



# EFFECTIVENESS OF PTP (PLANNED TEACHING PROGRAMME) ON KNOWLEDGE REGARDING WARNING SIGN OF PREGNANCY AMONG PRIMI GRAVIDA MOTHER

*Mrs. Bharat<sup>1</sup>*

*Dr. Rajwant Kaur Randhawa<sup>2</sup>*

*Dr. Priyanka Chaudhary<sup>3</sup>*

*<sup>1</sup>PhD. (Nursing) Scholar, Desh Bahgat University Off to NHI, Mandi Gobindgarh District  
Fatehgarh Sahid, Punjab- 147301 India.*

*Ass. Professor, Savitri Jindal Institute of Nursing, Jindal Hospital. Model Town, Hisar, Haryana  
Mobile No. 9729010808*

*Email: bhartipoonia@gmail.com*

*<sup>2</sup>Professor (CHN) Desh Bahgat University Off to NHI, Mandi Gobindgarh District Fatehgarh  
Sahid, Punjab- 147301 India.*

*<sup>3</sup>Associate Professor (MSN) Desh Bahgat University Off to NHI, Mandi Gobindgarh District  
Fatehgarh Sahid, Punjab- 147301 India.*

*Subject- Obstetrics & Gynaecological Nursing*

## **Abstract**

*The objective of the study was to assess the effectiveness of PTP (planned teaching programme) on warning sign of pregnancy among primigravida mothers. The data collection procedure was carried out in the month of October and November 2021. The sample 60 primigravida mothers were taken from PHC, Chaudharywas, Hisar. Demographic Variables for age at marriage, age, education, occupation, religion, types of family, dietary pattern, source of information. The gathered data was analyzed by calculating the frequency, mean, percentage, standard deviation, t-test and chi square. The graph, and tables were used to present the findings of the study. Findings depicts that majority Primigravida mothers 46.7 % age at marriage was  $\leq 20$  and 53.3% was  $\geq 20$ . Primigravida mothers 25% were in the age group of  $\leq 20$ , 40% were in the age group of 21-25, 26.7% were*

in the age group of 26-30, and 8.3% were in the age group of  $\geq 30$ . Regards to education 16.7% of them were illiterate, 18.3% were completed primary education, 16.7% completed secondary education, 21.7% completed higher secondary education and 26.7% graduate. 61.7% primigravida mothers were house wife, 16.7% labour, 15% self employ, and 6.7% govt employ. Primigravida mothers 76.7% were hindus, 10% muslims, 11.7% sikh, and 1.67% Christian. 48.3% primigravida were from nuclear family, 28.3% from joint family, and 23.3% from extended family. 40% were vegetarian, 50% non vegetarian, and 10% eggetarian. 43.3% of the primigravida mothers received information from friends and relative, 16.7% from mass media and, 15% from health care personnel and 25% from other sources. 30% primigravida mothers had previous knowledge about warning sign of pregnancy and 70% have not any previous knowledge about warning sign of pregnancy. Mean post-test knowledge score of primigravida mothers were 24.11 higher than the Mean pre-test knowledge score 9.9 and standard deviation of primigravida mothers was 4.40. Calculated 't' value for knowledge score of primigravida mothers was 34.96, found to be statistically significant at 0.05 level of significance. It reveals that PTP was effective to enhance the level of knowledge on warning sign of pregnancy among primigravida mothers.

**Key Word:** Knowledge, Warning Sign, Pregnancy, Primigravida mother, PTP, Effectiveness.

## Introduction

Pregnancy is the period from conception to birth. After egg is fertilized by a sperm and then implanted in the lining of the uterus, it develops into the placenta and embryo, and later into a fetus. [1]

The duration of pregnancy has been calculated in terms of 9 calendar months and 7 days or 280 days or 40 weeks, calculated from the first day of the last menstrual period. [2]

This period of pregnancy in human females is divided into three trimesters. The first trimester which is 12 weeks long includes the first to 12 weeks of the pregnancy, during this period the product of conception grows from the just-visible speck of the fertilized ovum to a lively embryo and this trimester is typically the riskiest part of the pregnancy, most of miscarriage take place in this period. The second trimester which is fifteen weeks long includes 13 through 27 by gestational age, during this period the fetus grows fast. The third trimester of 13 weeks includes weeks 28 through 40 by gestational age. The third trimester is marked by further development of the fetus, as well as the fetus fat stores to prepare it for birth. [3]

Women who are diagnosed positive for pregnancy early then mother get a proper antenatal care and proceed a healthy pregnancy and deliver a healthy baby. [2]

Moreover, pregnancy is time of great physical and emotional change for women. These physiological changes assist fetal survival as well as prepare the mother for labour. These are due to effects of specific hormones that are Progesterone and Estrogen which help a pregnant woman to nurture the fetus, prepare the body for labour, develop her breasts for production of milk during puerperium. [4]

Causes of physiological changes in pregnancy are 1. Metabolic demands brought on by the fetus, placenta and uterus. 2. Due to increasing levels of pregnancy hormones that are

*Progesterone and Estrogen.3. Mechanical pressure from the gravid uterus.*<sup>[4,5]</sup>

There are profound anatomical, physiological, endocrinological and biochemical changes during pregnancy in various system of the body such as reproductive system, hematological, cardiovascular system, respiratory system, urinary tract, gastrointestinal system, skin, endocrine gland and psychological changes. This can unmask or worsen a pre-existing maternal disease like heart or renal disease. <sup>[3]</sup>

These changes may be unpleasant and worrying but rare chance of causing alarm because these changes are normal. These so-called minor disorders or ailments of pregnancy can be troublesome on a day to day basis. By proper explanation and simple treatment, these minor ailments are improved. These discomforts of pregnancy are those presentations and conditions that result from pregnancy but do not significantly interfere with activities of daily living or any significant threat to the health of the mother or baby, in contrast to pregnancy complications. During pregnancy most of the women experience some common minor ailments such as nausea, vomiting, back pain, heartburn, constipation leg cramps etc. that are spontaneously subside after delivery. <sup>[6,7]</sup>

Some women experience health problems during pregnancy. Health of mother and fetus or both together affected by these complication. In some case if woman was not having any medical history before getting pregnancy, they can also affected by these complications. These complications make the pregnancy a high- risk pregnancy. High risk pregnancy is diagnosed, treated in early stage by health workers then these complications can not be worsen for mother and fetus. The commonest warning signs are:- Hyperemesis Gravidarum, Bleeding or leaking fluid from the vagina, Blurry or impaired vision with severe headache, Pre-eclampsia and Eclampsia, Placenta Previa, Decreased or no fetal movement, Severe cramp in abdomen, Severe Leg cramp, Syncope, Varicose vein, Oedema, Dyspnoea( shortness of breath), Severe Anemia. <sup>[4]</sup>

Globally, During 1990 to 2015 near about 10.7 million antenatal mothers were died by occurring complications during antenatal time period thus maternal mortality rate is high in developing countries. Most of antenatal mother were belongs to sub-Saharan Africa and studies found that in sub-Saharan Africa mothers were having less knowledge regarding warning sign of pregnancy. <sup>[8,9,10]</sup>. 73% mothers were died due to severe bleeding, increased blood pressure during antenatal period, unsafe abortion, complications intranatal period and infections during puerperium. <sup>[9,10,11]</sup>.

All pregnancies are considered as risk for mother but life-threatening obstetrics complication occur among 15% of antenatal mothers which needed immediate treatment to survive. <sup>[12]</sup>.

To decrease the maternal mortality rate, it is necessary that every mother should have enough knowledge regarding warning sign of pregnancy so mother can early detect complication and start treatment. <sup>[13]</sup> By educating and improving knowledge of antenatal mothers regarding warning sign of pregnancy, achieve the target upto 2030 that maternal mortality rate should be less than 70 per 100,000 live births <sup>[9,14]</sup>. Previous research studies has shown that mother were having very less knowledge regarding warning sign of pregnancy, delivery, puerperium. For instance, study was conducted in rural Uganda showed that very less 19% of mothers had knowledge of three or more key warning signs that take place in pregnancy, delivery and puerpeium. Results of Studies that only few 15.5% and 31.3% of mothers were having knowing about obstetric danger signs, these studies were took place at Somali region of Ethiopia and Tanzania <sup>[15]</sup>.

**Objectives of the Study:**

- ❖ To assess the pre-test & post test level of knowledge regarding warning sign of pregnancy among primigravida mothers.
- ❖ To assess the effectiveness of PTP (planned teaching programme) regarding warning sign of pregnancy among primigravida mothers.

**Hypothesis:**

- ❖  $H_1$ : There will be significant difference in the mean pre-test and post-test knowledge score regarding warning sign of pregnancy among primigravida mothers.

**Materials and Methods:**

Pre-experimental research design (one group pre-test post-test) was used in the study to achieve the objectives of the study. The samples were collected by using the convenient sampling technique. The data was collected from the participants by using a self-structured knowledge questionnaire. Total questions were 30 and total maximum score was 30. Both descriptive and inferential statistics was used for data analysis.

**Results and Discussion:****Section I: Frequency and percentage distribution of primigravida mothers according to demographic variables.**

Primigravida mothers 46.7 % age at marriage was  $\leq 20$  and 53.3% was  $\geq 20$ . Primigravida mothers 25% were in the age group of  $\leq 20$ , 40% were in the age group of 21-25, 26.7% were in the age group of 26-30, and 8.3% were in the age group of  $\geq 30$ . Regards to education 16.7% of them were illiterate, 18.3% were completed primary education, 16.7% completed secondary education, 21.7% completed higher secondary education and 26.7% graduate. 61.7% primigravida mothers were house wife, 16.7% labour, 15% self employ, and 6.7% govt employ. Primigravida mothers 76.7% were hindus, 10% muslims, 11.7% sikh, and 1.67% Christian. 48.3% primigravida were from nuclear family, 28.3% from joint family, and 23.3% from extended family. 40% were vegetarian, 50% non vegetarian, and 10% eggetarian. 43.3% of the primigravida mothers received information from friends and relative, 16.7% from mass media and, 15% from health care personnel and 25% from other sources. 30% primigravida mothers had previous knowledge about warning sign of pregnancy and 70% have not any previous knowledge about warning sign of pregnancy.

**Section II: Table 1. Pre-test level of knowledge regarding warning sign of pregnancy among primigravida mothers**

Knowledge Level	Range of Score	No. of Respondent	
		Frequency (f)	Percentage (%)
Good	>69% Score	0	0
Average	35% - 68% Score	24	40
Below Average	< 34 %Score	36	60
Total		60	100

Table 1. shows the description of pre-test level of knowledge that no one mother had good knowledge, 24(40%) of them had average knowledge, and 36(60%) of them had below average knowledge.

**Section III: Table 2. Mean, mean percentage, standard deviation percentage of pretest level of knowledge regarding warning sign of pregnancy among primigravida mothers**

S. No	Knowledge	No. of Items	Mean	S.D ( $\sigma$ )	Mean %
1	Over all total	30	9.91	4.405	33.03

Table 2. shows that the Mean knowledge score was 9.91, standard deviation was 4.405 and mean percentage was 33.03.

**Section IV: Table 3. Post-test level of knowledge regarding warning sign of pregnancy among primigravida mothers**

Knowledge Level	Percentage (%)	No. of Respondent	
		Frequency (f)	Percentage (%)
Good	$\geq 69$	51	85
Average	35 -68	9	15
Below Average	$\leq 34$	0	0
Total		60	100

Table 3. shows the description of post-test level of knowledge with regard to score 51(85%) of them had good knowledge, 9(15%) of them had average knowledge, and 0(0%) of them had below average knowledge.

**Section V: Table 4. Mean, mean percentage, standard deviation percentage of post- test level of knowledge regarding warningsign of pregnancy among primigravida mothers**

S. No.	Knowledge	No. of Items	Mean	S.D ( $\sigma$ )	Mean %
1	Over all total	30	24.116	3.189	80.39

Table 4. shows that the Mean post test knowledge was 26.116, Standard deviation was 3.189 and Mean percentage was 80.39 regarding knowledge on warning sign of pregnancy among primigravida mothers.

**Section VI: Table 5. Evaluate the effectiveness of planned teaching programme on warning sign of pregnancy among primigravida mothers.**

Sr. No	Aspects of knowledge	Max. score	Mean	S.D	Mean %	't' value
1	Pre test Knowledge score	30	9.91	4.405	33.03	34.969*
2	Post test Knowledge score	30	24.116	3.189	80.39	
3	Enhancement	30	14.2	3.145	47.33	

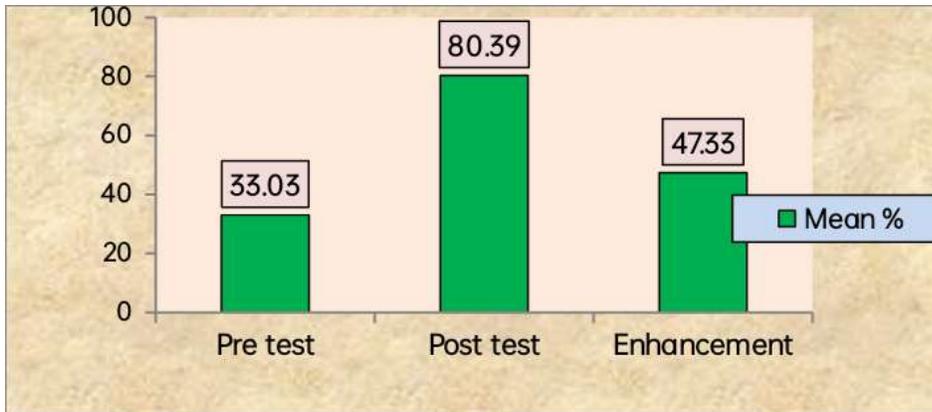
**Graph 1.**

Table 5 & Graph 1 shows the comparison of pre-test knowledge of the primigravida mothers regarding warning sign of pregnancy with regard to score. 't' value is 34.96 at the level of significant  $p= 0.05$ , found to be significant.

**Conclusion:-**

- ❖ The Mean post-test knowledge score of 24.44 on warning sign of pregnancy was significantly higher than the Mean pre-test knowledge score of 8.4 among primigravida mothers. Calculated 't' value for knowledge score was 23.62 and found to be statistically significant at 0.05 level of significance. This indicates that planned teaching programme had improved the knowledge regarding warning sign of pregnancy among primi gravida mothers.

**Implications:-**

This study has the following implication to nursing practice, education administration and research.

**Nursing Practice:-**

As the group of health care professional and community-based setting, nurses are well positioned to advocate for individual and families in implementing evidence- based activities designed to prevent illness and promotion of healthy behavior. Several implications can be drawn from the present study for nursing practice.

- ❖ The expanded role of professional nurse emphasizes the activities which promote health, warning sign of pregnancy become a part of care, it is expected that primigravida mothers will have normal, natural and satisfying delivery, decrease in maternal mortality and morbidity rate.
- ❖ The nurse should organize exhibitions in community to impart adequate knowledge regarding antenatal period.
- ❖ It is the responsibility of community health nurse to identify the health related behavior of the community and accordingly she motivates the public for health promoting behavior.
- ❖ Community health personnel like ANMs and ASHA must be knowledgeable enough so

*that they can teach the community importance of antenatal care.*

### **Nursing Education:-**

*In the nursing education curriculum, we are concerned to preventive expert. Before teaching and performing, there must be adequate guidance and evaluation of nursing student to ensure adequate knowledge on warning sign of pregnancy in dealing with primigravida mothers in community area*

### **Nursing Administration:-**

- ❖ The staff development programme for nursing personnel is adequate in existing health care system.*
- ❖ In the event of ever-growing challenges of maternity nursing, the administration has a responsibility to provide nurses with staff development opportunities.*
- ❖ This would enable the nurses to update their knowledge, acquire skill, and provide high quality care.*
- ❖ So more and more in service education programme should be provided on primigravida mother's health specially related to warning sign of pregnancy. The emphasis has been shifted from "cure oriented to care oriented".*

### **Nursing Research:-**

*There is need to extend intensive nursing research in the area of primigravida mother's education specially to assess the knowledge regarding warning sign of pregnancy. Various methods can be used to strengthen the knowledge of people by the researches.*

*The result of this study indicate that primigravida mothers have less knowledge regarding warning sign of pregnancy but it can be improved by health education and further insight into the existing situation will enlighten to understand the problem and define way out.*

### **Recommendations:-**

*On the basis of finding of the study, the following recommendation are offered for further research.*

- The study can be replicated on large sample to validate the finding and make generalization.*
- A similar study may be conducted with pre-test and post-test control group design.*
- A descriptive study can be conducted to assess the knowledge regarding warning sign of pregnancy.*

### **Acknowledgement:**

*Researcher would like to acknowledge support and guidance of Desh Bhagat university along with my PhD Supervisor and Co-supervisor.*

**Ethical clearance:** Taken from Institutional Ethical Committee, Desh Bhagat University, Mandi Govindgarh.

**Source of Funding:** Self-funded project

**References:**

1. <https://www.scribd.com/doc/48848043/minor-disorders-of-pregnancy-final-copy>
2. Mrs. Philomena Fernandes (2014). Knowledge of antenatal women on selected warning signs of pregnancy with a view to develop an information booklet. *www.jiarm.com*. V- 2. 1-5 333-341.
3. Dr. Shally Magon, Sanju Sira (2019). *Midwifery and Obstetrics*. Published by Lotus Publishers. Edition I. Pg. 43, 88.
4. Nega Terefe, Aderajew Nigussie. Prevalence of Obstetric Danger Signs during Pregnancy and Associated Factors among Mothers in Shashemene Rural District, South Ethiopia. Volume 2020. Article ID 6153146. <https://doi.org/10.1155/2020/6153146>
5. Dr. Jb Sharma (2015). *Midwifery & Gynaecological Nursing*. Edition I. Published by Avichal Publishing company. Pg 39, 59
6. <https://www.scribd.com/doc/48848043/minor-disorders-of-pregnancy-final-copy>
7. Mrs. Philomena Fernandes (2014). Knowledge of antenatal women on selected warning signs of pregnancy with a view to develop an information booklet. *www.jiarm.com*. V- 2. 1-5 333-341.
8. Alkema L, Chou D, Hogan D, Zhang S, Moller AB, Gemmill A, United Nations Maternal Mortality Estimation Inter-Agency Group collaborators and Technical Advisory Group, et al. Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN maternal mortality estimation inter- agency group. *Lancet*. 2016;387(10017):462–74.
9. WHO. *Maternal mortality fact sheet*. Geneva: World Health Organization; 2018. <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>. Accessed 5 July 2019.
10. WHO. *Trends in maternal mortality, to 2015 estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division*. Geneva: WHO; 1990. p. 2015.
11. Say L, Chou D, Gemmill A, Tunçalp O, Moller AB, Daniels J, et al. Global causes of maternal death: a WHO systematic analysis. *Lancet Glob Health*. 2014;2(6):e323–33.
12. World Health Organization (WHO). *Managing complication of pregnancy & childbirth a guide for midwives and doctor*. Geneva: WHO; 2007.
13. Perreira KM, Bailey PE, de Bocaletti E, Hurtado E, de Villagrán SR, Matute J. Increasing awareness of danger signs in pregnancy through community and clinic based education in Guatemala. *Matern Child Health J*. 2002;26:19–28.

- 14 World Health Organization. *Strategies towards ending preventable maternal mortality*; 2015.  
<https://apps.who.int/iris/bitstream/handle/10665/153540/WHORHR15.03eng.pdf>. Accessed 5 July 2019.
- 15 Maseresha N, Woldemichael K, Dube L. *Knowledge of obstetric danger signs and associated factors among pregnant women in Erer district, Somali region, Ethiopia*. *BMC Women's Health*. 2016;16:30.

