

Effect of respectful maternity care and effective communication during labor on postpartum depression: an interventional study

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ABSTRACT

Objective: Postpartum depression (PPD) is a significant public health issue and one of the most often observed psychological disorders among postpartum women. The purpose of this study was to determine the effect of implementing respectful maternity care (RMC) and effective communication (EC) during labor and delivery on experiencing postpartum depression.

Methods: One hundred twenty women were included in this trial; they were randomly assigned to two groups: the intervention and control groups. RMC and EC are provided to the intervention group, whereas the control group receives routine care. Six to eight weeks after delivery, postpartum depression was measured by the Kurdish version Edinburgh Postpartum Depression Scale. Pearson Chi-Square, Mann-Whitney U, Likelihood Ratio and Fisher's Exact Test were used in this analysis.

Results: Eighty percent of women in the intervention group had an Edinburgh Depression Score of less than ten, compared to fifty percent in the control group. In addition, significantly higher mean scores on the Edinburgh Postnatal Depression Scale in controls than in the intervention group. However, there was no significant difference in PPD results between the intervention and control groups regarding delivery mode, pregnancy type, baby's gender, neonatal admission to the intensive care unit, and breastfeeding.

Conclusions: The results suggest that implementing RMC and EC throughout labor and birth considerably reduces the Edinburgh Postnatal Depression Score. Thus, the study's findings have significant implications for the primary prevention of postpartum depression.

Keywords: Childbirth, Edinburgh Postnatal Depression Scale, Effective communication, Postpartum Depression, Respectful maternity care.

INTRODUCTION

Childbirth places women at a high risk of developing mental illness, with postpartum mood disorders being the most common form of maternal morbidity following deliver¹. Postnatal depression is a mental and behavioral disorder that usually begins within six weeks of delivery. Women suffering from postpartum depression (PPD) frequently experience irritability, fatigue, guilt, anxiety, and sleep disorders, which negatively impact mothers, children, and families^{2,3}. PPD affects between 10% and 30% of all mothers after delivery^{4,5}.

Klainin and Arthur reported that the prevalence of PPD fluctuates in various parts of the world. Asian countries varied widely from 3.5 percent to 63.3 percent, with Malaysia and Pakistan having the lowest and highest, respectively⁶. Another study showed that women in developing countries had a higher prevalence of PPD than women in developed countries⁷.

In the Kurdistan region of Iraq, the prevalence of PPD was 28.4%⁸. In Iran was 25.3%⁹. In further research, these rates vary due to sampling size, the timing of evaluation, different clinical diagnoses, and whether or not the studies were retrospective or prospective¹⁰.

A growing number of studies have suggested that certain factors, such as a history of psychiatric illness, inadequate social support, social relationships, low self-esteem, limited community resources, family issues, history of wife abuse and postnatal physical complications, are linked to PPD^{8,11,12}.

Few studies have been conducted in neighboring countries, concentrating on cognitive behavioral intervention effectively reducing PPD and enhancing women's psychological health with PPD¹³. Another study focuses on the impact of interpersonal psychotherapy on PPD. The findings suggested reducing depression in women suffering from postpartum depression¹⁴.

The World Health Organization recommends effective communication (EC) between maternity care professionals and women in labor, using simple and culturally appropriate methods. Additionally, it is recommended that Respectful Maternity Care (RMC), which refers to women in labor, should be treated to maintain dignity, privacy, and confidentiality, ensure freedom from harm and mistreatment and make informed decisions to receive continuous support during labor and childbirth¹⁵.

No previous study has examined the effect of respectful maternity care and effective communication during labor and delivery on occurring postpartum depression in Kurdish women. Therefore, in the present study, we are implementing RMC and EC based on WHO recommendations. We aimed to study the effectiveness of the RMC and EC on PPD.

METHODS

Study design and subject's recruitment: An interventional study was conducted on 120 laboring women

admitted to Maternity Teaching Hospital in Koya city for childbirth. In the city of Koya, the Shahid Doctor Khalid Teaching Hospital is a public hospital. There are 200 beds in all, including eight in the delivery room.

The women were chosen at random from a total of 185 laboring women who met all of the study's eligibility criteria and were randomly assigned to one of two groups: intervention or control (Figure 1).

The research was carried out from February 2, 2020, to January 8, 2021. The subjects were divided into two groups: control (60) and intervention (60). The inclusion criteria were laboring women in the active first stage of labor, 38-42 weeks of gestations included primipara, multiparas, grand multiparas, absence of significant obstetric or medical pregnancy complications, Kurdish speaker, and acceptance to be a part of this study. A high-risk pregnancy, mental health issues were excluded.

Study tool of data collection: The data were gathered using a constructed questionnaire that is divided into three sections:

Section one: Includes the questions concerning the participant's sociodemographic and obstetrical characteristics collected before implementing RMC&EC.

The data was gathered based on age group (year). Education level, primary education requires the completion of six years of schooling, secondary education involves completing twelve years of schooling, and institute and bachelors require two years or more spent at university. Residential classifications include urban areas such as Koya, suburban areas within a half-hour to one-hour drive of Koya, and rural areas such as villages outside the suburban areas. Housewife, student, or employed were all terms used to describe the occupation.

The categories of primipara (first delivery), multipara (second to four deliveries), and grand multipara (five or more deliveries) were also included, as were gestational age, abortion, and stillbirth.

Section two: This section of the questionnaire included delivery outcomes as follows:

1. The term "spontaneous vaginal delivery" refers to a vaginal delivery that occurs without the use of Oxytocin or the assistance of an instrument by an obstetrician or midwife.
2. Induced vaginal delivery: It was carried out using intravenous Oxytocin, without the use of a vacuum or forceps
3. Emergency cesarean section: Mother exhaustion either decreases or increases fetal heart rate, prolonged labor or failure to progress.

The remaining part of this questionnaire section focuses on neonatal outcomes, such as 1-minute and 5-minute Apgar scores, neonatal admission to the intensive care unit, and breastfeeding initiation.

Section Three: The Kurdish version of the Edinburgh Postnatal Depression Scale (EPDS) ⁸ was used in this questionnaire section. The EPDS is a validated tool for identifying women who are suffering from PPD. ¹⁶. These ten items of EPDS are the most used screening scale for postpartum depression and have been demonstrated to be reliable and valid across multiple countries. ¹⁶⁻¹⁹.

At six and eight weeks postpartum, all participants were offered a phone call with the same questionnaire.

Verbally administered the depression questionnaire. EPDS has a maximum score of 30. When a woman's EPDS score was ten or higher, women considered having a depressive disorder ²⁰. The Kurdish version of the EPDS was validated during a study conducted by Ahmed, Alalaf and Al-Tawil, (2012).

Research intervention: Before data collection, the researcher developed the intervention procedure under WHO recommendations after thoroughly reviewing available literature on RMC & EC.

It selected ten EC items, which include effective communication between maternity care staff and women during labor and childbirth, as the Guideline Development Group (GDG) approved ²¹.

In addition to the 15-items, of RMC scale contains four components, friendly care (7 items), abuse free care (3 items), timely care (3 items), and discrimination-free care (2 items). Sheferaw et al., 2016 created it in Ethiopia and proved validity and reliability with a value of (0.845) ²².

RMC and EC have been used by the researcher as follows:

Informed consent was obtained when the study's eligibility criteria and aim of the trial were explained. The woman was randomly allocated to one of two groups: intervention or control.

EC was administered in the following manner: Following the woman's decision to join the intervention group, the researcher extends a warm and respectful welcome. Both the researcher and the midwife present themselves to a labour woman, her companion, and her family. She addressed the woman by her name and accompanying her to the private room to give birth (this took 8 to 10 minutes).

A short history of contraction features such as frequency, length, intensity, and detailed sociodemographic and obstetric questions was asked, which took around (10 to 15 minutes). After admission, the researcher examines the women's vital signs and fetal heart rate (In the Kurdistan region, electronic fetal monitoring and partograms are not routinely used).

Between contractions, the investigator provides information to the women about the labor process, thoroughly clarifying the stages of labor and the procedures performed, such as (fetal monitoring, intravenous therapy, medication was given). Additionally, all intervention group participants obtain information regarding colostrum and breastfeeding's advantages and are asked if they have any questions (Prenatal childbirth preparation programs were not available to women, and the Kurdistan region lacked an antenatal care program birthing preparation).

According to her request, a lower back massage was given between each contraction to the laboring women. Intrapartum care was defined as the researcher's continual reassurance, empathy, and holding her hand throughout contractions.

Women were instructed to communicate their needs, suggest a small meal, and request that her bladder be emptied and her genitals are cleansed (if she wants to).

The investigator keeps the woman and her family informed on labor progress and ensures adequate care for the mother and infant in a safe setting.

The following 15 RMC items were used: The laboring woman has access to a qualified and compassionate

midwife (with at least ten years of delivery experience) informed of the study's objective of providing ongoing emotional and physical care. We were making sure the woman knew our language. To minimize service delay for whatever reason, the researcher receives medication from the hospital pharmacy and prepares bedsheets, pads, and equipment.

The researcher was impressive in explaining pain and pain treatment techniques (administered pharmacological treatment following her desire for pain relief). Assisted women in changing positions on the bed for side-lying, squatting, standing, and walking) to enhance comfort and progress labor.

When the contractions grow more intense and closer together, the researcher holds the woman's hand to motivate her and cleaning her face due to excessive sweating. The second stage of labor encourages women to push spontaneously and empowers them to push in their way rather than being forced to push. It also informs women to rest and relax between contractions to conserve energy for the next contraction.

The researcher aims to reduce women's disrespect (protect from verbal abuse, right to informed consent, maintaining privacy, treat with respect). Additionally, allowing a woman to engage in religious practices.

After birth, the newborn was wrapped in warmed blankets. Following placental birth and cleaning the perineum, the midwife examines vaginal or perineal tears and supports women in achieving a comfortable position. The woman was referred to the postpartum unit with the first breastfeeding attempt if no tear was present.

The researcher spent approximately 8-10 hours with each woman in the intervention group between admission and discharge from the hospital.

The control group (Routine care group)

1. The midwife did not identify herself to the laboring woman; instead, she instructed them to proceed to the delivery room and wait until I arrived to assess cervical dilation.
2. Service provision (prepare the bed, room, admitting women, examine the women to detect cervical dilation, obtain medicine from a pharmacy) was delayed to the laboring woman due to staff shortage or changing team shift.
3. Women were admitted in the labor room with other laboring women (at least five laboring women).
4. The laboring women's food and fluid intake was restricted (delivery room staff frequently inform all women you must not take food and fluid due to the possibility of a cesarean section).
5. The delivery room staff did not inform the family about labor progress or reassure them of adequate care
6. The researcher only observed and recorded the necessary data without explaining or clarifying any procedures. Midwives and delivery room staff did not explain them.
7. Following admission, women were instructed to remain in the delivery room without regular checkups by the midwives until the women's companion requested it or cervical dilation was complete and the baby was ready to be born.

8. The researcher observed the women and her companion in the control group frequently exposed to verbal abuse. Unfortunately, we do not have official data on the prevalence of disrespect in the delivery room in the Kurdistan region.

Outcome measure: The outcome measure in this study was depressed symptomatology at six to eight weeks postpartum. It was defined as a score \geq of 10 on the EPDS.

Statistical analysis: SPSS version 25.00 (SPSS 25.00, IBM Corp; USA) was used for statistical analysis. The mothers' categorical and numerical data were provided in frequency (Percentage).

Pearson Chi-square, Fisher Exact, Likelihood Ratio, and Mann-Whitney U tests were performed to determine the homogeneity of baseline data between two groups. The effect of RMC and EC on postpartum depression was examined using the Chi-square test in both groups. Finally, using the Likelihood Ratio, Pearson Chi-Square, and Fisher's Exact Test, we examined the relationship between demographic factors, mother and fetal outcome, with postpartum depression in the two groups. Statistical significance was defined as a p-value of 0.05 or less.

Ethical considerations: The scientific and ethical committee of the College of Nursing/ Raparin University approved the study protocol; registration number: 7-29 (22/1/2020).

The Koya Health Directorates authorized the collection of data. The degree of intervention offered to the intervention group member was found to be safe. Additionally, informed consent was obtained from each woman once the relevant information was explained to all participants. They are reminded that they may withdraw at any moment. Furthermore, the study sample's private details were kept confidential, and consent was acquired from participants to publish their results in this study.

RESULTS

Of the 109 women who completed the EPDS screening between 6 and 8 weeks postpartum, there was no significant baseline data between the two groups. Except for family income ($p < 0.05$), Table 1. Implementing RMC and EC during labor and birth showed a highly significant difference between the two groups regarding PPD. At six and eight weeks postpartum, eleven out of fifty-five (20%) participants in the intervention group scored ten or higher on the EPDS than twenty-seven out of fifty-four (50%) participants in the control group, Table 2.

After an intervention, the mean score on all EPDS items was substantially lower in the intervention group than in the control group, except for the last item (The thought of harming myself has occurred to me), which did not demonstrate a significant difference ($p = 0.556$), Table 3.

There was no significant association between the intervention and the control group with PPD in terms of method of birth, pregnancy type, baby's gender, neonatal admission to the intensive care unit, and breastfeeding, Table 4, 5.

Table 1: Comparison of mother's characteristics between groups (n=120).

Subject's	Control (n=60)	Intervention	P-value
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Characteristics		(n=60)	
Age groups			0.969**
< 20	7 (11.7)	6 (10)	
20 - 29	31(51.7)	33(55)	
30 - 39	17 (28.3)	17 (28.3)	
≥ 40	5(8.3)	4 (6.7)	
Residency			0.546**
Urban	32 (53.3)	32(53.3)	
Suburban	25(41.7)	22(36.7)	
Rural	3(5)	6(10)	
Education Levels			0.106***
Cannot read and write	5(8.3)	8(13.3)	
Can read and write	15(25)	7(11.7)	
Primary School graduate	17(28.3)	12(20)	
Secondary School graduate	14(23.3)	25(41.7)	
Institute and college graduate	9(15)	8(13.3)	
Occupation of mother			0.361**
Employed	5(8.3)	6(10)	
House wife	54(90)	52(86.7)	
Student	1(1.7)	2(3.3)	
Gestational age (weeks)	39.07	39.17	0.666 *
Parity			0.681***
Primipara	17(28.3)	13(21.7)	
Multipara	32(53.3)	36(60)	
Grand multipara	11(18.3)	11(18.3)	
Abortion			0.835***
Aborted	16 (26.7)	15 (25)	
Not aborted	44 (73.3)	45 (75)	
Last pregnancy			0.559***
Planned	42 (70)	39 (65)	
Unplanned	18 (30)	21(35)	
Sex of baby			0.465***
Male	29 (48.3)	33 (55)	
Female	31 (51.7)	27 (45)	
Neonatal admission to ICU			0.717****
Yes	5 (8.3)	3 (5)	
No	55 (91.7)	57 (95)	
Monthly family income			0.034***
Sufficient	14 (23.3)	15 (25)	
Barely sufficient	29 (48.3)	39 (65)	
Insufficient	17 (28.3)	6 (10)	

*Mann-Whitney U **Likelihood Ratio, *** Pearson Chi-Square **** Fisher's Exact Test

Table 2: Comparing Postpartum depression between two groups

Postpartum depression	Control (n=54)	Intervention (n=55)	P Value
Depressed	27 (50)	11 (20)	0.001*
Non-Depressed	27 (50)	44 (80)	

*Chi-square

Table 3: Edinburgh Postpartum Depression Scale items between groups

Items	Control (n=54) Mean ± SD	Intervention (n=55) Mean ± SD	P value
I have been able to laugh and see the funny side of things	0.8148 ± 0.95313	0.4545 ± .81236	0.025
I have looked forward with enjoyment to things	0.9259 ± 0.98770	0.5273 ± 0.76629	0.023
I have blamed myself unnecessarily when things went wrong	1.2778 ± 1.05360	0.5818 ± 0.87540	0.001
have been anxious or worried for no good reason	1.5185 ± 1.17747	0.6727 ± 1.03735	0.001
I have felt scared or	1.3889 ±	0.7273 ±	0.01

panicky for no very good reason	1.13962	1.04447	
Things have been getting on top of me	1.4259 ± 1.10917	0.9818 ± 1.11373	0.031
I have been so unhappy that I have had difficulty sleeping	1.2222 ± 1.16013	0.7455 ± 1.10919	0.017
I have felt sad or miserable	1.0185 ± 1.14085	0.3273 ± 0.69534	0.001
I have been so unhappy that I have been crying	0.7407 ± 1.03131	0.1818 ± .58026	0.001
The thought of harming myself has occurred to me	0.0556 ± 0.30199	0.0364 ± 0.26968	0.556

Mann-Whitney U test

Variables		Non-Depressed	Depressed	P value
Age Groups				
Control	< 20	3 (5.6)	3 (5.6)	0.101*
	20 - 29	17 (31.5)	10 (18.5)	
	30 - 39	4 (7.4)	12 (22.2)	
	40 and above	3 (5.6)	2 (3.7)	
Intervention	< 20	3 (5.5)	1 (1.8)	0.986*
	20 - 29	25 (45.5)	6 (10.9)	
	30 - 39	13 (23.6)	3 (5.5)	
	40 and above	3 (5.5)	1 (1.8)	

Table 4: Postpartum depression by socio- demographic attributes

Monthly family income				
Control	Sufficient	4 (7.4)	9 (16.7)	0.166**
	Barley Sufficient	13 (24.1)	13 (24.1)	
	Insufficient	10 (18.5)	5 (9.3)	
Intervention	Sufficient	9 (16.4)	5 (9.1)	0.109**
	Barley Sufficient	31 (56.4)	4 (7.3)	
	Insufficient	4 (7.3)	2 (3.6)	
Types of Pregnancy				
Control	Planned pregnancy	18 (33.3)	20 (37)	0.551**
	Unplanned pregnancy	9 (16.7)	7 (13)	
Intervention	Planned pregnancy	28 (50.9)	6 (10.9)	0.579**
	Unplanned pregnancy	16 (29.1)	5 (9.1)	

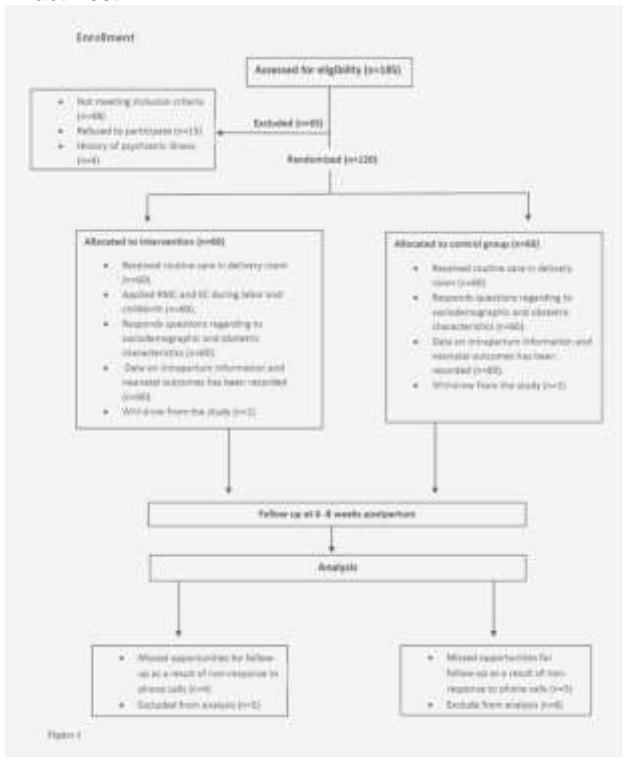
*Likelihood Ratio, ** Pearson Chi-Square

Table 5: Postpartum depression by mode of birth and neonatal outcomes

Variables		Non-Depressed	Depressed	P Value
Mode of Birth				
Control	Spontaneous vaginal delivery	2 (3.7)	2 (3.7)	0.743**
	Induced vaginal delivery	22 (40.7)	20 (37)	
	Emergency cesarean section	3 (5.6)	5 (9.3)	
Intervention	Spontaneous vaginal delivery	14 (25.5)	2 (3.6)	0.650*
	Induced vaginal delivery	27 (49.1)	8 (14.5)	
	Emergency cesarean section	3 (5.5)	1 (1.8)	
Neonate admission in Intensive Care Unite				
Control	Yes	4 (7.4)	1 (1.9)	0.35
	No	23 (42.6)	26 (48.1)	
Intervention	Yes	3 (5.5)	0 (0.0)	0.24

	No	41 (74.5)	11 (20)	0*
Sex of baby				
Control	Male	16 (29.6)	11 (20.4)	0.17
	Female	11 (20.4)	16 (29.6)	4**
Intervention	Male	23 (41.8)	8 (14.5)	0.21
	Female	21 (38.2)	3 (5.5)	1**
Breastfeeding				
Control	Yes	7 (13)	6 (11.1)	0.75
	No	20 (37)	21 (38.9)	0**
Intervention	Yes	33 (60)	8 (14.5)	0.87
	No	11 (20)	3 (5.5)	7**

*Likelihood Ratio, ** Pearson Chi-Square, *** Fisher's Exact Test



DISCUSSION

In this study, 80% of mothers who received RMC and EC during labor and delivery with other criteria like having a private room for laboring mothers had EPDS score <10 at the 6 and 8 weeks' assessment, compared with 50% of mothers in the control group. The significant effect of RMC and EC during labor and birth on PPD at the 6 and 8 weeks' evaluations remained, even when mothers' baseline information was controlled, with respect to family income.

Respectful maternity care and effective communication were recommended by the World Health Organization¹⁵. Additionally, it has received much attention in recent years and several studies indicating that mistreatment during childbirth in health care facilities^{23,24}. However, few research has been conducted to assess the effects of such experiences on the health of mothers and children. Silveira et al. observed that in their study of 3065 mothers in Brazil during pregnancy and three months after birth, self-reported mistreatment during labor included physical abuse, verbal abuse, and denial of care; and that

undesirable procedure increased the risk of PPD three months after birth²⁵. Furthermore, a cross-sectional study of 432 Brazilian women was conducted in 2011 to determine the influence of institutional violence on postpartum depression. The findings indicated a positive association with PPD²⁶.

An intervention trial confirmed our results that supportive labor, by providing positive emotional support and encouragement throughout labor has been associated with significant improvements in mothers' psychological health in the context that it appears to reduce the risk of developing depression²⁷.

The majority of interventional studies, regardless of intervention type, have examined the presence or absence of support during pregnancy or the postpartum period in order to prevent PPD²⁸⁻³¹. Until recently, no experimental study has demonstrated women's support (effective communication and respectful care) on psychological outcomes such as postpartum depression throughout the childbirth process.

Respecting birth as an important life event and rite of passage helps nurture and maintain a woman's birth memory. For the laboring woman, the day of delivery is a time of tremendous immersion and learning. Medical staff who attend births should be aware of any disrespect because women will recall their actions and words, whether positive or negative³². The quality of care given to laboring women during labor influences their women's memories of their births; Those who had the most satisfaction with their birth care also had the most positive memories; they believed that their birth experience strengthened their self-esteem and confidence. In contrast, careless, neglectful, or disrespectful treatment frequently results in a negative experience, forming a woman's negative self-image for the remainder of her life³³. Hassanzadehand and colleagues observed in a 2020 research in Iran that positive childbirth experiences promote women's health, whereas negative birth experiences can lead to psychological stress and, in extreme situations, lead to postpartum depression³¹.

PPD is a common psychologic disorder that affects a significant number of postpartum mothers. The relevant studies had investigated interventional techniques, including patient education to modify maladaptive thought patterns and an emphasis on psychological issue treatment. Two Taiwanese randomized control studies established the efficacy of informational support in reducing postpartum depression. The intervention group received postnatal depression education and information support (transition to motherhood, postpartum stress management, communication skills). The study's findings indicated that those who attended support sessions had a lower likelihood of having a high depression score^{34,35}.

The demographic and obstetric associations with PPD in this study are not significant since the two groups did not differ in those variables, although the control group is a higher occurrence of postpartum depression. Across prior research conducted in many cultures and nations, postpartum depression was related to many sociodemographic and obstetric factors, for instance, mode of birth^{8,36}, economic status^{8,37-39}, unplanned pregnancy^{8,38,40}, other factors like parity and age⁴¹. In contrast to this result, Iranian research on parity has been discovered⁴⁰.

Lee and Kheirabadi identified a link between PPD and the gender of the baby in their study^{37,40}. The authors of an investigation on the hormonal components effect on PPD discovered that women who breastfeed had considerably lower Edinburgh Postnatal Depression Scale scores⁴². In addition, Hamadan and Lara reported that breastfeeding reduces the risk of PPD^{43,44}.

It is worth noting that the number of women suffering from PPD in the control group is high in this study, compared to a prior study in the Kurdistan region, which revealed lower rates⁸. It is also essential to mention that our research was conducted during the Covid19 pandemic. Our findings were corroborated by a cross-sectional survey of 162 Spanish women in 2020. It was shown that mothers who gave birth during the Covid19 pandemic had significantly greater rates of postpartum depression⁴⁵.

Although this study established a positive correlation between implementing RMC and EC during labor and an improved postnatal depression score, additional studies with a larger sample size are necessary to determine the efficacy of RMC and EC on women's depression scores and perceived birthing experiences, as well as the consequences of disrespect and maltreatment on mother's physical and psychological health throughout childbirth.

STRENGTHS AND LIMITATIONS

The project's strength is its random assignment to groups and evaluation of the efficacy of RMC and EC interventions in avoiding PPD. The small sample size limited the study. Furthermore, using EPDS as the sole measure for evaluating results.

CONCLUSIONS

Our findings highlight the critical need for efforts to support respectful maternity care and effective communication throughout labor and delivery and to help mothers avoid negative consequences associated with PPD. Providers of health care needed education and training to behave and communicate to enhance women's psychological outcomes.

Abbreviations: WHO: World Health Organization; RMC: Respectful Maternity Care; EC: Effective Communication; PPD: Postpartum depression; EPDS: Edinburgh Postpartum Depression Scale; ICU: Intensive care unit; GDG: Guideline Development Group.

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Author's contribution: HMA formulated the idea, prepare the proposal and design of the study. KKF developed a questionnaire and research intervention, collect the data, interpreted data, and drafted the manuscript. The final version of the manuscript has been read and accepted by all Authors.

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Ethics approval and consent to participate: The study's Ethical approval was obtained from The Ethics Committee of college Nursing/Raparin University registration number: 7-29 (22/1/2020). The verbal consent was taken from each woman after explaining the purpose and procedure of the study, and it was mentioned in the special form requested by Ethics Committee. Additionally, they have also assured confidentiality of the information.

Consent for publication: Not applicable.

Competing interests: The authors declare no conflict of interest.

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