

## **Effectiveness of Childbirth Education on Primigravida Womens' Knowledge about Childbirth Preparation**

**Mayada Soliman Rashed<sup>1</sup>, Prof. Sanaa Ali Nour<sup>2</sup>, Prof. Hind Salah El-Din Mohamed<sup>3</sup>, Prof. Ahmed Ragaa Ragab<sup>4</sup>, Assist.Prof. Nagat Salah Salama<sup>5</sup>, Assist.Prof. Elsayda Hamdy Nasr<sup>6</sup>**

Master Obstetrics and Gynecological Nursing-Faculty of Nursing - Port said University<sup>1</sup>

Professor of Obstetrics and Gynecology - Faculty of Nursing - Zagazig University<sup>2,3</sup>

Professor of Reproductive Health - International Islamic Center for Population Studies and Research - Al-Azhar University<sup>4</sup>

Assistant prof of Maternity, Obstetrics and Gynecological Nursing<sup>5,6</sup>

Faculty of Nursing - Port said University<sup>5,6</sup>

---

### **ABSTRACT**

**Background:** Childbirth education is an essential component of prenatal care. Preparing for childbirth helps women cope with their pregnancies and improves pregnancy outcomes. **Aim:** To evaluate the effectiveness of childbirth education on primigravida women's knowledge about Childbirth Preparation. **Subjects and method: Design:** A quasi-experimental design was applied. **Setting:** The study was conducted at antenatal care clinics in health care centers at comprehensive health insurance in Port Said city. **Subjects:** Purposive sample, The sample consisted of 66 primigravida women who attended the research setting and were included in this study. **Tools of data collection:** The Structured interview regarding the labor process and childbirth preparation. **Results:** women's ages ranged from 25- 35 years. The studied sample demonstrated a significantly higher level of childbirth preparation knowledge (P 0.001), with a high reported satisfactory knowledge level (75.8%) of childbirth preparation in post-intervention than the pre-intervention (18.2%). **Conclusion:** Improvement of a primigravida woman's knowledge about preparation for childbirth after the implementation of the education program. **Recommendations:** Continuous childbirth education programs for pregnant women in different antenatal care settings are highly recommended.

**Keywords:** Childbirth Education, Childbirth Preparation, Primigravida Womens'.

## **INTRODUCTION**

Pregnancy is a normal physiological process. Pregnant women go through significant physiological changes during this time in order to nourish and host the developing foetus and prepare for labour. Pregnancy is a critical period that includes the antenatal, natal, and postnatal periods, all of which increase the needs of pregnant women in different ways (Soma, Nelson, Tolppanen, & Mebazaa, 2015). The most important goal of any pregnancy is a healthy newborn, and nurses play a significant role in assisting the pregnant woman, her husband, and her family to achieve this goal (Oats, Abraham, & Llewellyn, 2017).

Every minute, A woman dies in pregnancy or labor. According to the Millennium Development Goals (MDGs) and the International Conference on Population and Development (ICPD), "complications related to pregnancy and childbirth are among the leading causes of mortality for women of reproductive age in many parts of the developing world, killing approximately half a million women each year, 99 percent of whom are in developing countries." (WHO, UNICEF, and UNFPA, 2018) Egypt was on the verge of meeting MDG 5 targets, as the maternal mortality ratio (the number of women dying during pregnancy and childbirth per 100,000 live births) had significantly decreased (WHO, UNICEF, UNFPA, World Bank Group & United Nations Population Division, 2019).

Antenatal Care (ANC) must emphasize on birth preparation and expected complication readiness This strategy is critical for reducing prenatal and/or post - natal illnesses, both of which can be fatal (Alatawil, Faheem, & Alabdulaziz, 2020). Regular ANC visits provide numerous benefits, including enhanced nutritional condition and health, increased chances of detecting gestational risks, psychological and counselling support to pregnant women and their families, and increased opportunities for a safe

labour with the assistance of qualified birth attendants; these benefits, in turn, reduce maternal and fetus deaths (Tadele, & Lamaro, 2017).

The most terrifying sensation is childbirth pain, particularly for primigravida mothers. Primiparous women fear childbirth more than multiparous women. Lack of self-esteem, the anticipation of unbearable pain, bad stories from other women, insufficient physical and psychological preparation for birth, loss of self-control, fear of perineal laceration, a lack of guidance from the birth team, and a worry about dying are all reasons for this (Kzlrnak & Baser, 2016).

Participation in childbirth classes has the potential to increase women's knowledge about childbirth while also reducing anxiety and fear about the childbirth experience. Nurses and midwives can help pregnant women by providing prenatal education and encouraging them to attend these classes. As healthcare professionals, they can provide pregnant women with childbirth education as well as prenatal care. They can help pregnant women learn more about pregnancy and delivery by teaching them about physiological changes during pregnancy, foetal development, labour and childbirth, warning signs, dealing with common pregnancy problems, and non-pharmacological pain relief techniques in labour (Hassanzadeh et al., 2019).

### **Significance of the study:**

There is no programme for childbirth education in Egyptian health-care systems. As a result of insufficient information, a negative attitude toward childbirth, and afraid of childbirth, pregnant women faced the threat of caesarean section (CS) requests without medical indications (El-Nemer; 2015). So, this study offers childbirth education to assist pregnant women to deal with change in pregnancy and improve pregnancy outcome. As a result, it's critical to evaluate the effectiveness of childbirth education on primigravida women's knowledge about Childbirth Preparation.

## **AIM OF THE STUDY**

The aim of this study was to evaluate the effectiveness of childbirth education on knowledge about childbirth preparation among primigravida women's'.

### **Study Hypotheses:**

The women's knowledge level will be improved after attending the education classes.

## **SUBJECTS AND METHOD**

### **I. Technical Design**

#### **Study Design:**

A quasi-experimental design with one group (pre/post-intervention) was used to achieve the research aim.

#### **Study Settings:**

This study was conducted at antenatal care clinics in health care centers at comprehensive health insurance in Port Said city.

#### **Study sample:**

A purposive sample

#### **Subjects:**

The total number of the studied women was 66 primigravida women. The following women were included: At 32 to 35 weeks of gestation, they ranged in age from 20 to 35 years old, able to read and write, and with no medical or psychological problem.

#### **Study size:**

Based on data from literature (El-Kurdy et al., 2017), considering level of significance of 5%, and power of study of 80%, the sample size was calculated using the following formula:

$$n = [(Z_{\alpha/2} + Z_{\beta})^2 \times \{2(SD)^2\}] / (\text{mean difference between the two groups})^2$$

where

SD = standard deviation

$Z_{\alpha/2}$ : This depends on level of significance, for 5% this is 1.96

$Z_{\beta}$ : This depends on power, for 80% this is 0.84

Therefore,

$$n = [(1.96 + 0.84)^2 \times \{2(15.68)^2\}] / (5)^2 = 65.90$$

Based on the above formula, the sample size was 66.

### **Tools for Data Collection:**

Data was collected for this study by using the following tool in pre and **post-intervention**.

#### **Structured interview questionnaire regarding women's knowledge about the labor process and childbirth preparation:**

A structured interview sheet was designed by the researcher after reviewing literature (Danielewicz et al., 2017; Lim, Wong & Soon, 2018; Podder, 2015). It was designed in Arabic language to avoid misunderstanding, and divided into three parts:

Part (1): Demographic characteristics such as: Age, level of education, working status, and residence.

Part (2): Present obstetric history: Gestational weeks, Had antenatal care, and antenatal care visits.

Part (3): Women's knowledge regarding childbirth preparation and labor process "pre and post-intervention": This part subdivides to assess women's knowledge in three domains (nutrition, exercise, and labor process).

-Women's knowledge regarding good nutrition: It contains five items such as; the ideal amount of food in the last months of pregnancy, the importance of iron, eliminate fats from the diet.

-Women's knowledge regarding exercise: It contains 3 items such as; the importance of exercises, types of exercise in the last trimester.

-Women's knowledge regarding the labor process: It contains 16 items such as; labor bag contents, true labor pain, the exercises during the second stage of labor, correct way to bear down.

**Scoring system:** True or false questions were mixed in with multiple-choice questions. The "correct answer" took a one, while the "incorrect answer" received a zero. The scores for each domain's items and the total domain were totaled, divided by the number of items, and converted into percent scores. The women's knowledge level was considered satisfactory if it was 60% or higher, and unsatisfactory if it was 60% or less.

**II. Operational design:**

The operational design phase have included preparatory phase, pilot study, tool validity and reliability, and field work.

**Preparatory phase:**

The researcher used books, articles, internet journals, and magazines to develop data collection tools based on relevant literature reviews and theoretical knowledge of many aspects of research, and it creates a handout for childbirth preparation that contain all of the above covering points. The program had been completed.

**Validity:**

A jury of five experts in the field of obstetrics and gynaecological nursing reviewed the tools, and face and content validity was determined. The sheet was modified in response to the expert's remarks and suggestions.

**Reliability:**

The reliability of tools used in this study will use the Cronbach's alpha test (Cronbach's  $\alpha = 0.87$ ). The reliability of tools reveals good reliability.

**Pilot Study:**

Following the development of the tool, a pilot study was conducted. It was administered to 10% of primigravida women. The intention of the pilot study was to evaluate the applicability and explain the viability of the tool, as well as to test the sequence of items to maintain continuity. It also assisted in estimating the time required to complete the tool, as well as determining any problems that might interfere with data collection, and determining the appropriate data and time for data collection. As a result of the pilot study, necessary changes were made. The study tools were revised, redesigned, and rewritten in response to the findings and acceptance of the final forms. The women who participated in the pilot study were not included in the study.

**Field Work**

Data was collected four days a week (Saturday, Monday, Tuesday and Thursday). The current study field work lasted sixteen months, from the beginning of May 2019 to the ending of September 2020. The work was divided into four stages (assessment, planning, implementation and evaluation).

**Phase I: Assessment (Pre-intervention phase):**

The researcher interviewed the primigravida women and introduced herself then invited them to participate the study. After their agreements to participate, written consent was obtained. To gain their cooperation, the researcher explained the purpose of the study. Each primigravida woman who met the inclusion criteria was interviewed separately. After that, the researcher explained to the participants the tools which include structured interview sheet regarding labor process and childbirth preparation, and asks them to answer the tools as consider a pre-intervention assessment.

**Phase II: Planning**

The researcher created an Arabic version of the childbirth preparation handbook and required to submit it to the study group. It contains the following details: Healthy nutrition during pregnancy, exercise during pregnancy and its benefits, different stages of childbirth and adaptation to it, and use non-pharmacological methods to overcome pain. The handbook was divided into theoretical and practical parts. Also, it was supplemented by photos for more illustration and to help the women understand the content. Each participant was given a handbook which is summarizing the content of childbirth preparation classes to guide them for self-practice at their home. Animation videos, social media, and slide presentations were used in the sessions.

**Phase (III): Health education classes implementation**

Because of covid-19 precautions, pregnant women were appointed to childbirth preparation classes in groups of one to three.

They were given the structured prenatal education course that lasted about three hours and was divided into three classes of about 60 minutes each.

**Sections 1** firstly, the researcher illustrated aim, purpose of these classes, and then distributed the childbirth preparation handbook to participates. The content for the first class included: Periodic follow-up and danger signs of pregnancy, nutrition in third trimester, and exercise in third trimester.

**Section 2** was held after one week from first class. The content for the second class included: Physiology and benefits of normal labor, premonitory symptoms of labor, difference between true and false labor pain, and stages and phases of labor.

**Section 3** was held after one week from second class. The content for the third class included: Non-pharmacological coping measures with labor pain.

#### **Phase IV: Evaluation**

At the end of the third class, the researcher distributed structured interview regarding labor process and childbirth preparation (part 3) again and asks them to answer the tools as consider a post- intervention evaluation.

### **III. Administrative design**

The relevant authorities have given their formal approval for the conduct of this study. Before beginning the study, the Dean of the Faculty of Nursing at the University of Port Said have sent formal letter explaining the goal, and purpose of the study to the Directors of the aforementioned settings, requesting permission to proceed.

### **Ethical consideration**

Before obtaining written consent to participate in the study, the purpose of the study was explained to the participants. A brief overview of the study was given to participants in order to reassure them that all information obtained would be kept strictly confidential and used only for the purpose of the study. Participants were informed that they could participate in or opt out of the study at any time. For identification purposes, code numbers rather than participant names were used. This safeguard ensured that the participants' identities would not be revealed in public reports.

### **IV. statistical design**

Data was sorted, organised, coded, and transferred into specially designed formats for computer entry. SPSS version 22 was used for the statistical analysis. Frequencies and percentages were used to describe qualitative data. The Chi-square test was used to examine the relationship between categorical variables (x<sup>2</sup>). Significance was adopted at  $p < 0.05$  for statistically significant interpretation of results of tests of significance, while  $p \leq 0.01$  was adopted for highly statistically significant interpretation of results.

## **RESULTS**

**Table (1):** shows the age of the women participating in the study ranged between 25-35 years with a mean  $\pm$  SD ( $25.8 \pm 4.0$ ), and more than half (68.2%, 56.1%) were



housewives, had secondary education. This table also shows approximately three quarters (71.2%) of the women studied were living in urban areas.

**Table (2):** demonstrates the gestational weeks of women in this study ranged from 32- 35 weeks. The majority had antenatal care, with more than two-thirds (68.2%) attended less than four of the visits.

**Table (3):** shows the women's nutrition knowledge in the third trimester of pregnancy was significantly higher in the post-intervention compared to the pre-intervention in all tested items ( $p < 0.001$ ). Pre-intervention, less than half of studied women (45.5%, 36.4%, and 43.9%) had correct knowledge about ideal amount of food, eliminate fats from the diet, and calcium and vitamin D-rich foods respectively. Furthermore, no one (0.0%) was aware of the importance of amino acids. This result improved after the intervention, the majority of studied women (89.4%, 92.4%, and 100%) had correct knowledge about ideal amount of food, the importance of iron, and calcium and vitamin D-rich foods respectively. As well, more than half (72.7% and 59.1%) had correct knowledge about eliminate fats from the diet, and the necessity of amino acids respectively.

**Table (4):** shows in the pre-intervention, less than a quarter (24.2%, 12.1%) of the studied women had correct knowledge about allowing exercise in the last months of pregnancy, and types of exercise. Also, less than half (43.9%) had a ware about the importance of exercise. While this result changed in the post-intervention, as all studied women had correct knowledge about allowing exercise in the last months of pregnancy. As well, more than three quarters (87.9%) respond correctly about the importance of exercise. So, there was a highly statistically significant improvement in women`s knowledge post-intervention than pre (P-value  $<0.001$ ).

**Table (5):** Shows there was a highly statistically significant improvement in women`s knowledge regarding first stage of labor in post-intervention than pre (P-value  $<0.001$ ) in all test items except the duration of the birth process was statistically significant improvement (P-value = 0.005). This revealed as the majority of studied women (93.9%, 89.4%, 83.3%, and 95.5%,) in post- intervention had correct knowledge about labor bag contents, true labor pain, childbirth symptoms, duration of the first stage of labor, foods

allowed in the latent stage, labor respectively versus less than one third (31.8%, 22.7%, 31.8%, and 19.7) in pre- intervention.

**Table (6):** illustrates the majority of studied women (93.9%, 93.6%, and 78.8%) in pre- intervention hadn't knowledge regarding duration of the second stage, proper position, and the correct way of bearing down respectively. In other hand, more two third of studied women (66.7%, 87.9%, and 92.4% respectively) in post intervention had correct knowledge about the previous items. The difference observed is highly statistically significant ( $P < 0.001$ ).

**Table (7):** demonstrates that there was a highly statistically significant improvement in women's knowledge regarding second stage of labor in post-intervention than pre ( $P$ -value  $< 0.001$ ). 28.8% of studied women in pre- intervention versus 84.8% in post- intervention had correct knowledge regarding duration of the third stage of labor. Likewise, more than two third (71.2%, and 93.9%) of women not aware about duration of the fourth stage of labor, and ideal time for breastfed after birth respectively, this finding differed in post-intervention (68.2%, and 48.5% respectively) had correct knowledge about the previous items.

**Figure (1):** presents that the levels of women's knowledge improved significantly after intervention than before ( $P$ - value  $< 0.001$ ).

**Table (1): Frequency distribution of demographic characteristics of Studied women .((N= 66**

Items	n	%
<b>Age (years)</b>		
< 25	27	40.9
25 or More	39	59.1
Range	20.0-35.0	
Mean $\pm$ SD	25.8 $\pm$ 4.0	
<b>Educational Level</b>		
Basic	9	13.6
Secondary education	37	56.1
University education	20	30.3
<b>Working Status</b>		
Working	21	31.8
Housewife	45	68.2
<b>Residence</b>		
Urban	47	71.2
Rural	19	28.8

**Table (2): Frequency distribution of the current obstetric history among the studied women (N= 66).**

Items	n	%
<b>Gestational weeks</b>		
32 – 33	39	59.1
34 – 35	27	40.9
Range	32-35	
<b>Had antenatal care</b>		
Yes	57	86.4
No	9	13.6
<b>Antenatal care visits</b>		
> 4	45	68.2
$\leq$ 4	12	31.8

**Table (3): Frequency distribution the studied women`s knowledge regarding good nutrition in third trimester of pregnancy (N= 66)**

Items	Pre-Intervention				Post-intervention				Chi-Square	
	Correct		Incorrect		Correct		Incorrect		X <sup>2</sup>	P
	n	%	n	%	n	%	n	%		
<b>The ideal amount of food in the last months of pregnancy.</b>	30	45.5	36	54.5	59	89.4	7	10.6	29.007	<0.001**
<b>The importance of iron.</b>	11	16.7	55	83.3	61	92.4	5	7.6	76.388	<0.001**
<b>Eliminate fats from the diet.</b>	24	36.4	42	63.6	48	72.7	18	27.3	17.600	<0.001**
<b>Calcium and vitamin D-rich foods.</b>	29	43.9	37	56.1	66	100.0	0	0.0	51.410	<0.001**
<b>The necessity of amino acids.</b>	0	0.0	66	100.0	39	59.1	27	40.9	55.354	<0.001**

**Table (4): Frequency distribution of women`s knowledge regarding exercises in third trimester of pregnancy (N= 66)**

Items	Pre-Intervention				Post-intervention				Chi-Square	
	Correct		Incorrect		Correct		Incorrect		X <sup>2</sup>	P
	n	%	n	%	n	%	n	%		
<b>Allowing exercise in the last months of pregnancy.</b>	16	24.2	50	75.8	66	100.0	0	0.0	80.487	<0.001**
<b>The importance of exercise.</b>	29	43.9	37	56.1	58	87.9	8	12.1	28.356	<0.001**
<b>Types of exercise the last month of pregnancy.</b>	8	12.1	58	87.9	39	59.1	27	40.9	31.753	<0.001**

**Table (5): Frequency distribution of women`s knowledge regarding first stage of labor pre and post- intervention (N= 66)**

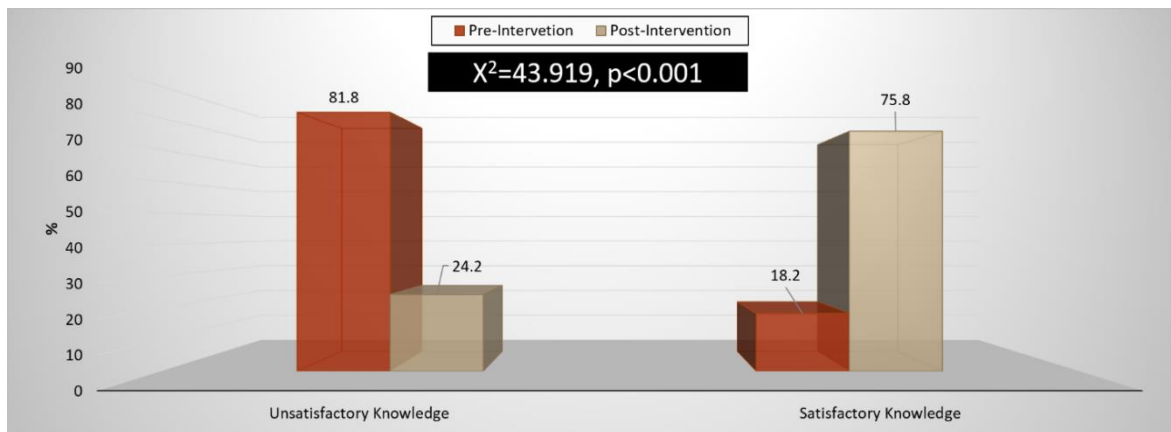
Items	Pre-Intervention				Post-intervention				Chi-Square	
	Correct		Incorrect		Correct		Incorrect		X <sup>2</sup>	P
	n	%	n	%	n	%	n	%		
Labor bag contents.	21	31.8	45	68.2	62	93.9	4	6.1	54.559	<0.001**
True labor pain.	15	22.7	51	77.3	54	81.8	12	18.2	46.186	<0.001**
Childbirth symptoms.	21	31.8	45	68.2	59	89.4	7	10.6	45.819	<0.001**
<b>labor stages</b>										
The duration of the birth process.	27	40.9	39	59.1	43	65.2	23	34.8	7.786	0.005*
The number of labor stages.	16	24.2	50	75.8	45	68.2	21	31.8	25.632	<0.001**
<b>The first stage of labor</b>										
Duration of the first stage of labor.	5	7.6	61	92.4	55	83.3	11	16.7	11.622	<0.001**
Foods allowed in the latent stage.	13	19.7	53	80.3	63	95.5	3	4.5	77.537	<0.001**
Foods allowed in the active phase.	0	0.0	66	100.0	40	60.6	26	39.4	57.391	<0.001**
Bladder emptying in the first stage of labor.	11	16.7	55	83.3	55	83.3	11	16.7	58.667	<0.001**
Exercises and relaxation techniques in the first stage.	11	16.7	55	83.3	52	78.8	14	21.2	51.045	<0.001**

**Table (6): Frequency distribution of women`s knowledge regarding second stage of labor pre and post- intervention (N= 66).**

Items	Pre-Intervention				Post-intervention				Chi-Square	
	Correct		Incorrect		Correct		Incorrect		X <sup>2</sup>	P
	n	%	n	%	n	%	n	%		
<b>Second stage of labor</b>										
Duration of the second stage of labor	4	6.1	62	93.9	44	66.7	22	33.3	50.256	<0.001**
Proper position in the second stage of labor	4	6.1	62	93.9	58	87.9	8	12.1	88.689	<0.001**
The correct way to bearing down	14	21.2	52	78.8	61	92.4	5	7.6	68.208	<0.001**

**Table (7): Frequency distribution of women`s knowledge regarding third, and fourth stages of labor pre and post- intervention (N= 66).**

Items	Pre-Intervention				Post-intervention				Chi-Square	
	Correct		Incorrect		Correct		Incorrect		X <sup>2</sup>	P
	n	%	n	%	n	%	n	%		
<b>Third stage of labor</b>										
Duration of the third stage of labor	19	28.8	47	71.2	56	84.8	10	15.2	42.271	<0.001**
<b>Fourth stage of labor</b>										
Duration of the fourth stage of labor	19	28.8	47	71.2	45	68.2	21	31.8	20.504	<0.001**
Ideal time for breastfed after birth	4	6.1	62	93.9	32	48.5	34	51.5	29.944	<0.001**



**Figure (1): Comparison of total knowledge levels before and after intervention**

## DISCUSSION

Antenatal care is the careful, thorough assessment and follow-up of pregnant women that provides knowledge, advice, screening, and treatment to ensure the best possible health for the mother and foetus. (Salama & Aly, 2019). The current study hypothesized that, the women's level of knowledge will improve after attending the educational classess. The study results revealed that tested knowledge domains were highly statistically significant improvements in the post-intervention than pre-intervention. This leads to acceptance of this hypothesis.

Also, the intervention had a positive impact in this study; there were improvements in women's knowledge after prenatal education, as the majority of pregnant women in the post-intervention correctly answered questions about nutrition, exercise, and labour. This

is consistent with the findings of a study by Madhavanprabhakaran, Souza, and Nairy (2016), who discovered that a childbirth education programme improved nulliparous women's knowledge of labour and delivery preparation.

In a recent randomised controlled study, Cankaya and Simsek (2021) looked into the impact of prenatal courses given to primiparous women on fear of birth, childbirth self-efficacy, depression, anxiety, stress, and mode of delivery. According to the findings of this study, a 4-week antenatal education programme given to pregnant women increased childbirth self-efficacy while decreasing birth fear, depression, anxiety, and stress both during pregnancy and postpartum. Antenatal education as well urges women to give birth vaginally.

One other study conducted by Hassanzadeh et al. (2019), between regular and irregular attenders, primiparous women's childbirth knowledge and satisfaction with childbirth h preparation classes were compared, with the findings showing that regular attendance at childbirth preparation classes is associated with higher women's knowledge, which can help primiparous women meet their learning needs, decrease maternal deaths, and improve maternal health.

During pregnancy, the World Health Organization (WHO) advises eight antenatal visits. (Ahinkorah et al., 2018). The majority of women in this study received antenatal care, but more than two-thirds attended fewer than four visits. The most likely reason for the low number of visits is that the majority of women follow up in clinics and private centers. This is consistent with the results of the study provided by Reis, Silva, and Borges (2021) who discovered that, while all postpartum women received antenatal care, more than a fifth attended fewer than four visits due a lack of understanding about the importance of multiple visits, not having easy access to the health facility, not really being cognizant of pregnancy, and not having a partner for the visit.

## **CONCLUSION**

Based on the findings of the present study, it can be concluded that an educational programme that has a positive effect on a primigravida woman knowledge about preparing for childbirth. There was an obvious increasment in studied women satisfactory knowledge level of childbirth preparation in post- intervention than the pre- intervention.

## RECOMMENDATION

*Based on the findings of this study, the following recommendations are made :*

- 1- It is recommended that childbirth preparation classes be integrated into routine prenatal care, and that all pregnant women be motivated to attend these classes.
- 2- Educational materials such as booklets and pamphlets should be developed for pregnant women according to their beliefs, attitudes, and cultures.
- 3- Attempting to increase the belief of pregnant women in the importance of practicing exercises of all kinds through various health initiatives.

## REFERENCES

- Ahinkorah, B.O., Seidu, A.A., Budu, E., Mohammed, A., Adu, C., & Agbaglo E. (2018). Factors associated with the number and timing of antenatal care visits among married women in Cameroon: Evidence from the 2018 Cameroon Demographic and Health Survey. *J Biosoc*, 1–11. [Retrieved from:org/10.1017/S0021932021000079](https://doi.org/10.1017/S0021932021000079).
- Alatawi1, M., Faheem, W.A., & Alabdulaziz, H. (2020). Knowledge, attitude, and practice of primigravida women on birth preparedness. *The Open Nursing Journal*, 21. Retrieved from <https://opennursingjournal.com>
- Cankaya, S & Simsek, B. (2021). Effects of antenatal education on fear of birth, depression, anxiety, childbirth self-efficacy, and mode of delivery in primiparous pregnant women: A Prospective Randomized Controlled Study. *Clinical Nursing Research*, 30(6), 818–829. doi: 10.1177/1054773820916984
- Danielewicz, H., Myszczyzyn, G., Debinska, A., Myszkal, A., Boznanski, A., & Hirnle, L. (2017). Diet in pregnancy—more than food. *Eur J Pediatr*, 176, 1573–1579.
- El-Kurdy, R., Hassan, S. I., Hassan, N. F., & El-Nemer, A. (2017). Antenatal education on childbirth self-efficacy for Egyptian primiparous women: A randomized control trial. *IOSR Journal of Nursing and Health Science*, 6(4), 15–23. Retrieved from: [org/10.9790/1959-0604021523](https://doi.org/10.9790/1959-0604021523).



El-Nemer A. (2015). Effect of childbirth counseling on pregnant women requested for cesarean delivery. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)*, 4 (4), 24-29.

√ Hassanzadeh , Abbas-Alizadeh, F. , Meedy, S. , Charandabi, S.M., & Mirghafourvand, M. (2019). Assessment of childbirth preparation classes: A parallel convergent mixed study. *Reproductive Health*, 16,160. Retrieved from:org/10.1186/s12978-019-0826-2

Kızıllırmak, A., & Baser, M. (2016). The effect of education given to primigravida women on fear of childbirth. *Applied Nursing Research*, 29, 19–24.

Lim, Z.X., Wong, J.L., Lim, P.Y., & Soon, L.K. (2018). Knowledge of nutrition during pregnancy and association factors among antenatal mothers. *International Journal of Public Health and Clinical Sciences*, 5(1), 117-128.

Madhavanprabhakaran, G.K., D'Souza, M.S., and KarkadaSubrahmanya Nairy, K. (2016). Effectiveness of childbirth education on nulliparous women's knowledge of childbirth preparation, pregnancy anxiety and pregnancy outcomes. *Nursing and Midwifery* Retrieved from <https://www.researchgate.net/publication/310739300>

Masoumi, S. Z., Kazemi, F., Oshvandi, K., Jalali, M., Esmaeili-Vardanjani, A., & Rafiei, H. (2016). Effect of training preparation for childbirth on fear of normal vaginal delivery and choosing the type of delivery among pregnant women in hamadan, IRan: A Randomized Controlled Trial. *Journal of Family and Reproductive Health*, 10(3), 115–121.

MOHP. (2015). *Egypt demographic and health survey*. (2015). Retrieved from. <https://dhsprogram.com/pubs/pdf/FR302/FR302.pdf>

Oats, J., Abraham, S., & Llewellyn-Jones. (2017). *Fundamentals of obstetrics and gynaecology*. (10th Ed). (China: Elsevier 2017) 40- 54.

Podder, I. (2015). A study to assess the effectiveness of a video assisted child birth education programme on knowledge, intra-partum behaviour, maternal and foetal outcome among primigravida mothers in selected hospitals of Pune city. *BHARATI VIDYAPEETH DEEMED UNIVERSITY, pune*.

Reis-Muleva, B., Duarte, L.S., Silva, C.M., Gouveia, L.M.R., & Borges, A.L.V. (2021). Antenatal care in Mozambique: Number of visits and gestational age at the beginning of antenatal care. *Rev. Latino-Am. Enfermagem*. Retrieved from:[org/10.1590/1518-8345.4964.3481](https://doi.org/10.1590/1518-8345.4964.3481)

Salama, A.M, Aly, F.K. (2019). Effect of antenatal instructional package on pregnant women' knowledge, attitude and practices. *American Journal of Nursing Research*, 7(4), 519-533. Retrieved from:[10.12691/ajnr-7-4-14](https://doi.org/10.12691/ajnr-7-4-14)

Soma-Pillay, P., Nelson-Piercy, C., Tolppanen, H., & Mebazaa, A. (2015). Physiological changes in pregnancy. *Cardiovasc J Afr* ,27(2): 89-94. Retrieved from:[org/10.5830/CVJA-2019-021](https://doi.org/10.5830/CVJA-2019-021) [PMID: 27213856].

Tadele, N., & Lamaro T. (2017). Utilization of institutional delivery service and associated factors in Bench Maji zone, Southwest Ethiopia: community based, cross sectional study. *BMC Health Serv Res*, 17(1), 101. Retrieved from :[org/10.1186/s12913-017-2057-y](https://doi.org/10.1186/s12913-017-2057-y) [PMID: 28143513].

WHO, UNICEF, & UNFPA. (2018). Maternal health. Estimates by WHO, UNICEF and UNFPA. *Printed by the UNFPA document production services*. Retrieved from <https://egypt.unfpa.org/en/topics/maternal-health>

WHO, UNICEF, UNFPA, World Bank Group & United Nations Population Division. (2019). Maternal Mortality: 2000 to 2017. Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Printed by the WHO document production services, Geneva, Switzerland. Retrieved from <http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2017/en/>. on 2019.

## تأثير برنامج تعليمي عن التحضير للولادة على معرفة المرأة الحامل للمرة الأولى

ميادة سليمان راشد<sup>1</sup>، أ.د. سناء علي نور<sup>2</sup>، أ.د. هند صلاح الدين محمد<sup>3</sup>، أ.د أحمد رجاء رجب<sup>4</sup>، أ.م.د. نجاة

صلاح سلامة<sup>5</sup>، أ.م.د. السيدة حمدي نصر<sup>6</sup>

ماجستير تمريض النساء والتوليد- كلية التمريض - جامعة بورسعيد<sup>1</sup>

استاذ امراض النساء و التوليد - كلية التمريض - جامعة الزقازيق<sup>2,3</sup>

أستاذ الصحة الإنجابية - المركز الإسلامي العالمي للدراسات والبحوث السكانية - جامعة الأزهر<sup>4</sup>

أستاذ مساعد في تمريض الأمومة والتوليد وأمراض النساء- كلية التمريض - جامعة بورسعيد<sup>5,6</sup>

### الخلاصة

يعد التنقيف والتحضير للولادة عنصر أساسي في رعاية ما قبل الولادة. حيث تُمكن المرأة من التعامل مع الحمل وتعزز نتائج الحمل. هذا وكان الهدف من الدراسة هو تقييم تأثير برنامج تعليمي عن التحضير للولادة على معرفة النساء الحوامل للمرة الأولى حول الاستعداد للولادة. وقد تم استخدام تصميم شبه تجريبي. هذا وقد أجريت هذه الدراسة في عيادات رعاية الحوامل بالمراكز الطبية التابعة للتأمين الصحي الشامل بمدينة بورسعيد. وقد اشتملت عينه الدراسة علي (66) من النساء الحوامل للمرة الأولى . هذا وقد تم جمع البيانات باستخدام: استبيان المعلومات الديموغرافية فيما يتعلق بعملية المخاض والتحضير للولادة. وقد أسفرت نتائج الدراسة علي أن تراوحت أعمار النساء بين 25 و 35 سنة، أظهرت العينة المدروسة مستوى عالي من المعرفة حول التحضير للولادة، كانت هناك فروق ذات دلالة إحصائية عالية بين مستوى المعرفة المرضي (75.8%) من التحضير للولادة بعد التدخل مقارنة بما قبل التدخل. (18.2%).. وقد اوصت الدراسة بأن هناك حاجة لبرامج التنقيف المستمر بشأن الولادة للنساء الحوامل في أماكن رعاية ما قبل الولادة.

**الكلمات المرشدة :** التحضير للولادة، الحوامل للمرة الأولى، تعاليم الولادة.