

Effect of Health Educational Package on Reducing Postpartum Discomforts

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ABSTRACT

Background: One of the most important maternal health care services to prevent impairment and incapacity after childbirth is postnatal care. The aim of this study was to assess the effect of health educational packages on reducing postpartum discomforts. **Methods:** This study used a quasi-experimental pre- and post-test one-group design. A convenient sample of a total of 110 postpartum mothers were attending the postpartum ward at Sohag University Hospital. Three tools were used to collect the data: a structured interviewing schedule, a pre- and post-test on maternal knowledge regarding minor discomforts, and a follow-up tool for postpartum minor discomforts. **Results:** The postpartum women's mean age was 22.97 ± 2.856 years. The study revealed that 86.4% of postpartum women were housewives, 72.7% lived in rural areas, and 43.6% had completed secondary education. Sixty-six-point four percent of the postpartum women stated that prior to receiving health education, they had an unsatisfactory level of knowledge regarding postpartum minor discomforts. After the teaching, only 0.9% of postpartum women were unaware of these minor discomforts. **Conclusion:** The health education package improved the women's knowledge of postpartum discomforts. There was also partial relief from afterpain, episiotomy pain, breast engorgement, constipation, and urinary retention. **Recommendations:** Before discharge from the hospital, postpartum primiparous mothers should receive health education materials that clearly and comprehensively explain postpartum minor discomforts.

Keywords: Discomforts; Health Educational Package; Postpartum

INTRODUCTION

The term "postpartum period" describes the healing phase that occurs after childbirth, during which the reproductive organs return to their pre-pregnancy state, typically lasting six to eight weeks. Postpartum mothers go through a lot of changes throughout the recovery phase, some of which are physical and some of which are psychological. If support from family and medical professionals is lacking, there's a chance that many issues will persist after postpartum time (Jayanti & Mayasari, 2022). All systems adapt, and minor discomforts may arise after giving birth. Common postpartum include mild discomforts with after-pains, episiotomy pain, exhaustion, breast engorgement, constipation, urine retention, and lactation issues. Following labour, prompt and efficient treatment for these problems can have a big impact on postpartum adjustment (Chen, Wang & Chen, 2020; Abd El-Salam & Ashour, 2020).

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Raj, Rajan and Kj (2018) conducted a study on the incidence of minor puerperium ailments and related knowledge among postnatal mothers. The result showed that the common incidence of minor ailments was afterpain (67%), perineal discomfort (50%), constipation (43%), and fatigue (67%). Most of the postnatal mothers had average knowledge (65%), some of them had good knowledge (21%), and some of them had poor knowledge (14%). Ali *et al.* (2023) conducted a study to assess the effectiveness of a health education program on women's knowledge regarding postpartum minor discomforts. The results revealed that 91% of selected women had poor knowledge of postpartum minor discomforts before the teaching program, compared to 6% after the teaching program. Additionally, 66% of the studied women had inadequate self-reported practice pre-education programs, compared to 34% having adequate self-reported practice post-education programs.

Women experience soreness and agony after childbirth, which is associated with uterine involution. Lower back and abdomen pain, as well as dull cramps akin to extreme menstrual discomfort, are among the symptoms that follow pains. These symptoms typically arise within the first 48 hours of delivery and persist for one to four days. Moreover, these symptoms disrupt a mother's daily schedules and her confidence in breastfeeding (Deussen *et al.*, 2020; Evcili & Kaya, 2019; Soumya, Raj, Rajan & Kj 2018). Over one-fifth of women worldwide have the painful symptom of perineal pain, which lasts for roughly ten days following a typical vaginal delivery, affects over one-fifth of women worldwide. The pain may restrict her mobility and standard of living. Pain may be caused by surgical incisions, spontaneous rips, bruises, or vaginal births that require surgery. Acute postpartum perineal discomfort may be better relieved by perineal massage, ice packs, and NSAIDs; fewer women may require further analgesics (Abdelhakim *et al.*, 2020; Kim *et al.*, 2020; Gohar & Taman, 2022; Abalos, Sguassero & Gyte, 2021; Wuytack, Smith & Cleary, 2021).

Breast engorgement, according to Mangesi and Zakarija-Grkovic (2016), is a condition in which the breasts overfill, become solid, diffuse, and painful because of infrequent or inefficient milk evacuation. Engorgement typically starts in the postpartum period between days three and seven. Scraping therapy, acupuncture, acupressure, and cabbage leaves may lessen breast engorgement. Another concerning problem is postpartum urine retention, which is the inability to urinate following childbirth. This condition is often linked to a number of things, such as the first vaginal delivery, an epidural, spinal, or pudendal block during labour, a difficult instrumental birth and/or shoulder dystocia, a prolonged second stage, a birth weight of more than 3.8 kg, severe perineal trauma, and a lot of swelling (Lauterbach *et al.*, 2018).

According to a study by Sendas and Freitas (2024), women report feeling unprepared for the postpartum period and cite several unmet requirements; therefore, health education and parenting skills training are crucial to enhancing the postpartum experience and the transition to parenthood. A health education program raises knowledge and gives postpartum women—especially those who are primiparous—the confidence to take care of their own health. This led the women to seek medical attention for their health issue, which is critical for maintaining health and facilitating a speedy recovery. In this regard, the nurse can serve as both a caregiver and an educator, establishing and improving the experience of primiparous mothers in managing minor postpartum discomforts (Abd El-Salam & Ashour, 2020).

Significance of the Study

Rai *et al.* (2023) reported that postnatal care is among the most crucial maternal health care services for preventing impairment and disability brought on by childbirth. Inadequate treatment during the postpartum phase can cause death or disability, as well as lose opportunities to encourage good behaviour that impact both the mother and the child.

Minor discomforts are common during the postpartum period and have the potential to worsen. Consequently, teach the mother about the changes that take place during the postpartum phase to increase her tolerance and avoid discomfort. This will help the mother identify the issues as much as possible. A woman who has just given birth could have a lot of queries and worries regarding this phase of her life.

According to Zengin *et al.* (2020), postpartum care and deliveries receive the least attention in terms of care and health education in a clinical context throughout the entire maternity care cycle. Moreover, Sohag

University Hospital does not currently offer this service, which exposes new mothers to a wide range of postpartum discomforts that could negatively impact their health and interfere with their ability to bond with their infant and maintain family relationships. Therefore, this study aims to bridge the knowledge-practice gap regarding minor postpartum discomforts.

Aim of the Study

The aim of the present study was to assess the effect of health educational package on reducing postpartum discomforts.

Research Hypotheses

- Postpartum women provided with health educational package report feeling less discomfort.
- Postpartum women who receive the health educational package had a higher knowledge score regarding postpartum discomforts.

METHODOLOGY

Research Design

This study used a quasi-experimental (one group pre/posttest) design to investigate how a health education package can lessen postpartum discomforts. No random assignment is used in this design, but controls allow for other criteria. According to Stratton (2019), pre- and post-test designs are among the various quasi-experimental designs that are employed to evaluate participants' attitudes or perceptions regarding an event, to gauge their comfort level applying the knowledge they received during a training session, or when introducing new concepts (acceptance and efficacy study). A successful training program is assumed if the post-test results exceed the pre-test results.

The study complied with accepted ethical guidelines for medical research. Participants who met the eligibility requirements were informed about the nature, goal, and significance of the study. The women who agreed to participate in the study gave their written consent. Additionally, anonymity and confidentiality were assured through coding the data. Participants received assurances that their involvement in the study was entirely voluntary and that they would not be penalised for leaving the study at any point. The study did not pose any risk to the research subjects.

Setting

The postpartum unit at Sohag University Hospital conducted the research.

Sampling

A convenient sample of 110 postpartum women attending the postpartum unit at Sohag University Hospital was recruited for the study. Despite the following equation requiring a minimum of 95 women for recruitment, the research investigator managed to recruit 110 postpartum women for this study, assuming a 10% non-response rate among the women.

$$n = \frac{N Z^2 p (1 - p)}{d^2 (N - 1) + Z^2 p (1 - p)}$$

$$(N - 1) + p(1 - p)n = (NZ^2 P(1 - p)) / (d^2 (N - 1) + Z^2 P(1 - p))$$

n=Sample size

N= Total society size=(142).

D= error percentage=(0.5).

P= percentage of availability of the character and objectivity= (0.1).

Z= the corresponding standard class of significance 95%= (1.96).

Inclusion Criteria

Primiparous women

Term pregnancy

No medical problems

Exclusion Criteria

Women with medical and obstetrics complications

Tools of the Study

Three tools were used to gather data. The researcher developed it following a survey of relevant literature (Abd El-Salam & Ashour, 2020; Elsebeiy, 2019; Shaban & Elhendawi, 2018). These tools included the following: 1) structured interviewing schedule; 2) A pre- and post-test on maternal knowledge regarding minor discomforts; and 3) Follow-up form for minor postpartum discomforts. 1- Structured Interviewing Schedule: It contained demographic characteristics information, including age, education level, occupation, address, and phone number.

A pre- and post-test on maternal knowledge regarding minor discomforts is used to gauge women's knowledge of these issues in the early postpartum period. It included questions on common postpartum discomforts, such as what constitutes a minor discomfort for the reproductive system, as well as self-care activities for reliving postnatal breast engorgement. What are some minor postnatal discomforts that GIT experiences? What minor postnatal discomforts affect the urinary system, among others?

Knowledge Scoring: Knowledge scoring consisted of twenty questions. A score of 20 was the highest possible. For the right answer, a "one" was given, and for the wrong answer, a "zero." The question scores will then be determined, followed by the calculation of the total knowledge score. A knowledge score of 50% to less than 75% is regarded as fair, less than 50% as poor, and at least 75% as good.

Follow-up form for minor postpartum discomforts: This tool covered only five minor postpartum discomforts, which included afterpains, perineal pain, breast engorgement, urine retention, and constipation. The researcher checked in with each participant every week for the first three weeks after giving birth, asking them if the health educational package they received was useful. Do they adhere to the health education package correctly and systematically? reason for incompliance? What impact does the health education package they received have on their minor postpartum discomfort? The Likert scale is used as the scoring system to determine how well symptoms are improving. A score of three signifies the improvement of discomforts, a score of two indicates the absence of discomforts, and a score of one indicates no improvement in discomforts.

Tool Validity

Five nursing professionals in the field of obstetrics and maternity nursing were given the tools to test the content validity; modifications were made based on their assessment of the content's appropriateness and sentence clarity.

Pilot Study

A pilot study of 11 cases was carried out to evaluate the tool's viability, objectivity, and clarity, as well as the amount of time needed to finish it. The sample consisted of women who participated in the pilot study.

Ethical Consideration

The research ethical committee of Faculty of Nursing, Assiut University, Egypt granted primary approval with reference number 1120240528 on 27th December 2022.

Procedures

The study was conducted through 4 phases:

Preparatory Phase: Official approval from the hospital administrators was secured to carry out the study. Furthermore, all participants and medical professionals received verbal information regarding the goal, significance, and advantages of the study, which included a review of recent literature to build and prepare tools for data collection.

Interviewing and Assessment Phase: To obtain their informed consent, the researcher approached the postpartum women and explained the nature of the study to them. During the interview session data on each postpartum woman, including demographic characteristics like age, education level, occupation, address, and phone number were gathered. Additionally, the researcher assessed postpartum knowledge among women using a maternal knowledge tool regarding minor discomforts (pre and posttest). The interview took 20-30 minutes for each woman.

Implementation Phase: Teaching sessions were implemented for each woman who satisfied the inclusion criteria and was granted approval to participate in the study. The study covered the definition and duration of the postnatal period in detail. These included danger signs that necessitate calling a doctor and discussing other minor discomforts that occur during the reproductive system, self-care activities for reliving after pain, ways to speed healing and relieve perineal minor discomforts, etc. Each woman took 10 to 15 minutes to complete the teaching session.

Evaluation Phase: The effect of a health education package on postpartum discomfort was evaluated using a postpartum minor discomfort follow-up tool. Weekly phone calls were made for three weeks following discharge to assess the level of discomfort among the women. Responses were being monitored for the following: whether symptoms were present, whether they were relived, whether symptoms were discovered, whether compliance with the provided data was present, and why there was noncompliance.

Statistical Analysis

Data management was conducted by coding the responses and inputting them into the statistical software using SPSS version 21. To ensure there were no inconsistencies, the study's investigator reviewed every piece of data. Data entry and coding errors were reviewed. To analyze normally distributed numerical data, mean and standard deviation were used, alongside frequency and percentage. The Friedman and Wilcoxon tests were applied for further analysis. A *p*-value of less than 0.05 was considered statistically significant, while a *p*-value below 0.001 indicated a highly significant result.

RESULTS

Table 1 displayed the mothers' ages, which varied from 19 to 31 years old with a mean age of 22.97 years; 78.2% of the mothers were in the 20–<30 age group, while 5.4% of the mothers were in the ≥30 age group only. Seventy-two-point seven percent of the population resided in rural areas. In terms of their educational attainment, 43.6% of the mothers had secondary education, while 6.4% were able to read and write. Considering occupation; 86.4% of them were not working.

Table 1: Distribution of the Postpartum Mothers Regarding Demographic Characteristics

Characteristics	Number (110)	%
Age		
< 20	18	16.4
20-	86	78.2
≥30	6	5.4
Mean ± SD	22.97 ± 2.856	
Residence		
Rural	80	72.7
Urban	30	27.3
Educational Level		
Not read or write	12	10.9
Read and write	7	6.4
Primary	12	10.9
Preparatory	21	19.1
Secondary	48	43.6
University	10	9.1
Occupation		
Working	15	13.6
Not working	95	86.4

Table 2: Distribution of Postpartum Mothers Based on Knowledge of Minor Discomforts Following Childbirth

	Pre-test		Post-test		Wilcoxon test	P-value
	No.	%	No.	%		
Do you know what are Minor Discomforts during Postpartum Period? (n= 110)						
Yes	37	33.6	109	99.1	-8.485	0.000
No	73	66.4	1	0.9		
If yes, what are? (n = 37)						
Colic	21	56.8	35	94.6	-5.546	0.000
Breast engorgement	3	8.1	25	67.6		
Urinary retention	1	2.7	17	45.9		
Constipation	3	8.1	22	59.5		
Cracked nipple	1	2.7	19	51.3		
Fatigue	11	29.7	28	75.7		
Episiotomy pain	0	0.0	29	78.4		
Postpartum blues	1	2.7	16	43.2		
Hemorrhoid pain	0	0.0	20	54.1		
If no, why?		No. (73)			Percentage (%)	
Primipara		50			68.5	
No source of information		10			13.7	
Having no interest to know		13			17.8	
Sources of Knowledge		No. (37)			Percentage (%)	
During pregnancy care		10			27	
Social media		9			24.3	
Others (relatives, neighbors, friends)		18			48.7	

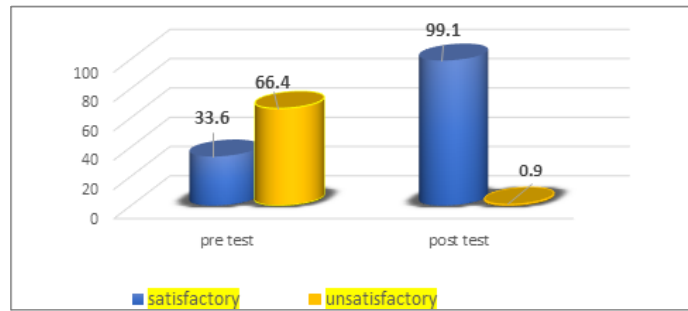


Figure 1: Distribution of Postpartum Mothers Based on Knowledge of Minor Discomforts Following Childbirth

Table 2 and figure 1 revealed that 66.4% of the postpartum women stated that prior to receiving health education, they had unsatisfactory level of knowledge regarding postpartum minor discomforts, and 0.9% of them were still unaware of this after the session.

Postpartum mothers also indicated at the pretest that they were aware of colic, fatigue, breast engorgement, constipation, urine retention, cracked nipple and postpartum blues (56.8, 29.7, 8.1, 8.1, 2.7, 2.7 and 2.7 respectively). After health education session, they reported that they had knowledge about colic, episiotomy pain, fatigue, breast engorgement, constipation, Hemorrhoid pain, cracked nipple and urinary retention (94.6, 78.4, 75.7, 67.6, 59.5, 54.1, 51.3, 45.9 respectively). The pretest and posttest demonstrated a significant difference in these outcomes ($p=0.000$).

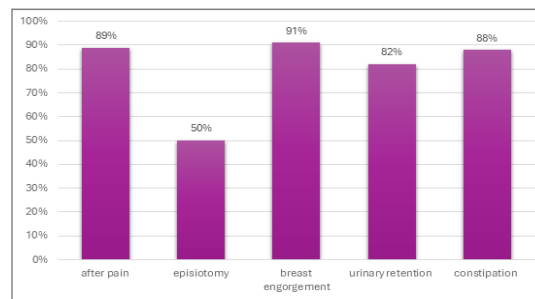


Figure 2: Incidence of Minor Discomfort among Post-Natal Women

Figure 2 showed the incidence of minor discomfort among post-natal women, 89% of postnatal mothers had afterpain, 50% had episiotomy pain, 91% of postnatal mothers had breast engorgement, 82% had urinary retention and 88% had constipation.

After performing the health education session over the course of three consecutive weeks of assessment, Table 3 revealed a considerable improvement in postpartum women's knowledge regarding pain after delivery, as indicated by 73.6% in the first week, 84.6% in the second week, and 89.1% in the third week. The findings showed that health education had a substantial impact on postpartum women's pain management as time went on ($p=0.0001$).

Table 3: The Impact of Health Education on Relieving of After-pain

After-pain	First Week		Second Week		Third Week		The Friedman Test	P-value
	No.	%	No.	%	No.	%		
Improved Discomforts	81	73.6	93	84.6	98	89.1	47.348	0.0001
Not Detected Discomfort	12	10.9	12	10.9	12	10.9		
Not Improved Discomforts	17	15.5	5	4.5	0	0		
Total	110	100.0	110	100.0	110	100.0		

After conducting the health education session over the course of three consecutive weeks of assessment, Table 4 showed that postpartum women had significantly improved regarding episiotomy pain, as reported by 38.2% in the first week, 40.9% in the second week, and 49.1% in the third week. The findings showed that health education had a substantial impact on postpartum women management of episiotomy discomfort as time went on ($p=0.0001$).

Table 4: Effect of Health Education on Relieving of Episiotomy Discomfort

Episiotomy	First Week		Second Week		Third Week		The Friedman Test	P- value
	No.	%	No.	%	No.	%		
Improved Discomforts	42	38.2	45	40.9	54	49.1	39.000	0.0001
Not Detected Discomfort	55	50	55	50	55	50		
Not Improved Discomforts	13	11.8	10	9.1	1	0.9		
Total	110	100.0	110	100.0	110	100.0		

After conducting the health education session over the course of three consecutive weeks of assessment, Table 5 showed that postpartum women had significantly improved of breast engorgement, as reported by 70.9% in the first week, 82.7% in the second week, and 90.9% in the third week. The findings showed that health education had a substantial impact on postpartum women management of breast engorgement as time went on ($p=0.0001$).

Table 5: The Impact of Health Education on Relieving of Breast Engorgement

Breast Engorgement	First Week		Second Week		Third Week		The Friedman Test	P- Value
	No	%	No.	%	No.	%		
Improved Discomforts	78	70.9	91	82.7	100	90.9	52.857	0.0001
Not Detected Discomfort	10	9.1	10	9.1	10	9.1		
Not Improved Discomforts	22	20	9	8.2	0	0		
Total	110	100.0	110	100.0	110	100.0		

The Table 6 illustrates the impact of health education on relieving urinary retention discomfort over three weeks. It shows that the number of participants experiencing improved discomfort increased steadily, with 67.3% reporting improvement in the first week, 79.1% in the second week, and 81.8% in the third week. In contrast, the percentage of individuals reporting no detected discomfort remained constant at 18.2% across all three weeks. A Friedman test was conducted to assess the statistical significance of these changes, yielding a test statistic of 54.250 and a highly significant P-value of 0.0001. This indicates that the health education intervention had a substantial and statistically significant impact on reducing urinary retention discomfort over the three-week period.

Table 6: The Impact of Health Education on Relieving of Urinary Retention

Urinary Retention	First Week		Second Week		Third Week		The Friedman Test	P- value
	No.	%	No.	%	No.	%		
Improved Discomforts	74	67.3	87	79.1	90	81.8	54.250	0.0001
Not Detected Discomfort	20	18.2	20	18.2	20	18.2		
Not Improved Discomforts	16	14.5	3	2.7	0	0		
Total	110	100.0	110	100.0	110	100.0		

Following the health education session over the course of three consecutive weeks of assessment, Table (7) demonstrates a considerable improvement in postpartum women's constipation, as indicated by 74.6% in the first week, 82.7% in the second week, and 88.2% in the third week. The findings showed that health education had a substantial impact on postpartum women's management of constipation with time ($p=0.0001$).

Table 7: Health Education's Impact on Relieving of Constipation (N=110)

Constipation	First Week		Second Week		Third Week		The Friedman Test	P- Value
	No.	%	No.	%	No.	%		
Improved Discomforts	82	74.6	91	82.7	97	88.2	43.628	0.0001
Not Detected Discomfort	13	11.8	13	11.8	13	11.8		
Not Improved Discomforts	15	13.6	6	5.5	0	0		
Total	110	100.0	110	100.0	110	100.0		

DISCUSSION

Maintaining and promoting the health of the postpartum mother and the infant, as well as creating an environment that aids and supports a range of social and physical needs, depend greatly on the care that the midwifery nurse provides from the moment of delivery until the end of puerperium. Expectant mothers can navigate the difficult postpartum phase more skilfully if they are aware of all facets of postnatal care in general and self-care in particular (McCauley *et al.*, 2022; Binti Ab Latif, 2018).

According to the current study's findings, most primiparous mothers were unemployed, over two fifths had a secondary education, over half lived in rural areas, and over three quarters of them were in the 20+ age range. Similarly, Elsebeiy (2019) found that nearly three-quarters of the respondent women were between the ages of 18 and 25 years (mean age: 22.67±2.15 years) and showed that a greater proportion of the women under study had only completed secondary school and/or university education than had basic education. Additionally, over four fifths of the women were housewives, and over half of them lived in rural areas.

In addition, Ali *et al.* (2023) in their study revealed that fifty percent of women their age is between 20 and <25 years, and near seventy-five percent of the women live in rural areas, while near fifty percent of the women had secondary education as well as most of them are housewives. This similarity may arise from the participants' comparable age ranges, places of residence, and levels of education in the present study. Also, people who live in rural areas typically seek to complete their secondary education and get married young.

The current study's results revealed that over half of the postpartum women assessed had no prior knowledge of postpartum discomfort. This finding may be attributed to the fact that all of the study's female participants were primigravidae and had limited experience with mild postpartum discomforts. These findings agree with Elsebeiy (2019), who found that almost three-fourths of nulliparae had poor knowledge regarding the postnatal minor discomforts and self-care activities for relieving them.

In addition, these findings agree with Abd Elhady *et al.* (2020), who found that more than two-thirds of the control and study groups had inadequate knowledge in their investigation of the efficacy of interactive digital health media based on the ADDIE (Analyze, Design, Develop, Implement, and Evaluate) Model on women's postpartum mild discomforts at Benha University Hospital, Egypt. Additionally, this result aligns with the findings of Ali *et al.* (2023), who discovered that prior to the education program, most selected women lacked knowledge about minor postpartum discomforts, but after the program, 6% of them gained this knowledge.

The study by Raj, Rajan and Kj (2018) on "incidence of minor ailments of puerperium and related knowledge among postnatal mothers" on 100 postnatal mothers in Kochi found the opposite. They found that most postpartum women do know much about these minor ailments. Additionally, Doha *et al.* (2020) discovered that the majority of women in the study were informed about postnatal care and had utilized postnatal care services, with more than half doing so for routine check-ups.

The findings of the current study regarding after-pain revealed that for most of the women, their pain had improved following a health education session, while none reported that it had become worse. The results of a study by Danasu and Praimathi (2016) corroborate the findings of this study, which showed that nursing care was a successful intervention in reducing after pains in postnatal mothers.

In addition, Shabaan, El Sayed and Ghonemy (2018) discovered that following a health education session, 75% of the participants reported an improvement in their post-exposure. During the postpartum period, Kegel exercise and prone position were effective in reducing afterpain. Furthermore, a study by Baishya and Devi (2021) concluded that providing nursing interventions to expectant mothers was successful in lowering the degree of discomfort experienced after delivery. These therapies are simple to use, inexpensive, non-pharmacological, and free of side effects. From my perspective, this outcome could be attributed to the beneficial impact of the health education package. Women are eager to learn and practice in this field; additionally, there is a focus on providing moms in postpartum units with information and practices related to postpartum discomforts.

Regarding episiotomy discomfort, the results of this study showed that almost half of the women under investigation reported an improvement in their pain following a three-week assessment period that included a health education session. But only a few of them reported that things were getting worse. This result is congruent with Ari *et al.* (2019) study of the impact of an educational intervention on postpartum perineal wound care. The study demonstrated that the practice of postpartum perineal wound care by women led to improved wound healing progress.

This finding is also in line with research by Lazarus *et al.* (2022), who found that women who received and followed self-perineal care instructions on episiotomy pain and wound healing during the postpartum period had lower pain scores and less discomfort related to perineal episiotomy. Moreover, Öz and Güloğlu (2024) found that scores on the REEDA (Redness, Oedema, Ecchymosis, Discharge, Approximation) scale were lower, and pain experiences were significantly less in the group that received education and counselling with social media tools after discharge in women who underwent episiotomy. From the researcher's point of view, this outcome could be the consequence of the positive relationship between practice and knowledge.

Breast engorgement: The results of the current study showed that most of the women reported an improvement in their breast engorgement following a health education session. However, none of them provided information about things going worse. This finding aligns with Shabaan, El Sayed, and Ghonemy (2018), who found that following health education sessions, 75% of the patients reported an improvement in breast engorgement, which lends weight to these findings. Conversely, 1.4% of the participants reported that things were getting worse.

Additionally, Abd Elhady *et al.* (2020), who demonstrated a statistically significant reduction in women's complaints of breast engorgement following the implementation of a video-assisted instruction program ($p < 0.001$). This outcome could be the result of a beneficial relationship between practice and knowledge. Furthermore, Di, Ge, and Wang (2024) found that basic clinical treatment, nursing intervention, and breastfeeding health education are effective in treating postpartum breast engorgement and pain while also boosting lactation yield.

Regarding urine retention, the results of the current study showed that following a health education session, over 75% of the women reported an improvement in their urinary retention, while none reported a worsening. Similarly, Shabaan, El Sayed, and Ghonemy (2018) found that following a health education session, over 75% of the participants claimed that their urine retention had improved, whereas 13.8% reported that it had gotten worse. This could be because implementing postpartum minor pain education reduced the incidence of transient urine retention. The results of the current study showed that most of the women reported that their constipation was getting better, but none reported that it was becoming worse. In a similar vein, Shabaan, El Sayed and Ghonemy (2018) found that 75% of the participants said that their constipation had improved, while 17.9% reported that it had gotten worse.

In addition, Kumari, Vahitha, and Kubera (2024), in their study of the effectiveness of video-assisted teaching on the prevention of constipation among postpartum women, revealed that video-assisted teaching

regarding the postnatal diet and exercise was effective in preventing constipation among postpartum women. This outcome could be attributed to the health education package's beneficial influence on women's knowledge, which enhances women's habits.

The study's findings indicated a statistically significant improvement in primipara women's knowledge after completing a health education package ($p < 0.001$). This aligns with the results of Ali *et al.* (2023), who observed a significant increase in knowledge among participants following the implementation of a video-assisted teaching program. The program led to a notable enhancement in understanding postpartum minor discomforts, such as after-pains, urinary retention, breast engorgement, episiotomy pain, fatigue, constipation, and cracked nipples. This improvement is likely due to the effectiveness of the educational package in providing comprehensive information.

Limitations

The use of a quasi-experimental design without a control group was one of the limitations of the study, although it can be corrected by repeating the study with a control group. Conducting the study with a larger sample size can overcome the second limitation of the small sample size.

CONCLUSION

The results of the current study revealed that about two-thirds of postpartum mothers did not know enough about management of minor discomfort that arises after giving birth. Therefore, the health education package enhanced the women's comprehension and behaviour regarding postpartum discomforts, enabling them to implement these educational programs to enhance their self-care skills after giving birth, both in the current and subsequent pregnancies. Educating family members about the minor discomforts is particularly beneficial for preventing and managing them. Further studies are necessary to examine the effect of a health educational program on relieving postpartum minor discomforts and reducing the recurrence of these discomforts during puerperium. The significance of this study lies in demonstrating that health education packages effectively improve postpartum women's knowledge and alleviate minor postpartum discomforts, contributing to better maternal health outcomes. Furthermore, future research could concentrate on the complications associated with minor discomforts in postpartum women. Further studies are required to compare the health profile of postpartum women who have minor discomforts with vaginal delivery and caesarean section.

Recommendation

Postpartum primiparous mothers should receive health educational packages that provide a clear and comprehensive explanation of postpartum minor discomforts, enhancing their understanding and practice prior to hospital discharge. A parental education program on postpartum minor discomforts and their management should be implemented for pregnant mothers. Maternity nurses should undergo an educational program to enhance their understanding of postpartum minor discomforts.

Conflict of Interest

The authors declare that they have no competing interests.

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