Effectiveness of Health Education Program on Women's Knowledge and Self- reported Practice Regarding Postpartum Minor Discomforts

Sahar Ahmed Ali AL- Shamandy[1], Mariam Nadi Ayad[2], Sameh Reda Mousa[3], Safaa Ali Abdelnaem[4]

1. Assistant Professor of Women Health and Obstetric Nursing- Faculty of Nursing – Minia University.
2. B.Sc. in Nursing, Faculty of Nursing- Minia University.
3. Lecturer of Obstetrics and Gynecology- Faculty of Medicine –Minia University.
4. Lecturer of Women Health and Obstetrics Nursing- Faculty of Nursing –Minia University.

ABSTRACT

Background: After childbirth, mothers can expect to have some physical and psychological changes. Postpartum minor discomforts could happen as outcome of every system's adaptation as well as may lead to serious complications. Therefore, it is important to educate mothers to alleviate discomforts and how to handle with them. **Aim:** Evaluate the effectiveness of health education program on women's knowledge and self- reported practices regarding postpartum minor discomforts. **Design:** A Quasi-experimental research design was employed. **Sample:** one hundred perinatal women were selected by utilize a systematic random sample method (from January 2023 to June 2023). **Setting:** A research was performed at the inpatient units for obstetrics and gynecology at Samalot Specialized Hospital. **Tools:** Three tools were utilized: An interviewing questionnaire consists of socio demographic features as well as obstetric history, women's knowledge as well as women's self-reported practice regarding postpartum minor discomforts. **Results:** The majority of the selected women (91%) have poor knowledge as regards postpartum minor discomforts before-teaching program compared to 6% after-teaching program. Additionally, 66% of the studied women had inadequate self- reported practice pre-education program compared to 34% had adequate self- reported practice post-education program. **Conclusion:** Afterward interventional health education program, the women's awareness about the postpartum minor discomforts was extremely developed which results in refining the mother self-care practices. **Recommendations:** Health care providers must offer complete information to all postpartum mothers before discharge about changes expected to occur during postpartum period and provide measures to avoid unnecessary complications as regards minor discomforts.

Keywords: Health Education Program, Knowledge, Postpartum Minor Discomforts, Self- reported Practice

Introduction

The postpartum period is defined as the time from the placentas' delivery to six weeks post-delivery. The majority of alterations of pregnancy, labor, as well as delivery subside, as well as the body returns to anon-pregnant state. The postpartum period is the more important, transitional, and event that changes women's life, filled with intense physical, psychological alterations, fresh and modifying relationships, assumptions, as well as adjustment to thereof motherhood. In the immediate postpartum period, most women spend approximately two days in the hospital following a vaginal delivery. During this time, the woman recovers from childbirth and begins caring for her newborn. This time is utilized to ensure that the woman is stable as well as to teach her how to take care of herself and her child **(Hussein et al., 2019).**

Postpartum minor discomforts can be the result of any number of systemic adaptations that women face during the postpartum period. The effects of events such as labor, delivery, and the transition from non-parent to parent can result in physical disability and depression. The managing of minor discomforts can prevent the severity of postpartum disorders .Minor postpartum discomforts include uterine pain, perineal pain, breast engorgement, cracked nipples, constipation, hemorrhoids, urinary retention, and postpartum blues **(Sayed et al, 2022).**

The postpartum minor discomforts that women face during this time are not as well-explained in health literature, which has an impact on the health of these women as well as how they interact with their newborns and families. Health education regarding minor discomforts during the postpartum period and how to handle is necessary in Egypt and will indirectly improve quality of life of the mothers **(Raj et al., 2018)**.

Health education raises awareness and empowers postpartum women, especially first-time mothers, to care for their own as well as their newborn's wellbeing. This in turn leads mother to need treatment for medical problems, that is essential to maintain good wellbeing and allow for early progress. A purpose of the instruction is to communicate awareness as well as practice in a horizontal relation, in which nurses can serve as both career and educator **(Abd El-Salam, 2020).**

Both actions primarily linked to the body and behaviors largely related to the mind are components of self-care. Those pertaining to the mind include play, spiritual relaxation, relationships, and psychological well-being. Exercise, sleep, diet, sexuality, physical wellbeing, as well as environmental wellbeing are all habits associated to the body. Personal cleanliness, perineal care, checking the funds, breast care, diet, and postpartum care are examples of self-care during the postpartum time **(Omran et al, 2020).**

Postpartum nurse must assist the new mother with her physical as well as emotional requirements immediately following delivery as well as policies follow, philosophies, as well as objectives of the health care facility as well as department. The postpartum nurse assumes multi roles while applying the nursing care plan. Then nurse provides immediate medical attention, directs maternal care also

provides anticipatory direction as well as counseling **(Sayed et al, 2022).**

Significance of the study:

In Egypt, (64.7percent) of women were unaware of the minor discomforts expected via the postpartum time, Additionally, in addition women did not consider their complaint important enough to mention it. **(Elsebeiy, 2019).**

Shabaan, et al., 2018 found in their study that at seven days, six weeks, as well as twelve weeks after the labor, respectively, 91.6%, 90.3%, and 83.5% of women experienced at least one issue. Raising women's self-reported practices and understanding of minor postpartum discomforts could help fix a lot of these issues.

During the postpartum period, minor discomforts are typical and can develop into serious problems. As a result, educate the mother about the changes that occur during the postpartum period, make her more tolerant and prevent discomforts. This will help the mother to recognize the complications as much as possible. A postpartum woman may have many questions and concerns about this time in her life. A lot of information she may have learned about self-care issues, dietary needs, how to manage general discomforts, and how to care for new born can be incorrect or inadequate .Therefore, by presenting this study, the researchers can link this knowledge-practice gap between mothers about the minor discomforts that can occur after childbirth **(Fouad et al., 2021).**

Aim of the study:

Evaluate the effectiveness of health education program on women's knowledge and self- reported practices regarding postpartum minor discomforts**.**

Research hypothesis:

- Utilization of health education program will improve the level of knowledge and self- reported practices of women regarding postpartum minor discomforts.
- There were a correlation between level of women's knowledge and their practice regarding postpartum minor discomforts.

Subjects and Methods of the research

Design of the Research: Quasi experimental (pre as well as posttest one group) design was used.

Setting: This research was executed at the inpatient wards for obstetrics as well as gynecology at Samalot specialized Hospital in Samalot district at Minia governorate in Egypt that was selected randomly to complete this study. The hospital serves large numbers of women; therefore they selected to perform this study.

Sample type: A Systematic random sample type of perinatal females used for this study.

Sample size: According to the flow rate of patient's census for primipara women who attended for normal delivery at obstetrics and gynecology at Samalot Specialized Hospital in the last year from May 2021 to May 2022 was 315 females. Later, the assessed sample size was one hundred females consistent with the sample size adder (the Rasosoft), with a sideline of error of five percent as well as a level confidence on 95percent.

• The size of sample as well as error margin E is estimated by this equation: -

$X = Z(c/100)2\ r\ (100-r)$

$n = Nx\ /(N-1)E2 + x)$

$E = Sqrt\ [(N - n)\ x/n(N-1)]$

N is the population size (315), r is the fraction of reactions you are concerned in, besides Z(c/100) is the serious rate for the confidence level c.

Inclusion criteria:

- Primipara women.
- Women at latent phase of first stage of labour .
- Normal vaginal delivery with or without episiotomy.

Exclusion criteria:

- Women who had any medical and obstetrics complications.
- Women who refused to participate.

Data Collection Tools:

It involved three tools as the next:-

Tool (I): An interviewing Questionnaire (pretest): it was created by the investigator afterward reviewing extensive literature to collect data related to perinatal women, it consisted of 2 parts:

Part I: Socio-demographic Features: for example: Name, age, educational level, work, residence, telephone No. (to continue follow up).

Part II: Obstetric History: included mother's obstetrical history such as number of abortion and minor discomforts during pregnancy……etc.

Tool (II): Knowledge Assessment Tool (Pre and posttest):

This one was designed by the investigator after widespread literature review to conclude the level of mother's knowledge as regards postpartum minor discomforts during the early postpartum period and how to relieve it. It contained 24 MCQ questions as regards (kinds of minor discomforts, causes, symptoms, complications, and management). In addition to a question about source of information.

Scoring System: Accurate complete answer was recorded "two", accurate incomplete answer was recorded "1" as well as improper answer was recorded "0". So, a whole knowledge score was designed by summary of the whole scores for the identified objects. An extreme score was 48 as well as the lowest score was zero. A scores were transformed into percentage. The greater scores redirected a greater degree of knowledge regarding minor discomforts in the early postpartum phase, and degree of knowledge clarified as the next: Good ≥ 36 (≥ 75%); Fair 24 – < 36 (50% - <75%); and poor < 24 (< 50%) **(Abd El-Salam & Ashour, (2020).**

3-Tool (III): Self- reported Practice Assessment tool (Follow up): It was planned by the investigator after extensive literature review to assess postpartum women self-reported practice regarding management of postpartum minor discomforts. It includes 56 questions regarding management of postpartum minor discomforts for after pain, perineal pain, breast engorgement, cracked nipple, constipation , hemorrhoids, urinary retention and Postpartum blues).

Scoring System: Completed practice done was recorded "1" then practice that did n't done was recorded "0". The whole practice score was considered by summation of the whole scores for all statements. The full score was 56 as well as the least score was zero. The score was transformed into percentage. The overall practice score was showed as the next: adequate was 34 – 56 (60 – 100%) and inadequate was 33 (< 60%) **(Nwafor et al, 2020).**

Validity as well as the Reliability:

To create validity, an inquiry form was revised and certified by the committee Jury that was collected of a panel of five profession of obstetrics as well as gynecology nursing professors' staff at Minia University, to determine reliability, alpha Cronbach's was accustomed to checked the internal consistency's stability of tools (II as well as III) 0.875 as well as 0.925 respectively.

Pilot Study:

The pilot of study was performed on 10% (10) of the mother participants to evaluate the tools' clarity, also the objectivity as well as the feasibility. And to determine the time required to be practical. In line with the outcomes of the pilot all essential as well as needed changes were ended also the mother who were established within the field of study were let off in the research sample**.**

Study Procedure:

Research was conducted over 3 phases, an assessment phase (the test pre), an implementation phase (providing an educational program), evaluation and a follow-up phase. Data was collected from January (2023) until the end of june (2023).

1. Assessment phase:

- The investigator presented herself to the perinatal mother during the assessment phase and greeting them then described the scope, duration, as well as activities of the research. Oral agreement from the mother to share in the research was obtained, as well as they were informed that it was voluntary as well as that at any time, they might withdraw.
- Each participant received an Arabic standardized interviewing sheet after receiving consent from the women subjects to take part in the study. This sheet was utilized to evaluate socio-demographic data, obstetric history and knowledge about postpartum minor discomforts. The researcher completed the form for illiterate women. It took about 15-20 minutes.

2-Implementation phase:

- Data collection was done by the researcher via six months as well as went to the hospital 3 days each week from the starting of the research. A researcher attended to obstetrical and gynecology department at Samalot hospital from nine am to two pm as well as performed face-to-face meeting. Post assessing mother's knowledge regarding postpartum minor discomforts by knowledge evaluation questionnaire. A researcher implemented health education sessions, each session included (1-2) women, about (1-2) sessions through the day, and each session was taken from 25 -30 minutes. A whole count of meetings were about (70) meetings started from the first of January till the end of June.
- Via applying of the health teaching program, the researcher conducted the health education program regarding the postpartum minor discomforts to women who in latent phase of first stage of labor from 25 to 30 minutes using illustrated booklet that was distributed for each women in the study .Health education program containing information as the following contents (definition, types, causes, symptoms and management) about commen postpartum minor discomforts to develop their knowledge as well as self-reported practices of women related postpartum minor discomforts. A further 15 minutes was given at the end of the session to summarize and gave the chance for asking questions.

3.Evaluation as well as follow up phase:

- The first evaluation (pre-test): was conducted in advance beginning an learning program, a preliminary examination on the way to evaluate the socio-demographic traits, obstetric history, knowledge of women regarding postpartum minor discomforts.
- The second evaluation was done (immediately post-test): was directed following the application of the teaching session to assess mother's knowledge of postpartum minor discomforts.
- The third evaluation (follow up): was directed afterward two weeks of the learning program's execution toward assess the women's self-reported postpartum minor discomforts practices (follow up test taken by telephone).
- \The pre - posttests as well as follow up test were made to assess their knowledge as well as self-reported practice related to postpartum minor discomforts and were compared to determine the impact of the health education program. For each mother, three evaluations were completed.

Ethical consideration:

The Ethics Committee of faculty of nursing approved this study prior to the performance of both the pilot and the actual study, Samalot Specialized Hospital's director gave approval before the actual study as well as the pilot study were conducted , perinatal women who were participated in this study gave verbal consent after being informed of its nature and objective , training issues have the ability to refuse to share either or both to leave the study at every phase without giving a reason , participant's privacy was taken into consideration during data collection and there were no health risks and the high confidentiality was assured for the participants information.

Statistical Design of the research

The composed statistics were summarized, organized, as well as consuming social science statistical package, version (28). The numerical data were stated such as mean and SD. Also, data qualitative were stated in terms of frequency as well as percentage. Data qualitative, comparison among 2 variables was done utilized student's t-test. Test Chi-square utilize as a manner to test the connection among two categorical elements. Correlation Pearson correlation analysis was used to calculate the coefficient. (P-value) probability is

the level of significance, lower 0.05 was indicated significant. If the result is lower 0.001, it is deemed highly significant; smaller the P-value obtained, the more significant.

RESULTS

Table (1): Distribution of the Socio-demographic features of the studied women (n = 100).

Items	No.	%
Age/years		
18 - <20	35	35.0
20- <25	55	55.0
25 - <30	10	10.0
Residence		
Urban	27	27.0
Rural	73	73.0
Educational level		
Illiterate	5	5.0
Read as well as write	15	15.0
Primary	4	4.0
Secondary	42	42.0
University	14	14.0
Occupation		
Employed Worker	14	14.0
Housewife	86	86.0

Table (1): It reflects that more than half (55%) of the women their age is 20: < 25 years, and nearly to three quarters (73%) of the women lives in rural, while near half (42%) of the women had secondary teaching and the majority of them (86%) are housewife.

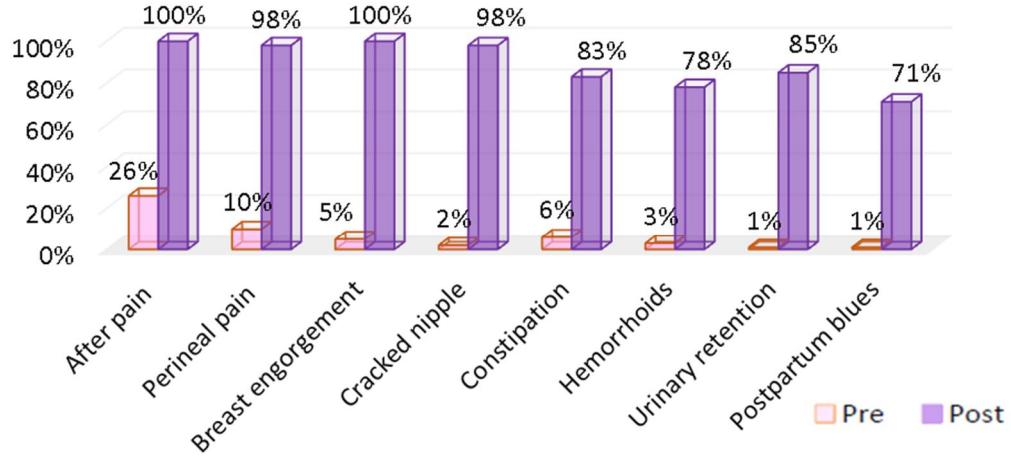

Figure (1): The Comparison between pre as well as post teaching program according to women 's knowledge about types of postpartum minor discomforts (n = 100).

Figure (1): It illustrates that more than one quarter (26%) in pre-test know that after pain is one type of postpartum minor discomforts which increased to all of them (100%) in post- test. Furthermore, the minority (10%, 5%, 2%, 6%, 3 %, 1%, and 1% respectively) know that perineal pain, breast engorgement, cracked nipple, constipation, hemorrhoids, urinary retention, and postpartum blues as apostpartum minor discomforts which increase their knowledge to (98%, 100%, 98%, 83%, 78%, 58%, and 71% respectively) post teaching program.

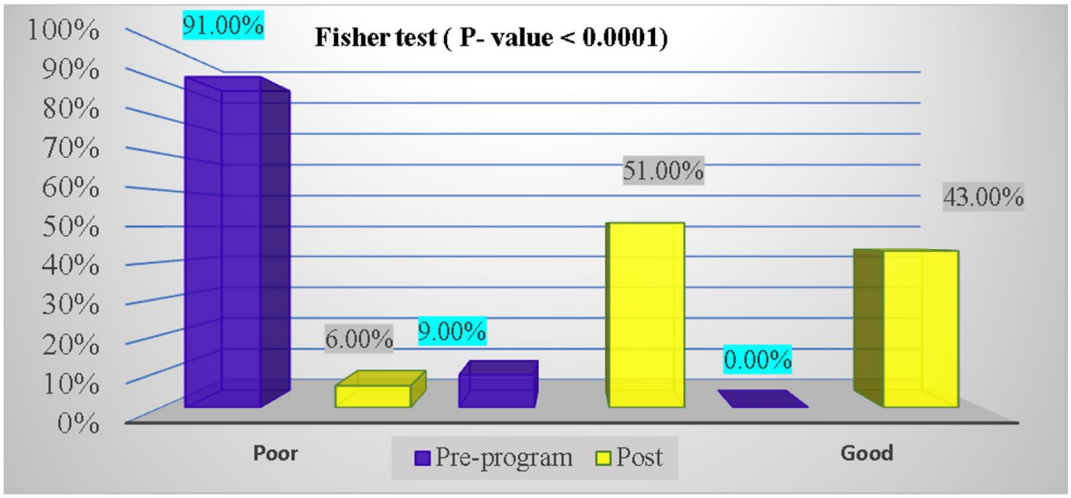

Figure (2): Total knowledge levels of the women according to their postpartum minor discomforts pre as well as post-teaching program (No = 100)

Figure (2): It illustrates that the majority (91%) of the studied women have poor knowledge regarding postpartum minor discomforts pre teaching program decreased to (6%) post teaching program and near to half (43%) had good knowledge post teaching program with significant differences in terms of statistics (P value < 0.0001).

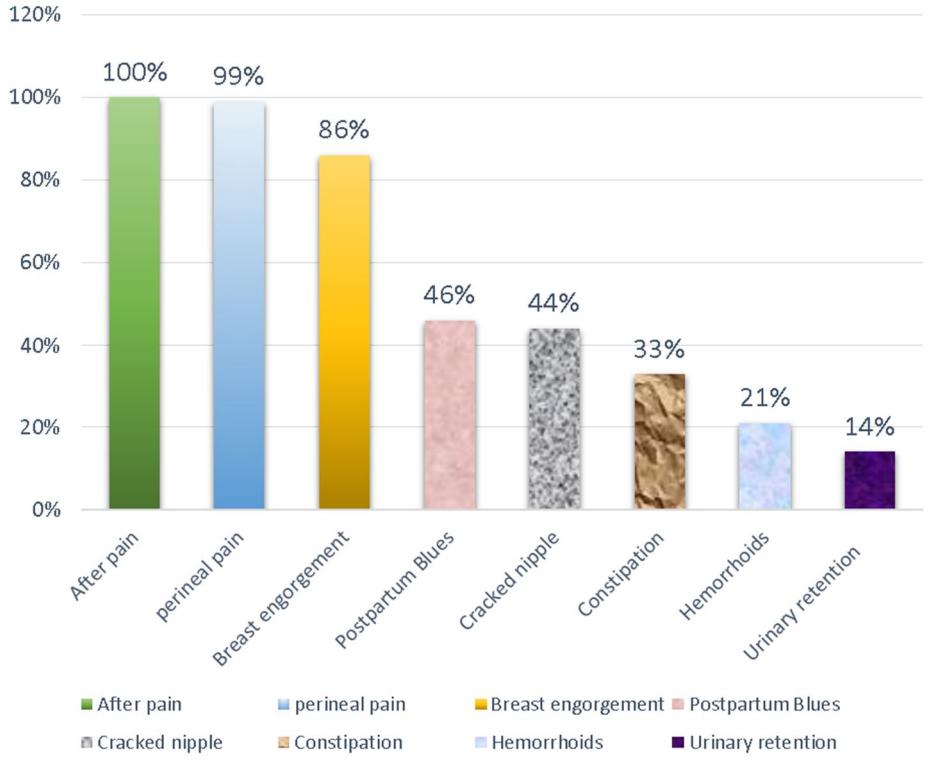

Figure (3): Distribution of current postpartum minor discomforts among the studied women (n = 100).

Figure (3): It discovers that the majority of the studied sample (100%, 99 % and 86 %) had after pain, perineal pain and breast engorgement pre teaching program. Also, near half of the studied sample (46% and 44 %) had postpartum blues and cracked nipple. Furthermore, about one third had postpartum constipation, near one quarter (21 %) had hemorrhoids and only (14 %) had urinary retention pre teaching program.

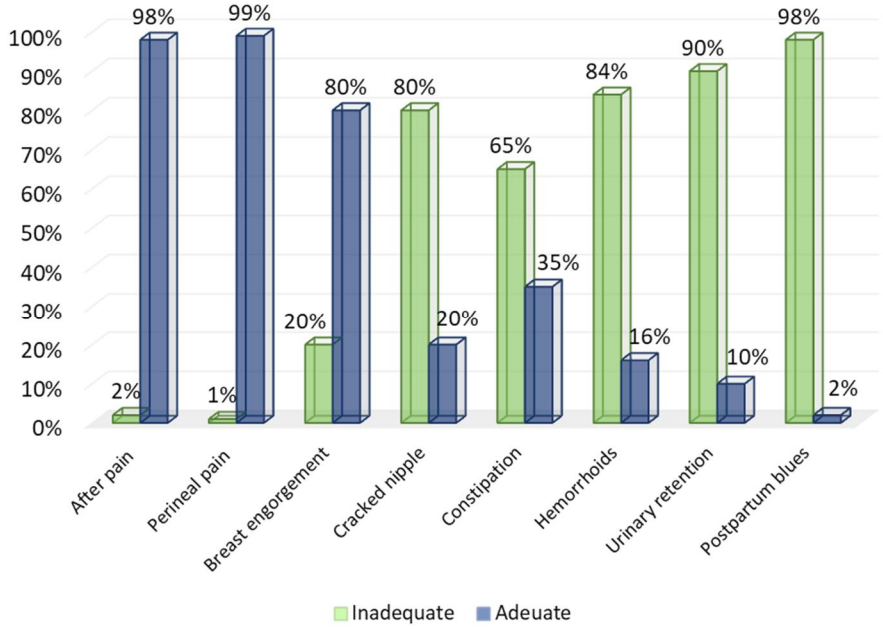

Figure (4): Distribution of Self- reported practice of women regarding postpartum minor discomforts at post teaching program (n = 100).

Figure (4): It illustrates that the majority (98%, & 99%) of the studied women had satisfactory reported practice regarding after pain and perineal pain respectively, and (80%) had satisfactory reported practice regarding breast engorgement post teaching program. On the other hands, (20%, 35%, 16%, 10%, and 2%) of the women had satisfactory reported practice regarding cracked nipple, constipation, hemorrhoids, urinary retention, and postpartum blues respectively post teaching program.

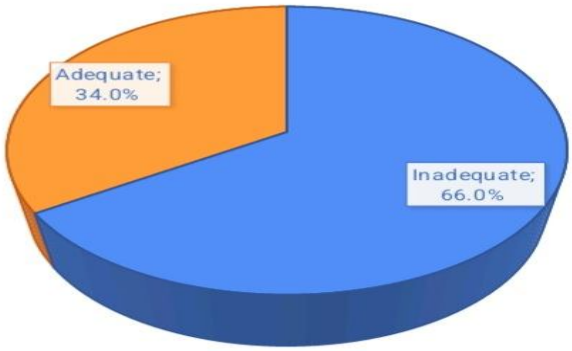

Figure (5): Distribution of the studied women according to their total Self-reported practice level regarding postpartum minor discomforts at post teaching program (n = 100).

Figure (5): It illustrates that (66%) of the women had inadequate self- reported practice and (34%) had adequate self-reported practice about postpartum minor discomforts at post teaching program.

Table (2): Relation between demographic features of the studied women and their knowledge level at pre and post teaching program (n = 100).

Items	Total knowledge level									
	Pre-program				Post program					
	Poor (n = 91)		Fair (n= 9)		Poor (n = 6)		Fair (n = 51)		Good (n = 43)	
No. No.	No.	%	No.	%	No.	%	No.	%	No.	%
Age/years										
18 - <20	34	97.1	1	2.9	3	8.6	16	45.7	16	45.7
20- <25	50	90.9	5	9.1	3	5.5	32	58.2	20	36.4
25 - <30	7	70.0	3	30.0	0	0.0	3	30.0	7	70.0
X^2 / Fisher (P – value)	*Fisher* (0.030) *				*Fisher* (0.293)					
Residence										
Urban	24	85.7	4	14.3	1	3.6	14	50.0	13	46.4
Rural	67	93.1	5	6.9	5	6.9	37	51.4	30	41.7
X^2 / Fisher (P – value)	1.327 (0.249)				0.496 (0.780)					
Educational level										
Illiterate	5	100.0	0	0.0	0	0.0	4	80.0	1	20.0
Read and write	22	95.7	1	4.3	4	17.4	13	56.5	6	26.1
Basic	7	100.0	0	0.0	1	14.3	4	57.1	2	28.6
Secondary	42	100.0	0	0.0	1	2.4	21	50.0	20	47.6
University	15	65.2	8	34.8	0	0.0	9	39.1	14	60.9
X^2 / Fisher (P – value)	*Fisher* (0.0001) **				*Fisher* (0.090)					
Occupation										
Worker	12	80.0	3	20.0	0	0.0	6	40.0	9	60.0
Housewife	79	92.9	6	7.1	6	7.1	45	52.9	34	40.0
X^2 / Fisher (P – value)	2.607 (0.106)				2.664 (0.264)					

*Statistically significance difference at 0.05 **Statistically significance difference at 0.01 Percentage calculated by raw.

Table (2): It illustrates that the studied women less than 25 years had poor knowledge regarding postpartum minor discomforts than women aged between 25 - < 30 years preprogram with differences statistically significance (*P* – value 0.03) as well as (34.8%) of women had university education had fair knowledge regarding postpartum minor discomforts preprogram with statistically significance differences (*P* – value 0.0001).

On the other hands, no relation between age, residence, educational level, and occupation of the studied women with their knowledge level post teaching program.

Table (3): Relation between demographic features of the women and their practice level post teaching program (n = 100).

Items	Total practice level post program				Significance Test	
	Inadequate (n= 66)		Adequate (n =34)		X^2	*P* - value
No.	No.	%	No.	%		
Age/year						
18 - <20	23	65.7	12	34.3	0.201	0.904
20- <25	37	67.3	18	32.7		
25 - <30	6	60.0	4	40.0		
Residence						

Items	Total practice level post program				Significance Test	
	Inadequate (n= 66)		Adequate (n =34)		X^2	*P* - value
No.	No.	%	No.	%		
Urban	17	60.7	11	39.3	0.484	0.487
Rural	49	68.1	23	31.9		
Educational level						
Illiterate	5	100.0	0	0.0	Fisher	0.489
Read and write	15	65.2	8	34.8		
Basic	5	71.4	2	28.6		
Secondary	28	66.7	14	33.3		
University	13	56.5	10	43.5		
Occupation						
Worker	8	53.3	7	46.7	1.262	0.261
Housewife	58	68.2	27	31.8		

Percentage calculated by raw.

Table (3): It presents that no relation between age, residence, educational level, and occupation of the women with their practice level post teaching program.

Table (4): Correlation between total knowledge of the studied women and their practice post teaching program

		Total practice scores
Total knowledge scores	r	0.437
	P value	0.0001**

**. Correlation is significant at the 0.01 level.

Table (4): It illustrates the correlation between total knowledge of the women and their practice post teaching program and shows fair association between total knowledge of the women and their self care practice post teaching program (r=0.437; P value<0.001).

Discussion

Postpartum period started with the labor of the baby and includes two physical and psychological elements as well as lasts about six weeks. the reproductive organs recover from pregnancy pregnancy as well as childbirth during this time. Generally, the role of this period is to physiologically stabilize of the women's body to its pre-pregnancy condition. This is also a period when mothers and newborns need support from health workers as well as family members to ensure acceptable transition **(Sayed et al., 2022).**

Postpartum minor discomforts may occur after birth due to adjustments in various systems. Most postpartum minor discomfort involves postpartum pain, constipation, perineal pain, urinary retention and breast-feeding issues. Prompt and impact treatment of these issues during and after delivary is critical to postpartum adjustment **(Shabaan et al., 2018).**

Concerning the Socio-demographic features of the mother higher fifty percent of them their age is between20: < 25 years, and near seventy-five percent of the women live in rural, while near fifty percent of the women had secondary education as well as the majority of them are housewife.

This result was consistent with **Sayed et al., (2022),** which assessed women's knowledge of the postpartum period, its mild discomfort, as well as ways to enhance their self-care. The study also revealed that over half of the women in the control group belonged to the 20–25 age range. Over 50% of the women in the study group were housewives, over one-third had only completed secondary school, and over fifty-percent of the women lived in rural areas. This resemblance could be the result of the participants' similar age groups, residence areas, and educational attainment in the current study.

In addition, the finding agrees with study conducted in Mbale district, Eastern Uganda by **Akoth et al., (2022)** who investigated postpartum mothers' knowledge, attitudes, and practices regarding critical newborn care while they were in medical facilities. They found that most of the mothers were in the 20–29 age range, that roughly two thirds of them were unemployed, and that almost half of the participants had only completed secondary school.

Also, the results supported with a research in Asmara by **Beraki et al. (2020)** that mentioned higher sixty-six of sample in the aged from 17 to 30 years, and majority of them was house wife but the same author was differ from the study finding in according to educational level, higher fifty percent of them are secondary education. This discrepancy may result from national differences in the educational systems.

In the same line, **Omran et al., (2020)** who studied self-care of women during postpartum period showed that around half from the study sample representing in the age of 20 ≤30 years and higher seventy- seven percent of postpartum mother were housewife but the actual study is not in agreement with the same author and documented that near three quarters of studied sample are secondary education.

Furthermore, study performed in Upper Egypt by **Hassan et al. (2020)** mentioned that higher thirty- three percent of them had secondary education as well as higher fifty- percent lived in rural residence.

The present study showed that the majority of the studied sample had poor knowledge regarding postpartum minor discomforts, postpartum pain, perineal pain, breast engorgement, cracked nipple, constipation, hemorrhoids, urinary retention, and postpartum blues in pre-teaching program, that improved in post-teaching program, and There are statistically significance differences between the all items of postpartum minor discomforts among studied women pre & post-teaching program (*P* - value = 0.0001 in each one). These results may be due to the effective methods and media that used during teaching program and the ability of the researcher to clarify the concepts through effective educational ways.

These results come in agree with **Abd El-Salam & Ashour, (2020)** revealed that, the majority of the mothers didn't have any knowledge regarding the postpartum minor discomforts in pre-test. This finding is in agreement with **Santhi, (2013)** about "a study to test the efficacy of video teaching program on postpartum primigravida mothers

admitted to urban maternity centers" and found that the majority of the participants didn't know any problems that could occur during and after the birth. Also, **Dhakal et al., (2007)** who conducted a study about "utilization of postnatal care among rural women in Nepal and" and reported that seventy percent of the postnatal mothers had poor knowledge and thirty percent had fair knowledge and no one had good knowledge. In addition to a study conducted by **Adam, (2015)** about "assessment of knowledge and practice of mothers regarding self- care during puerperium" and reported that the majority of the participants responded with poor knowledge regarding after-pains, episiotomy pain, breast engorgement.

Regarding the overall knowledge levels of the women under study regarding postpartum minor discomforts before as well as after the teaching program, the actual research showed that, with highly statistically significant variation (P value < 0.0001), the majority of the studied women had poor knowledge regarding postpartum minor discomforts before the teaching program, that decreased to a minority of them in the after-teaching program, and more than two fifths had good knowledge after the teaching program.

This results come in accordance with **Prakash, (2020)** that reported that the majority of the mother had poor knowledge regarding minor discomforts in before-teaching program. While the most of them taken good knowledge regarding minor discomforts in post-education program. This similarity might be because of effect of health education program.

The same result was reported by **Aboraiah et al., (2021)** and showed that, the high percent of the sample (82.3%) had poor knowledge scores before the intervention, while (70.83%) had good knowledge scores after the intervention. The study sample's overall knowledge score increased statistically significantly after the intervention as opposed to before ($p<0.001$).

From the researcher point of vision, this finding might be due to lack of information gave to the mother during antenatal period or postpartum time and women who receive education have better knowledge.

Concerning the studied mothers along with their total self-reported practice level around managment of postpartum minor discomforts at after the teaching program, the actual research illustrated that higher sixty-six of the women had inadequate reported self-practice and more than one third had adequate reported self-practice about managment of postpartum minor discomforts after teaching program.

These results arise approve of **Sayed et al., (2022)** who described that at hand was significant raising in informed self-care practice as regards postpartum minor discomfort post health teaching. Also results come in accordance with **Elsebeiy, (2019)** who documented that the most of the women had adequate self- reported practices regarding management of minor discomfort in post teaching program. While these results contraindicated with **Samarakoon et al., (2020)** who stated that the high number of the women had inadequate reported practices related to minor discomfort.

This study demonstrated that there were statistically significant differences between the age, educational level, as well as pre-teaching knowledge level of the study sample with regard to the relationship between the studied women's demographic characteristics and their knowledge level before and after the teaching program.

This is consistent with **Menaka , S. (2017)** findings, which showed a significant correlation between the degree of knowledge about minor discomforts experienced after childbirth and certain demographic factors like age and educational attainment. Furthermore, **Hassan et al. (2020)** clarified a positive correlation between maternal age and educational attainment and knowledge of minor postpartum problems. From the perspective of the investigator, this result validated that women's knowledge is significantly influenced by age and educational attainment.

Concerning the correlation among demographic features of the women as well as their practice level post teaching program, the present study revealed that, no relation between age, residence, learning level, and career of the women with their practice level post teaching program. This result come in accordance with **Hashem et al. (2020)** who described that, there were no statistical significance changes between residence, age, education level of them as well as their total practice regarding minor discomfort level before-teaching program.

While this result come inconsistent with **Gamel et al., (2016)** who made it clear that there were no appreciable variations between the practices of women and their demographic traits. According to the investigator, the results of this study, which were not impacted by the demographics of the women under study, were obtained through the use of structured teaching programs and methods that were effective in achieving the study's goal and its alternative hypothesis.

Concerning the correlation among total knowledge of the women as well as their total self- care practice post teaching program, the actual study showed that, there was unbiased relation among whole knowledge of the study women and their self- reported practice post teaching program ($r=0.437$; P value < 0.001).

This result is consistent with that of **Abd El-Salam andAshour (2020),** who found that there was a statistically significant difference in the study participants' pre- and post-test knowledge and practices regarding postpartum minor discomforts. **Ali et al.'s (2023)** findings, which demonstrated a statistically significant positive correlation between the studied women's knowledge and practices following the prenatal teaching program, corroborated this result.

From the researcher point of view, this finding confirmed that structured teaching programs can be an effective way to enhance the knowledge as well as practice of women regarding management of postpartum minor discomforts.

CONCLUSION

The study concluded that, in light of the findings and theories of the present investigation,

Postpartum primipara mothers had law knowledge about the postpartum minor discomforts symptoms and didn't know how to manage before the health education program. After the intervention program, participant's knowledge of the postpartum minor discomforts was highly enhanced, leading to improved self-care practice among mothers. In other words, there was statistically significant enhancement in women's knowledge as well as self-reported practices related to postpartum minor discomfort post the health education program. Thus, the study's results successfully proved the research hypothesis.

RECOMMENDATIONS

These counsels are made in light of the result of the existing research:

1- Refining the primipara mother's knowledge as well as practices regarding the postpartum minor discomforts pre the discharge from the hospital via the instruction in a clear as well as complete discussion into all mother classes via the postpartum time.
2- Inform women about the differences between mild discomfort and potential warning indicators.
3- More research is needed to determine the effects of health education regarding
4- Postpartum minor discomforts both during and after childbirth.

References

1. Abd El-Salam, A., & Ashour, E. (2020). Effectiveness of video assisted teaching program on postpartum minor discomforts of primipara mothers. American Journal of Nursing Research, 8(2), 142-150 .
2. Aboraiah, I. H., El-Sayed, M. EL., & Mohammed, F. S. (2021). Effect of Online Health Guidance on Recovery of Postpartum Minor Discomforts and Neonatal Problems during COVID-19 Pandemic. Egyptian Journal of Health Care, 12(3), 1267-1281 .
3. Adam, L. (2015). Assessment of knowledge and practice of mothers regarding self-care during puerperium. Ribat University p, 22 .
4. Akoth, C., Olowo, S., Kagoya, E. K., Iramoit, J. S., Nteziyaremye, J., Nekaka, R., & Ssenyonga, L. V. (2022). Knowledge, Attitude and Practice towards Essential Newborn Care among Postnatal Mothers Attending Health Facilities in a Rural District, Eastern Uganda. A Cross-Sectional Community study .Research square .
5. Ali, E. Y., EL-Said, F. M., & Maklad, S. A. (2023). Effect of prenatal Educational program on Knowledge and Self Care Practices Regarding Prevention of Breast Problems among Lactating Primiparous Women. Tanta Scientific Nursing Journal, 28(1), 128-148 .
6. Beraki, G. G., Tesfamariam, E. H., Gebremichael, A., Yohannes, B., Haile, K., Tewelde, S., & Goitom, S. (2020). Knowledge on postnatal care among postpartum mothers during discharge in maternity hospitals in Asmara: a cross-sectional study. BMC pregnancy and childbirth, 20, 1-10.
7. Dhakal, S., Chapman, G. N., Simkhada, P. P., Van Teijlingen, E. R., Stephens, J., & Raja, A. E. (2007). Utilisation of postnatal care among rural women in Nepal. BMC pregnancy and childbirth, 7, 1-9 .
8. Elsebeiy, F. (2019). Assessment of knowledge regarding postnatal minor discomforts and self care activities among nulliparous women: suggested guidelines. Mansoura Nursing Journal, 6(2), 167-181 .
9. Fouad Mohammed, S., Ibrahim Hamdy Aboraiah, M., & El-Sayed Mohamed El-Sayed, H. (2021): Effect of Online Health Guidance on Recovery of Postpartum Minor Discomforts and Neonatal Problems during COVID-19 Pandemic. Egyptian Journal of Health Care, 12(3), 1267-1281.,
10. Gamel, W., Fathy, T., El-Nemer, A., & Abou Shabana, K. (2016). Utilization of self-care brochure for relieving mother's minor discomforts during pregnancy. Mansoura Nursing Journal, 3(1), 393-407 .
11. Hashem, H. A., Emam, E. A. R., & Abd Elrahim, A. H. (2020). Effectiveness of teaching program on awareness regarding the minor discomfort problems among pregnant women. Minia Scientific Nursing Journal, 8(1), 147-154 .
12. Hassan, H. E., Ahmed, W. F. M., & Mahmoud, A. A. (2020). Impact of tailored educational program on primigravida anxiety and knowledge regarding minor discomforts in upper Egypt. International Journal of Studies in Nursing, 5(1), 1 .
13. Hassan, S. S., Eldin, S. A. N., & Abd-Allah, I. M. (2019). Effect of Prenatal Educational Programme on Women's practice for Prevention of Breastfeeding Problems after Cesarean Delivery .
14. Hussein Bakr, A., Mahmoud Ibrahim, R., & Fathy Mohamed, W. (2019). Women's Knowledge regarding Postpartum Warning Signs. Egyptian Journal of Health Care, 10(2), 201-215
15. Menaka, S. (2017). Assess the effectiveness of structured teaching programme on newborn care among primigravida mothers in Bangalore. April 20.
16. Nwafor, J. I., Aniukwu, J. K., Anozie, B. O., Ikeotuonye, A. C., & Okedo-Alex, I.N. (2020). Pregnant women's knowledge and practice of preventive measures against COVID-19 in a low-resource African setting. Int J Gynaecol Obstet, 150(1), 121-123.
17. Omran, A. E. A., Abd El-Fatah, A., Abdel Hakim Ahmed, H., & Abd El Sattar Ahmed, M. (2020). Self-care of women during postpartum period in rural area. Egyptian Journal of Health Care, 11(1), 59-72.
18. Prakash, A. (2020). A Study to Assess the effectiveness of Structured Teaching Programme on Knowledge regarding prevention of Breast Engorgement among postnatal mothers with Caesearean section admitted in selected government hospital of Dehradun, Uttrakhand. International Journal of Advances in Nursing Management .
19. Raj, S., Rajan, R. E. S. H. M. A., & Suvi, K. J. (2018). Incidence of minor ailments of puerperium and related knowledge among postnatal mothers. Asian J Pharm Clin Res, 11, 261-3.
20. Samarakoon, S. K. S. N., Mohamed, F. F. H., Wijerathna, K., & Kisokanth, G. (2020). Knowledge and practices regarding self-management of minor ailments among pregnant mothers .
21. Santhi, M. (2013). A Study to assess the effectiveness of Video Teaching Programme on Breast Feeding among Primigravida Mothers Admitted in Urban Health Maternity Centres, Coimbatore, Tamilnadu. International Journal of Nursing Care, 1(1), 77 .
22. Sayed, S. A., Khamis, M. A., & Arief, A. F. (2022). Improvement of Self-care of Postpartum Minor Discomfort. Assiut Scientific Nursing Journal, 10(32), 126-137 .
23. Shabaan, H. T. E. A., El Sayed, Y. A., & Ghonemy, G. (2018). Effect of health teaching on post partum minor discomfort. Beni-Suef university journal of basic and applied sciences, 7(2), 198-203.