18.78 ± 1.22	17.46 ± 1.59	3.61	<b>0.001</b>
Relational/husband-partner	19.88 ± 1.45	19.22 ± 1.40	1.78	0.079
Health & Functioning	19.17 ± 1.00	17.72 ± 1.58	4.21	<b>&lt;0.001</b>
Psychological/Baby	20.14 ± .90	19.47 ± 1.06	2.65	<b>0.010</b>
<b>MAPP-QOL total</b>	<b>19.27 ± 0.90</b>	<b>17.93 ± 1.09</b>	<b>5.17</b>	<b>&lt;0.001</b>

Note. Data are given as the mean ± standard deviation

## CONCLUSION

The researchers carried out this study to determine the effects of home-based postpartum education on quality of life for puerperant women undergoing caesarean section in a developed area of Istanbul. The puerperant women were visited at home between the second and fifth days after caesarean delivery and exposed to a postpartum educational program; the effects of the program were measured in the 6<sup>th</sup> week postpartum. The study results showed that the postpartum quality of life in the home-based education group, who are provided educational program about maternal and infant health after caesarean delivery, was higher than the control group.

This study emphasises the importance of home-based postpartum educational program given by midwives to puerperant women after caesarean delivery and the suitability and inadequacy of the content of postpartum health services following caesarean delivery.

The companionship of a close relative at home in the care of women after birth in Turkey plays an important role for them. For this reason, health education provider should take this point into account, and especially, the role of the caregiver in the postpartum quality of life should be taken into consideration. Subsequent studies should try to include such caregivers to foster the greater effect of the health program. In addition, subsequent studies can address women with emergency caesarean sections and elective caesarean sections in different groups. We can say that, with all these results, our study will serve as an important example for future research.

## REFERENCES.

1. Van der Woude, D.A, Pijnenborg, J.M. and de Vries, J. (2015). "Health Status and Quality of Life in Postpartum Women: A Systematic Review of Associated Factors". *Eur J Obstet Gynecol Reprod Biol*, 185, 45-52.
2. Aksakalli, M, Capik, A, Ejder Apay, S, Pasinlioglu, T. and Bayram, S. (2012). "Determination of Support Needs and Post-Partum Support Levels of Post-Partum Women". *J Psychiatr Nurs*, 3 (3), 129-135.
3. Aksu, S, Varol, F.G. and Hotun Sahin, N. (2017). "Long-Term Postpartum Health Problems in Turkish Women: Prevalence and Associations with Self-Rated Health". *Contemp Nurse*, 53 (2), 167-181.
4. Bağcı, S. and Altuntuğ, K. (2016) "Problems Experienced by Mothers in Postpartum Period and Their Associations with Quality of Life" [Turkish: Annelerin Doğum Sonunda Yaşadıkları Sorunlar ve Yaşam Kalitesi ile İlişkisi]. *J Hum Sci*, 13(2), 3266-79 doi:10.14687/jhs.v13i2.3884
5. Petrou, S, Kim, S.W, McParland, P. and Boyle, E.M. (2017) "Mode of Delivery and Long-Term Health-Related Quality-of-Life Outcomes: A Prospective Population-Based Study". *Birth*, 4 (2), 110-119.
6. Torkan, B, Parsay, S, Lamyian, M. and Kazemnejad, A. (2009). "Postnatal Quality of Life in Women After Normal Vaginal Delivery and Caesarean Section". *BMC Pregnancy Childbirth*, 9, 1-7.
7. Duman, N.B. and Karataş, N. (2011) "The Effect of Home Care Service Given to Postpartum Early Discharged Women Who Had a Caesarean Section on The Maternal Health and Power of Self-Care" [Turkish: Sezaryen Sonrası Erken Taburcu olan Kadınlara Verilen Evde Bakım Hizmetinin Anne Sağlığına ve Öz. *J Heal Sci*, 20 (1), 54-67.
8. Kisa, S. and Zeyneloğlu, S. (2016). "Opinions of Women Towards Cesarean Delivery and Priority Issues Of Care in The Postpartum Period". *Appl Nurs Res*, 30, 70-75.
9. Zubaran, C, Foresti, K, Schumacher, M.V, Muller, L.C. and Amoretti, A.L. (2009). "An Assessment of Maternal Quality of Life in The Postpartum Period in Southern Brazil: A Comparison of Two Questionnaires". *Clinics*, 64 (8), 751-756.
10. Killien, M.G, Habermann, B. and Jarret, M. (2001) "Influence of Employment Characteristics on Postpartummothers' Health". *Women Heal*, 33 (1-2), 63-81.
11. Thompson, J, Roberts, C.L, Currie, M. and Ellwood, D.A. (2002). "Prevalence and Persistence of Health Problems After Childbirth: Associations with Parity and Method of Birth". *Birth*, 29 (2), 83-94.
12. WHO. (1997). "Programme On Mental Health WHOQOL Measuring Quality Of Life". *World Heal Organ Div Ment Heal Prev Subst Abus.*, (1), 1-13.
13. Lagadec, N, Steinecker, M, Kapassi, A, Magnier, A.M, Chastang, J, Robert, S, Gaouaou, N. and Ibanez, G. (2018). "Factors Influencing The Quality of Life of Pregnant Women: A Systematic Review". *BMC Pregnancy Childbirth*, 23, 18 (1), 455.
14. Emmanuel, E. and Sun, J. (2014). "Health Related Quality of Life Across The Perinatal Period Among Australian Women". *J Clin Nurs*, 23 (11-12), 1611-1619. doi:10.1111/jocn.12265



15. Kohler, S, Sidney Annerstedt, K, Diwan, V, Lindholm, L, Randive, B, Vora, K. and de Costa, A. (2018). "Postpartum Quality of Life in Indian Women After Vaginal Birth and Cesarean Section: A Pilot Study Using The EQ-5D-5L Descriptive System". *BMC Pregnancy Childbirth*, 18 (1), 427.
16. Sadat, Z, Taebi, M, Saberi, F. and Kalarhoudi, MA. (2013). "The Relationship Between Mode of Delivery and Postpartum Physical and Mental Health Related Quality of Life". *Iran J Nurs Midwifery Res*, 18 (6), 499-504.
17. Çelik, A.S, Türkoğlu, N. and Pasinlioğlu, T. (2013). "Examination of The Postpartum Life Quality of Mothers" [Turkish: Annelerin Doğum Sonu Yaşam Kalitesinin Belirlenmesi]. *J Anatolia Nurs Heal Sci*, 17 (3), 151-157.
18. Suplee, P.D, Bingham, D. and Kleppel, L. (2017). "Nurses' Knowledge and Teaching of Possible Postpartum Complications". *MCN Am J Matern Nurs*, 42(6), 338-344.
19. McCarter-Spaulding, D. (2015). "Effectiveness of Postpartum Education in The Reducing Symptoms of Postpartum Depression". *J Obstet Gynecol Neonatal Nurs*, 44, S58.
20. Moshki, M, Baloochi Beydokhti, T. and Cheravi, K. (2014). "The Effect of Educational Intervention on Prevention of Postpartum Depression: an Application of Health Locus Of Control". *J Clin Nurs*, 23 (15-16), 2256-2263.
21. Sanar, S.P. and Demirci, H. (2018). "Evaluation of The Effectiveness of Planned Education for Mothers in Puerperant School: Healty Generations By The Concious Mothers". *J Biotechnol Strateg Heal Res*, 2 (3), 174-181.
22. Weiss, M, Fawcett, J. and Aber, C. (2009). "Adaptation, Postpartum Concerns, and Learning Needs in The First Two Weeks After Caesarean Birth". *J Clin Nurs*, 18 (21), 2938-2948
23. Erenel, A.Ş. and Eroğlu, K. (2005). "Effect of Breastfeeding Education Model Supported Through Home Visits on The Exclusive Breastfeeding Behaviour During The Postpartum Six Month" [Turkish: Doğum Sonrası İlk Altı Ayda Ev Ziyareti Yoluyla Desteklenen Emzirme Eğitimi Modelinin Etkili Emzirme] *Hacettepe Üniversitesi Hemşirelik Yüksekokulu Dergisi*, 43-54.
24. Sword, W. and Watt, S. (2005). "Learning Needs of Postpartum Women: Does Socioeconomic Status Matter?" *Birth*, 32 (2), 86-92.
25. World Health Organization. WHO. (2016). "WHO Recommendation on Community Mobilization And Antenatal Home Visits". *WHO Reprod Heal Libr Geneva World Heal Organ*, (November), 1-8.
26. Yeo, J.H. and Chun, N. (2013). "Influence of Childbirth Experience and Postpartum Depression on Quality of Life in Women After Birth". *J Korean Acad Nurs*, 43 (1), 11-19.
27. Faul, F, Erdfelder, E, Lang, A.G. and Buchner, A. (2007). "G\*Power 3: A Flexible Statistical Power Analysis Program for The Social, Behavioral, and Biomedical Sciences". In: *Behavior Research Methods*, doi:10.3758/BF03193146
28. Bağlama, S.S. and Bakir, E. (2019) "Caregiver-Delivered Foot Reflexology: Effects on Patients And Caregivers". *Holist Nurs Pract*, 33 (6), 338-345.
29. Özcan, H, Oskay, Ü. and Bodur, A.F. (2019). "Effects of Kefir on Quality of Life and Sleep Disturbances in Postmenopausal Women". *Holist Nurs Pract*, 33 (4), 207-213.
30. Health Turkey Public Health Agency, Department of Women and Reproductive. (2014). "Postpartum Care Management Guide". *Turkey Minist Heal Publ No 925*.
31. Hill P.D, Aldag J.C, Hekel, B, Riner, G and Bloomfield, P. (2006). "Maternal Postpartum Quality of Life Questionnaire". *J Nurs Meas*, 14 (3), 205-20.
32. Altuntuğ, K. and Ege, E. (2012). "Validity and Reliability of Turkish Version of Maternal Postpartum Quality of Life Questionnaire". *J Anatolia Nurs Heal Sci*, 15 (3), 214-222.
33. de Oliveira, M, Parker, L, Ahn, H, Catunda, H, Bernardo, E, de Oliveira, M, Ribeiro, S, Calou, C, Antezana, F, Almeida, P, Castro R, Aquino, P. and Pinheiro A. (2015). "Maternal Predictors for Quality of Life during the Postpartum in Brazilian Mothers. *Health*", 7, 371-380.
34. Rezaei, N, Azadi, A, Zargousi, R, Sadoughi, Z, Tavalae, Z. and Rezayati, M. (2016). "Maternal Health-Related Quality of Life and its Predicting Factors in The Postpartum Period in Iran". *Scientifica*, 1, 7.
35. Russ-Eft, D.F. and Steel, L.M. (1980). "Contribution of Education to Adults' Quality of Life". *Educ Gerontol*. 5 (2), 189-209. doi:10.1080/0360hyp800050207
36. Sis Çelik, A. and Pasinlioğlu, T. (2017). "Effects Of Imparting Planned Health Education on Hot Flush Beliefs and Quality of Life of Climacteric Women". *Climacteric*, 20 (1), 25-30.
37. Bahrami, N., Simbar, M. and Bahrami, S. (2013). "The Effect Of Prenatal Education on Mother's Quality of Life During First Year Postpartum Among Iranian Women: A Randomized Controlled Trial". *Int J Fertil Steril*, 7 (3), 169-174.
38. Aguado, O, Morcillo, C, Delàs, J, Rennie, M, Bechich, S, Schembari, A, Fernández, F. and Rosell, F. (2010). "Long-Term Implications of A Single Home-Based Educational Intervention in Patients With Heart Failure". *Heart Lung*, 39 (6 Suppl), S14-22.
39. Baker, D.W, Dewalt, D.A, Schillinger, D, Hawk, V, Ruo, B, Bibbins-Domingo, K, Weinberger, M, Macabasco-O'Connell, A, Grady, K.L, Holmes, G.M, Erman, B, Broucksou, K.A. and Pignone, M. (2011). "The Effect of Progressive, Reinforcing Telephone Education and Counseling Versus Brief Educational Intervention on Knowledge, Self-Care Behaviors and Heart Failure Symptoms". *J Card Fail*, 17 (10), 789-96.
40. Prost, A, Colbourn, T, Seward, N, Azad, K, Coomarasamy, A, Copas, A, Houweling, TA, Fottrell, E, Kuddus, A, Lewycka, S, MacArthur, C, Manandhar, D., Morrison, J., Mwansambo, C, Nair, N, Nambiar, B., Osrin, D., Pagel, C., Phiri, T, Pulkki-Brännström, A., Rosato, M., Skordis-Worrall, J, Saville, N, More, NS, Shrestha, B, Tripathy, P, Wilson, A. and Costello, A. (2013). "Women's Groups Practising Participatory Learning and Action to Improve Maternal and Newborn Health in Low-Resource Settings: A Systematic Review and Meta-Analysis". *Lancet*, 18, 381 (9879), 1736-46.