# **Improvement of Self-care of Postpartum Minor Discomfort**

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#### Abstract:

The postnatal period marks an important time of adaptation, changes that occur during postpartum period strongly impact on women's lives that can be overcomed by nursing education that focused on the improvement of women's knowledge, self-care. **This study aimed to** evaluate the women's knowledge levels about postpartum period and its minor discomfort and improve their self-care. **Research design:** qusiexpermental research design was utilized in this study. **Sample:** The study carried out on (200) immediate postnatal mother, who had normal labour, ages ranged from (20-35) years old. **Setting:** The study was conducted in Women's Health Hospital (emergency unit) at Assiut University Hospital. **Tools:** Two tools were used: woman assessment sheet, pre-post knowledge levels and Self-Care questionnaire. **Results:** There were a statistical significant difference between knowledge level, self-care pre and post-test after implementing nursing education (P=0.001). **Conclusion:** there was significant improvement in women's knowledge and reported self-care practice regarding postpartum minor discomfort after health education. **Recommendation:** Educate mothers in late pregnancy about physiologyical changes and postpartum minor discomfort and how to deal with this discomfort

#### Keywords: Postpartum period, Minor discomfort, Guidelines & Physiological changes

### Introduction:

Postpartum period which is a period soon after childbirth poses substantial health risks for both mother and newborn infant. This period begins with the birth of the fetus, comprises both physiological and psychological components and lasts for approximately six weeks. During this period, the reproductive organs recover from pregnancy and delivery. (Omran, 2020), in some countries the postpartum and postnatal period receives less attention from health care providers than pregnancy and childbirth. The first hours, days and weeks after childbirth are a dangerous time for both mother and newborn infant. Worldwide more than 500 000 women who die each year due to complications of pregnancy and childbirth, most deaths occur during or immediately after childbirth. (WHO, 2010)

Postnatal period is a critical phase in the lives of mothers and newborn babies. Most maternal and infant deaths occur during this time. Yet, this is the most neglected period for the provision of quality care. (WHO 2013)

There are some changes occur during postpartum period. This strongly impact on women's lives, as they not only interfere in their biological and physical state, but also on their interpersonal and family relationships. (Abed El-Azim, 2012)

These changes strongly impact on women's lives, as they not only interfere in their biological and physical state, but also on their interpersonal and family relationships, thus the need for puerperal adaptability. This period demands physiological and psychosocial care, so that women can foster self-care and at the same time is able to provide skilled care to her child. **(Sebold, 2014)** 

Postpartum minor discomforts may occur resulting from all systems adaptation. Which includes after pain, perineal pain, constipation, urinary retention, lactation problems, Immediate and effective care for these problems can make the differences in postpartum adaptation. (Shabaan, 2018)

The world health Organization defines self-care as activities individuals, families, and communities undertake with the intention of enhancing health, preventing disease, limiting illness, and restoring health. These activities are derived from knowledge and skills from the pool of both professional and lay experience. (**Riegel, 2018**)

Promoting women's self-care during postpartum is part of the nursing care process in the gravid puerperal cycle. One of the other factors that require attention is the woman's ability to satisfy her needs through self care. (**Barbosa**, 2016)

Postpartum nurses assist new mothers with physical and emotional needs immediately after the delivery and must follow the policies, philosophy and goals of the health facility and department. Postpartum nurses assume many roles while implementing the nursing care plan. Nurses provide direct physical care, teach mother care, and provide anticipatory guidance and counseling. (Abd el-Razek, 2013)

Nursing care during postpartum represents a major challenge for nurses, in view it's not only the physiological aspects that women face during postpartum period, but also the psychological aspects and new adaptations in relation to family and professional life. Such understandings, as well as others, must guide health professionals - nurses in particular-in rendering individual, human and holistic care. (Duman, 2012)

### Significance of the study:

The first two weeks after childbirth are a dangerous time for both mother and newborn infant. Among more than 500,000 women who had died each year due to complications of pregnancy and childbirth, most deaths occur during or immediately after childbirth. Every year three million infants die in the first week of life, and another 900,000 die in the next three weeks. (Abd el-Razek, 2013), The first few weeks after delivery are very important and critical time for both mother and newborn, from investigator observation there is improper instructions about selfcare during postpartum period are given to the mothers who attending at woman's Health Hospital at Assuit university before they were discharged. Therefore, this study is needed to focus on the postpartum minor discomfort to improve women's self-care during this period.

### Aims of this study was to:

- Evaluate the women's knowledge levels regarding postpartum period and its minor discomforts
- Apply health education about postpartum discomfort

- Improve women's self-care.

#### Hypothesis:

The women's knowledge and self-care practice will be improved after receiving health education program.

#### Subjects and Methods: Research design:

Qusi-experimental research design was used in this study.

# **Technical design:**

#### Setting:

The study was conducted in Woman's Health Hospital (Emergency unit) at Assiut University Hospital

#### Subject:

This study was carried out on (200) women. The inclusion criteria is immediate postnatal mother, their ages were ranged from (20-35) years, normal labor with single living normal neonate.

#### Tools

An interviewing questionnaire was developed based on the review of relevant literature to collect maternal personal data and to investigate mother's self-care practices for relieving minor discomfort during postpartum period. It includes:

**Part I**: Addressed personal data such as age, occupation, level of education.

**Part II**: It includes maternal obstetric history as No. of parity, gravidity and current pregnancy data as week of gestation, mode of delivery.

**Part III:** This part assess maternal knowledge related to postpartum period and its minor discomfort, this part consist of 7 open-ended questions related to postpartum period as (definition of postnatal period, types of lochia, warning signs during postpartum and etc) and 9 open-ended questions related to postpartum minor discomfort as (definition of minor discomfort, afterpain, perineal pain, backache, constipation and etc). Grading system for evaluation of open questions was as follows: one grade given when the answer is correct and zero given when the answer is Incorrect. The total score is graded for knowledge as; efficient level of knowledge (<60%). (Abd el-Razek, 2013)

**Part IV:** maternal self-care practice questioner to assess mother's self-care practice measures to relieve minor discomfort during postpartum period. This part covered mothers' self-care procedure as perineal care; episiotomy wound care, breast care, lochia assessment, after pain, breast engorgement. Grading system for evaluation of open questions was as follows: one grade given when the practice self-care is correctly and zero given when reported incorrectly self-care practice .The total score was graded for practice as; correct ((60 - 100%)) and incorrect ((60%). (Abd el-Razek, 2013)

#### **Operational Design:**

This study was carried out in three phase:

#### Phase1: Preparatory phase:

The researcher reviewed related literature of the current study, local & international related lecture, using text books, articles, and scientific magazines. The proposed study setting was assessed for the numbers of womans at emergencyunit, Women Health Hospital at Assuit University Hospital. This phase ended by a pilot study.

# Validity and Reliability

Several studies have confirmed the validity and reliability of this questionnaire.

Reliability was previously done by (9) at 0.94, based on Cranach's alpha.

#### A pilot study:

A pilot study was carried out on 10% of the study sample (20 women) to test the content clarity and applicability of the study tool and to explore the needed time for complete women's interview; no modifications were done so women who included in the pilot study were also included in the total sample size.

#### Phase 2: Implementation phase: Administrative phase:-

After approval was taken form Dean of faculty of nursing and Dean of Women's Health Hospital Assiut University, The study takes place to be implemented from Deceber2020 to July2021

#### Ethical consideration:

- Research was approved from Ethical Committee at the Faculty of Nursing, Assiut University.
- Oral consent was obtained from women who were participated in the study after explaining the nature and purpose of study.
- There was no risk for the women during conduction of study.
- The study was followed common ethical principles in clinical research.
- Confidentiality and anonymity would be assured and the participating women had the right to refuse participation or withdraw from the study at any time and without any rational.
- At initial interview the researcher introduce herself to initiate line of communication, explain the nature and purpose of the study to the selected womans who are willing to participate in the study and fill out the questionnaire sheet

#### Procedure:-

# This study applied on 200 women during postpartum period

The 200 women was divided into two group study and control, every group contain 100 women, women was taken immediately after normal delivery and from emergency unit

The researcher was collect data through 5 day per week so women assigned to control or study group randomly (first 3 day for study and other 2 day for control group),from 9 am to 1 pm. Researcher interviewed each woman immediately postpartum to collect basic data using (1). By using random sampling, each woman assigned to one of the two groups as follows; every group comprised 100 women; every woman in control group was assessed individually for knowledge related to postpartum period and minor discomfort and postpartum selfcare.

The average time for interviewed of each woman was about 30-40 minutes depending on the study or control as the study group need more time for health education, response of women.

Data collection from both groups were started at the same time whill collection of data ended for control group firstly. (2). Outcomes were evaluated for both group by asking every woman in study and control

group about knowledge about postpartum period and minor discomfort, postpartum self-care such as:-

Definition of postnatal period, Warning signs during postnatal period, Types of lochia, Definition of minor discomfort, After pain, Perineal pain, Perineal care, Episiotomy care, Breast care the grading was one grad for correct answer and zero for incorrect

Control group didn't receive health education, just assess knowledge and self-practice related postpartum period and postpartum minor discomfort and( after assess control group's women knowledge and practice, correct their practice during follow up but after assessment and ask for any question).

#### The study was carried through 4 session:

First session was in emergency unit ,(postpartum room), immediately postpartum during these session the researcher introduce her self to the mother explain the aim of study and there was no risks also assured that the mother can refuse to participate in the study and get the oral consent from every mother , assured that the women can withdrawal from the study at any time, maternal personal data, current and previous obstetric data was collected through hospital patient's sheet then women assessed for their knowledge about postpartum period and postpartum minor discomfort and how deal with minor discomfort (if she was multigravida), then give health education about self-care of these minor discomfort by using simple language to improve understanding and show how to make self-care was about 30-40 minutes depending on the study or control, response of women (study women need more time for health education)

• At the end of session the mother gave follow up card contain mother name, telph. Number, address, obstetrical diagnosis, mode of delivery, schedule of visiting, also contain name, telph. number of researcher ,day and time of interview

Follow up (other three meeting):-

Researcher follow up both group for self-care of postpartum minor discomfort, every women in both group asked about minor discomfort that occur and how women deal with it, occur for any complication, and finally asked for any questions, average time for these session was 10-15 minutes.

The follow up sessions was through phone calls (because spread of covid-19 and most of women follow in other health care centers also women's attends to hospital restricted only for complication to avoid covid- 19 infection spread

#### Health education

Health education was provided for study group and after complet data collection, women in both groups were answerd about their qustions .

The woman was given health education after assessment of her knowledge regarding postpartum

period and minor discomfort that occur during postpartum period.

Women was taken from emergency unit, immediately postpartum, health education was given orally (face to face) for each women especially, the researcher use Arabic language in simple way and some photos to improve and assure women's understand. health education about self- care of postpartum minor discomfort that contain care of breast engorgement, afterpain, insomnia, fatigue, perineal care, constipation, urinary retention, it given to every woman individually in study group.

#### Post intervention follow up &evaluation:

Follow up card was given to each mother in the study to remind the woman about the follow up schedule, this card contain:

• Data about mothers name, telph.number, address, obstetrical diagnosis, mode of delivery, schedule of visiting, also contain telph.number of researcher, day and time of interview

followe up carried out for women in both groups for the postpartum minor discomfort and self- care assessment through telephone (due to COVID 19 and spread of virus and some women gone to other health care center).

- It carried through three times postpartum ,first (after one week postpartum),second (21days postpartum), third (at the end of perpeurim )
- During follow up every mother in both group was asked about minor discomfort and how she care for it, also asked about any complication occur.

#### The statistical design:

The data obtained had reviewed, prepared for computer entry, coded, analyzed and tabulated, Descriptive statistics include (frequencies and percentages, mean and standard deviation) use Pearson chi- square (cross tabulation) between pre, and post-test after one month, two months and after three months, correlation and one way a nova test were done using computer program (SPSS).

#### **Results:**

Dansonal share staristics	Study	group	Contr	n voluo		
Personal characteristics	No (100) %		No (100)	%	p-value	
Age: (years) 20-25years 26-30 years < 30 years	47 33 20	47.0% 33.0% 20.0%	56 31 13	56.0% 31.0% 13.0%	0.220	
Mean ± SD			26.4 ±3	.8		
<b>Residence:</b> Rural Urban	56 44	56.0% 44.0%	60 40	60.0% 40.0%	0.566	
Level of education: Illiterate primary Secondary education University	17 17 36 30	17.0% 17.0% 36.0% 30.0%	21 18 27 34	21.0% 18.0% 27.0% 34.0%	0.575	
Work: House wife Employed	74 26	74.0% 26.0%	74 26	74.0% 26.0%	1.000	

Table (1): Distribution of women according to socio-demographic data in both groups:

Variables	Study	group	Contro	n voluo	
variables	No (100)	%	No (100)	%	p-value
Obstetric history					
Gravidity					
Primigravida	50	50.0%	50	50.0%	
2-4	33	33.0%	30	30.0%	0.824
>5	17	17.0%	20	20.0%	
Parity					
Primipara	53	53.0%	50	50.0%	
Multipara	37	37.0%	37	37.0%	0.787
Grand multipara	10	10.0%	13	13.0%	
NO. of abortions					
Non	82	82.0%	80	80.0%	
1-3	15	15.0%	20	20.0%	0.154
>3	3	3.0%	0	0.0%	
Current delivery data					
Mode of delivery					
Normal labor With episiotomy	44	44.0%	37	37.0%	
Normal labor Without episiotomy	56	56.0%	63	63.0%	0.315

# Table (2): Distribution of women according to obstetrical history and current delivery data in both groups:

# Table (3): Distribution of women according to their knowledge about postpartum period in both groups:

Item			tudy =100		Control N=100				
		Correct		Incorrect		Correct		rrect	<b>P-value</b>
	NO	%	NO	%	NO	%	NO	%	
Definition of postnatal period	75	75	25	25	74	74	26	26	0.871
Types of lochia	19	19	81	81	26	26	74	74	0.236
Warning signs during postnatal period	8	8	92	92	7	7	93	93	0.788
Element of personal hygiene	44	44	56	56	55	55	45	45	0.119
Benefit of postpartum exercise	15	15	85	85	25	25	75	75	0.077
Comfort and sleep	36	36	64	64	30	30	70	70	0.366
Important of breast feeding	40	40	60	60	39	39	61	61	0.885

 Table (4): Distribution of studied women according to their knowledge about postpartum minor discomfort in both groups:

I.t	l		(pre-test =100	)		C N	D 1		
Item	correct Inc		Inco	Incorrect Correc			inco	P-value	
	NO	%	NO	%	NO	%	NO	%	
Definition of postpartum minor discomfort	16	16	84	84	13	13	87	87	0,546
Afterpain	4	4	96	96	2	2	98	98	0.407
Perineal pain	24	24	76	76	23	23	77	77	0.867
Backache	36	36	64	64	38	38	62	62	0.769
Constipation	43	43	57	57	45	45	55	55	0.775
Urinary retention	19	19	81	81	18	18	82	82	0.855
Fatigue	35	35	65	65	40	40	60	60	0.465
Breast engorgement	26	26	74	74	22	22	78	78	0.507
Cracked nipple	31	31	69	69	39	39	61	61	0.236

Item		Pre	-test			Р-			
		Correct		Incorrect		Correct		orrect	r- value
		%	NO	%	NO	%	NO	%	value
Definition of postnatal period	75	75%	25	25%	100	100%	-	-	0.0001
Types of lochia	19	19%	81	81%	86	86%	14	14%	0.0001
Warning signs during postnatal period	8	8%	92	92%	80	80%	20	20%	.0001
Element of personal hygiene	44	44%	56	56%	89	89%	11	11%	0.0001
Benefit of postpartum exercise	15	15%	85	85%	75	75%	25	25%	0.0001
Comfort and sleep	36	36%	64	64%	85	85%	15	15%	0.0001
Important of breast feeding	40	40%	60	60%	87	87%	13	13%	0.0001

# Table (5): women's knowledge about postpartum period in the study group

# Table (6): women's knowledge about postpartum minor discomfort in the study group:

		Study N=100										
Item		P	re-test			Pos	P-value					
	corr	correct Incorrect		Cor	rect	inco		orrect				
	NO	%	NO	%	NO	%	NO	%				
Definition of postpartum minor discomfort	16	16	84	84	91	91	9	9	<0.001**			
Afterpain	4	4	96	96	88	88	12	12	< 0.001**			
Perineal pain	24	24	76	76	89	89	11	11	<0.001**			
Backache	36	36	64	64	92	92	8	8	< 0.001**			
Constipation	43	43	57	57	95	95	5	5	<0.001**			
Urinary retention	19	19	81	81	86	86	14	14	< 0.001**			
Fatigue	35	35	65	65	85	85	15	15	< 0.001**			
Breast engorgement	26	26	74	74	90	90	10	10	< 0.001**			
Cracked nipple	31	31	69	69	79	79	21	21	< 0.001**			

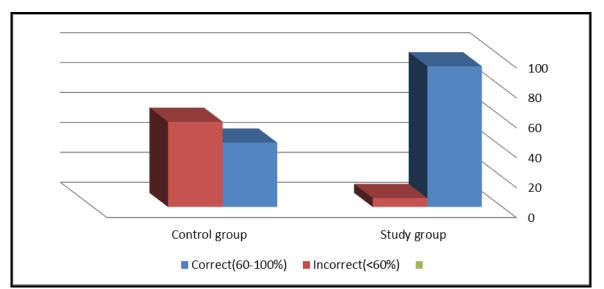


Figure (1): Comparison of control &study group as regard level of postpartum knowledge after implemention of health education

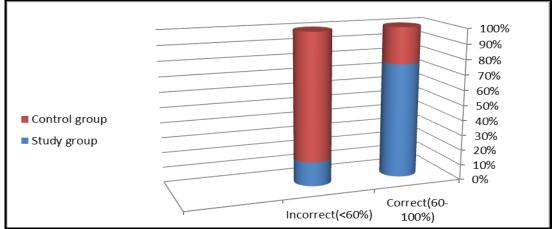


Figure (2): Distribution of women according to total knowledge regarding to postpartum minor discomfort in both groups after health education

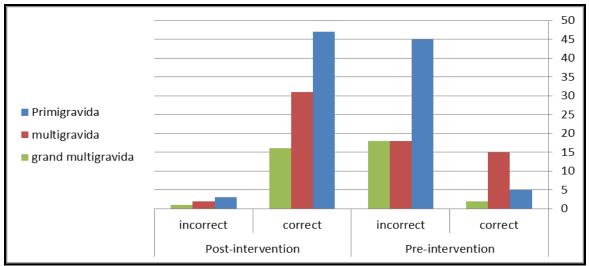


Figure (3): Relation between total women's knowledge about postpartum period and gravidity in study group

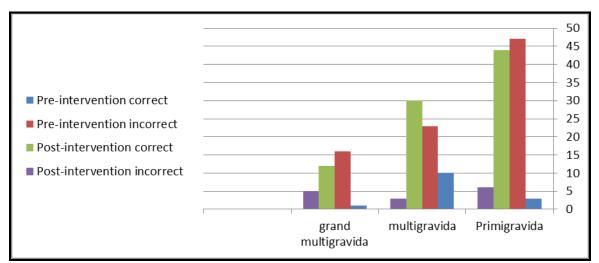


Figure (4): Distribution of women's knowledge about postpartum minor discomfort and gravidity

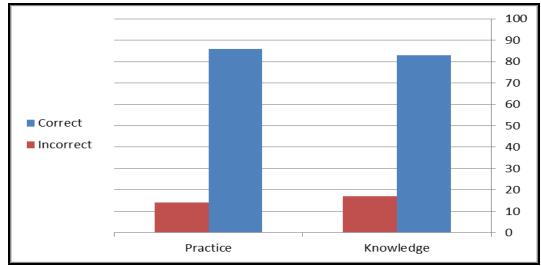


Figure (5): Distribution of women's knowledge and self-report practice in study group postintervention

**Table (1):** Reveals that 47% of women in the study group & more than half of women in control group (56%) were at age group (20-25 years). as regard residence it observed that more than half of women in both groups live in rural area (56% & 60%) respectively .Regarding to level of education this table show that 36% of women in study group & 27% of women in control group had secondary level of education. Regarding to occupation most of women in both group were house wife (74%). and this table clear there was no statistical significant difference between study and control groups as regard to women's socio-demographic data.

**Table (2):** Reveals that half of women in study and control group were primigravida (50% & 50%) also 10% of women in the study group&13% of women in control group respectively grand multigravida .Regarding to parity this table show that53.0% of women in the study group & 50.0% of women in control group were primipara.

**Table (3):** Through this table we observe that most of women in both group (75.0% & 74.0%) know the definition of postpartum period but most of them (81.0% & 74.0%) didn't know types of lochia also the majority of women in both group (92.0% & 93.0%) respectively didn't know what is the warning signs during postpartum period. This table Show that there was no statistical significant difference between study and control groups as regard women's knowledge related to postpartum period.

**Table (4):** This table clear that most of women in both group (84.0% & 87.0%) respectively didn't know the definition of postpartum minor discomfort and the fast majority of them (96.0% & 98.0%) didn't know what is afterpain, 43.0% of women in study group & 45.0% of women in control group

were know causes of constipation.as regard breast engorgement 74% of women in the study group & 78% of women in control group hadn't knowledge about breast engorgement, 69% of women in the study group & 61% of women in control group respectively hadn't knowledge about cracked nipple. this table Show that there was no statistical significant difference between study and control groups as regard women's knowledge related to postpartum minor discomfort.

**Table (5): It observed thorough this table that** there was a highly statistical significant improvement in women's knowledge regarding postpartum period after health education. As 8% of women in study group were know about warning signs that may occur during postpartum period and it became 80% after intervention. As regard types of lochia 19% of women had knowledge about lochia and it became 86% after intervention.

**Table (6): This table shows that** there was a highly statistical significant improvement in women's knowledge regarding postpartum minor discomfort after health education.as regard to definition of postpartum minor discomfort it observed that 16 % of women in the study group were know the definition and it became 91% after health education. As regard to afterpain 4% of women in study group had know the afterpain and become 88% after health education. Also it observed that 26% of women in study group had knowledge about breast engorgement and it became 90% after health education.

**Figure (1):** Clarify that there was a highly statistical significant difference in total women's knowledge about postpartum period in the study and control group after health education. As majority of the women (94.0%) in study group had correct

knowledge about postpartum period respectively. With a p. value =0.001

Figure (2): Show that there was a highly statistical significant difference in total women's knowledge about postpartum minor discomfort in the study and control group after health education. As majority of the women (86.0%) in study group had correct knowledge about postpartum minor discomfort respectively.

With a p. value =0.001

Figure (3): Revealed that there was sinficant improvement in primigravida women's knowledge about postpartum period after health education, as about 90% of primigravida women had correct

#### Discussion

The postpartum period begins with the birth of the fetus, comprises both physiological and psychological components and lasts for approximately six weeks. During this period, the reproductive organs recover from pregnancy and delivery. In general, this time period is the physiologic stabilization of the mother's body to the pre-pregnant state. It is also the time period where the mother and neonate need the assistance from health care workers and family to ensure successful transition (**Robin, et al., 2019**).

This study was carried out to assess women's knowledge and practice of self-care of minor discomfort during postpartum period and to improve women's self-care for minor discomfort during postpartum period.

200 women was recruited in this study (divided into two groups 100 women in every group control & study ) Regarding socio-demographic characteristics of studied women , the present study was show that about half of women's age in this study was 20-25 years ,more than half of women live in the rural area , one third of them had secondary level of education also one third had university and the majority of them were house wives .also the study show that there was no statistical significant difference between study and control groups as regards age ,education ,occupation and residence .

Regarding obstetric history and current labor data, the study show that half of women in the study were primigravida and about one third were multigravida and the other 20% were grand multi. Regarding parity about half of women were primipara, more than one third were multipara, and about more than half of women had normal labor with episiotomy, related to abortion history most of women had not aborted for both group and reveled that there was no statistical significant difference between study and control groups as regards number of gravidity, abortion, parity and mode of delivery. knowledge about postpartum period after health education.

**Figure (4): This figure clear** there was a highly statistical significance difference between the knowledge level of women regarding postpartum minor discomfort pre and post-intervention, as about 80% of women had incorrect knowledge befor health education and after health education, the majority of women had correct knowledge about postpartum minor discomfort.

**Figure (5):** It observed through this figure that there was no statistical difference between knowledge and practice in study group after intervention as there was improve in women's total knowledge and self-care practice.

Regarding women's knowledge about postpartum period there was no statistical significant difference between study and control groups in pre-test results as it found that about three quarters of women in both group were know the definition of postpartum period and this may be due to half of women in this study were multigravida and had a previous the relative experience, This study agreed with **Elsebeiy**, (2019) who assess knowledge regarding postnatal minor discomforts and self-care activities among

nulliparous women in Zagazig university hospital and al Ahrar hospital, It show that almost three gurters of the studied women correctly knew the definition and duration of the postpartum period and almost one qurter of them answered correct but incomplete. while the answer was incorrect in a very small percentage. This finding supported by Nahed (2019) who studied the relation between primipara coping pattern and their knowledge during the two & four weeks postnatal in Kafer-Elsheekh General Hospital, show that about three quarters of the mother had the correct meaning of the postnatal period. Also the present study was also in congruence with. Rasha leteef (2020) who assess the Effectiveness of an Educational Program regarding the Knowledge of women about maternal care during the postpartum period that attending to the primary health care centers at Al- Amara City / Iraq, she found that the women's knowledge regarding postpartum period was low as women were response incorrectly to the concept of postpartum period, duration of postpartum period.

The current study was disagreed with **Abd el-razek** (2013), who evaluate teaching guideline enhancement of mother's self-care practices for relieving minor discomfort during post partum period in a Middle Eastern city of El-Basher Hospital, Amman, Jordon, the pretest results show that more than half of women incorrectly defined the postpartum period .this difference might be due to difference in the level of women's education that included in current study

minority of women were illitrat, about one third had high level of education and in her study the level of education was the minority of women had university. As regard vaginal discharge the current study revealed that less than one third know the type of lochia and this result may be due to our moral Egyptian community to discuss issue related to production reproductive health among young women due to cultural or traditional issue. This study agreed with **Elsebeiy**, (2019) reported that more than three fourth of the studied women their answer was incorrect, almost one fourth of them their answer was correct but incomplete. Also on contrary with **Abd elrazek** (2013), the pretest show that As, types of lochia, about three quarter incorrectly answered.

As regard warning signs that might occur during postpartum period the present study revealed that less than one third had correct knowledge about warning signs and this result might be due to lack of experience and health education ,also half of studied women were primigravida that had no previous experience, The present study was also in congruence with. Rasha leteef (2020), found that the women's warning knowledge regarding signs during postpartum was low as women were response incorrectly to the warning signs during postpartum. The result of the current study was agreed with Amira (2019) who study Women's Knowledge regarding Postpartum Warning Signs

in Ain Shams maternity university hospital, show that nearly half of women had incorrect knowledge about postpartum warning signs for women, also in congruent with **Doaa**, (2018) who evaluate primiparas' mothers' self-care practices during postpartum period ,she revealed that half of mothers had incorrect knowledge about postpartum maternal danger signs.

As regard to women's knowledge about postpartum minor discomfort, the present study show that the majority of women had incorrect knowledge about definition of postpartum minor discomfort, this result in congruent with **Elsebeiy**, (2019) ,show that the majority of the studied women their answer were incomplete regarding the meaning of postnatal minor discomfort ,also this result in the same line with **Nour El Hoda**, (2021) who study Effect of Instructional Guidelines Regarding Minor discomforts on Reducing Depression, Anxiety, and Stress Level among Primigravida at Sohag University Hospital , show that most of women didn't know the definition of minor discomfort.

As regard types of minor discomfort the current study show that the majority of women had incorrect knowledge about after pain , also most of women had incorrect knowledge about causes of urinary retention , fatigue ,and more than two third of studied women had incorrect knowledge about cracked nipple and breast engorgement. This result might be due to half of women were primigravida and more than half of women live in rural areas. The current result was agreed with Shaimaa, (2021) who study "Effect of Online Health Guidance on Recovery of Postpartum Minor Discomforts and Neonatal Problems during COVID-19 Pandemic" at Mansoura University Hospitals, reported that women had poor knowledge regarding postpartum minor discomfort as all of women in study hadn't knowledge about after pain and constipation, also show that about two third of women had incorrect knowledge about fatigue and more than half of them of hadn't knowledge about urinary retention, however it didn't agree with the current study regarding breast engorgement and crackled nipple as it show that one third of studied women hadn't knowledge about breast engorgement, crackled nipple and this may be due to different in sample size and in current study half of women were primigravida. This result was in the same line with Hanan (2021) who study "Effect of young rural women's general characteristics on their knowledge and compliance with healthy practices during postpartum period" at Benha University Hospital, reported that more than half of women had incorrect knowledge about minor discomfort related to after pains, also less than ten percentage had incomplete correct knowledge. congruence with Abd el-razek (2013), report that the majority of studied women had incorrect knowledge about postpartum minor discomfort as less than three fourth of women had incorrect answer about after pain, backache and perineal pain, two third of women had incorrect knowledge about constipation, more than half of women hadn't knowledge about breast engorgement and two third of them hadn't knowledge about cracked nipple.

Regard relation between women's knowledge and obstetrical history the present study revealed that there was significant relation between knowledge and gravidity as about more than three quarter respectively of primigravida women had no knowledge about postpartum period and postpartum minor discomfort. This in the same line with **Beraki et al (2020)** who assess the Knowledge on postnatal care among postpartum mothers during discharge in maternity hospitals in Asmara, show that there was a positive correlation between women's knowledge and gravidity, parity.

The present study findings revealed that there was a highly statistical significant improvement in women's knowledge about postpartum period and postpartum minor discomfort. As regard knowledge about postpartum period the current study show that there was significant improvement in women's knowledge as most of women respectively had incorrect knowledge pre-intervention about types of lochia, warning signs during postpartum period, element of personal hygiene, benefit of postpartum exercise ,comfort and sleep, and important of breast feeding and after health education the majority of women were had correct knowledge about postpartum period. This could be due to half of studied women were primigravida and its first experience and they fear from any complication that might occur during postpartum period. This finding agreed with Shaimaa (2021), show that the majority of the studied sample had poor knowledge score pre-intervention whereas nearly three quarters of them had good knowledge score post-intervention. There was a highly statistical significant increase in the studied sample total knowledge score post intervention compared to pre intervention (p<0.001). Also congruence with Abd el-razek 2013), report that there was significant improvement in women's knowledge regarding postpartum period as most of women had incorrect knowledge pre-intervention and after intervention, the majority of women had correct knowledge regarding postpartum priod.

The present study revealed that there was highly significant improvement in women's knowledge regarding postpartum minor discomfort about one third respectively of women had correct knowledge pre-intervention about postpartum minor discomfort, and the women's knowledge improved after intervention as the majority of women respectively had correct knowledge about this minor discomfort . this result agree with Found (2020) that show that the majority of primiparous mothers had poor knowledge score pre intervention compared to nearly three quarters of them had good knowledge score post intervention.in addition This finding was in the same line with Kumbani & McInerney's., (2017), who assess the impact of a video teaching program on primiparous women at urban maternity centers and found that the majority of the studied sample were unaware of any potential health problems after birth.Also agree with, Menaka., (2016) who study the efficacy of structured educational program for primiparous mothers on newborn care in Bangalore found that, after applying video assisted educational program, the knowledge level of the studied sample on the management of breast engorgement was improved with highly significant difference between pre and posttest scores.

Regarding self-care practice the present study show that there was a highly statistical significant differences in women's self-care practice for minor discomfort during postpartum period between study and control group, as in study group there was significant improvement in self-care regarding

postpartum minor discomfort as more than three quarters of women in study group had correct selfcare practice regarding postpartum minor discomfort, on the other hand in the control group there was poor self-care practice regarding postpartum minor discomfort as about two quarters of women had incorrect self-care practice. The present study is agreed with Elsedeiy. (2019), who reported that selfcare activities for relieving after pain, almost two thirds of the studied women correctly but incompletely answered, while almost one third of them their answer was incorrect with a very small percentage of correct answer, Concerning self perineal care, less than half of women incorrectly knew it, while more than half of women had correct incomplete knowledge and none of women correctly knew it. In addition, women knowledge regarding self-care activities to encourage healing of perineal discomfort less than three fourth of women incorrectly knew these activities, and more than one fourth of women incompletely knew them, while none of women had correct knowledge. Also Conversely, Abd el-razek (2013) that found that there was significant improvement in women's selfcare practice during postpartum period after intervention as most of women had correctly self-care activities regarding perineal care, episiotomy care, lochia assessment and breast care. Also agree with Amany (2020), who Assess postpartum women's knowledge and practice related to self-care in rural area at family medicine centers affiliated to shesht El-Enaam health unit at El-Behara Governorate ,show that there was significant improvement of total selfcare practice post self-care program.

# **Conclusion:**

Based on the result of the present study, it can concluded that there was a highly statistical significance improvement in women's knowledge and self-care practice regarding postpartum minor discomfort after implemention of health education.

# **Recommendations:**

In the light of the findings of the current study the following recommendations were suggested:-

- 1. Provide health education to primigravida to educate mothers about postpartum minor discomfort and how to deal with it.
- 2. Educate mothers about differention between minor discomfort and warning signs that may happen.
- 3. More researches to comparison the effect of health education about postpartum minor discomfort in late pregnancy and after birth

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