

**A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED
TEACHING PROGRAMME ON KNOWLEDGE REGARDING PLACENTA PREVIA
AMONG NURSING STUDENTS AT SELECTED NURSING
COLLEGE OF MEHSANA DISTRICT**

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ABSTRACT

INTRODUCTION: When the Placenta is implanted partially or completely over the lower uterine segment (over and adjacent to the internal OS) it is called Placenta Previa. It is one type of antepartum hemorrhage. Antepartum hemorrhage is no longer a major cause of maternal mortality in high resource countries, but remains an important cause of perinatal and maternal morbidity; it is known to be an important cause of complication of pregnancy in lower resource countries. (Berhan, Y. et al., 2014). DESIGN: A quantitative approach using pre-experimental one group pre-test post-test design. PARTICIPANTS: 60 Nursing students were selected using probability- Simple Random sampling technique in selected colleges of Mehsana district. INTERVENTIONS: Planned teaching programme was given to the Nursing students. TOOL: Self planned Questionnaire was used to assess the level of Knowledge on Placenta previa among Nursing students. RESULTS: In this study overall Among the 60 Nursing students, the majority of the samples 57(95%) were in the age group of 21-22years, 40(67%) of the sample were in the female gender, 30(50%) of the sample were in the stream of education, 47(78%) of the samples were in Joint family, of the samples 48 (80%) were in previous source of information. CONCLUSION: The findings of the study revealed that Planned teaching programme helps in improving knowledge regarding Placenta previa among Nursing students. Social media has become an integral part of modern life, particularly for youth, influencing their psychological well-being in various ways. This paper explores the multifaceted psychological impacts of social media on young individuals, highlighting both positive and negative effects. On the positive side, social media enhances connectivity, provides access to information and support, fosters self-expression, and aids in skill development. However, it also poses significant challenges, including cyberbullying, body image issues, addiction, sleep disruption, and diminished face-to-face interactions. The paper underscores the need for effective strategies to mitigate negative impacts, such as promoting digital literacy, encouraging balanced use, and fostering supportive environments. Understanding these dynamics is crucial for guiding youth towards healthier social media practices and supporting their overall mental well-being..

Keywords: Assess, Effectiveness, planned teaching programme, Knowledge, Placenta previa, Nursing students.

INTRODUCTION

“The past grows gradually around One, like a placenta for dying”

-John Berger

Placenta previa is the complete or partial covering of the internal os of the cervix with the Placenta. ¹²³ It is a major risk factor for postpartum hemorrhage and can lead to morbidity and mortality of the mother and Neonate. ⁴

This situation prevents a safe vaginal delivery and requires the delivery of the neonate to be via cesarean delivery. Most cases are diagnosed early on in pregnancy via sonography and others may present to the emergency room with painless vaginal bleeding in the second or third trimester of pregnancy. The presence of placenta previa can also increase a woman’s risk for placenta accreta spectrum (PAS). ⁵

Placenta previa is a condition where the placenta partially or fully covers the cervical opening. It presents a risk of hemorrhage. Advanced maternal age and previous C-sections increase the risk. Diagnosis is made using ultrasound. For minor bleeding, bed rest is usually recommended, while heavy or uncontrollable bleeding requires emergency C-section. The condition increases risks for both mother and baby, such as bleeding, preterm birth, and low birth Weight⁶.

About one-third cases of antepartum hemorrhage belong to placenta previa. The incidence of placenta previa ranges from 0.5-1% amongst hospital deliveries. In 80% cases, it is found to multiparous women. The incidence is increased beyond the age of 35, with high birth order pregnancies and in multiple Pregnancy. ⁷

A complete coverage of the cervical os by the placenta. if the leading edge of the placenta is less than 2 cm from the internal os, but not fully covering, it is considered a Marginal previa Because of the inherent risk of hemorrhage, placenta previa may cause serious morbidity and mortality to both the fetus and the mother Placenta Previa. ⁸

The incidence of a low-positioned placenta decreases from 5% in the second trimester to 0.3-0.9% in the third Trimester. ⁹

Thus, a group of women will have a placenta located outside the LUS in the third trimester, without any risks, but a high-risk group will have a placenta located inside the LUS in the third trimester. Identifying these high- and low-risk groups in the second trimester could lower the burden and costs of follow-up ultrasound visits, prevent unnecessary lifestyle limitations and decrease anxiety in women in the low-risk Group. ¹⁰

The major causes of antepartum hemorrhage are placenta previa and abruption placenta; however, the exact cause of bleeding in some cases may be undetermined. In a small proportion

where placenta previa and abruption have been excluded, the cause may be related to local lesions of the cervix and vagina, e.g., cervicitis, cervical erosion, genital tumors, vulvar varicosities and heavy show and occasionally fetal in origin e.g., ruptured vasa previa and velamentous insertion of the cord. (Green-top Guideline No. 63.: RCOG; 2013).¹¹

Morbidities associated with placenta previa include antepartum bleeding (relative risk [RR] 9.81, 95% confidence interval [CI] 8.92–10.79), need for hysterectomy (RR 33.26, 95% CI 18.19 – 60.89), morbid adherence of the placenta, intrapartum hemorrhage (RR 2.48, 95% CI 1.55–3.98), postpartum hemorrhage (RR 1.86, 95% CI 1.46–2.36), blood transfusion (RR 10.05, 95% CI 7.45–13.55), septicemia (RR 5.5, 95% CI 1.31–23.54), and thrombophlebitis (RR 4.85, 95% CI 1.50–15.69). In the United States, maternal mortality occurs in 0.03% of cases of placenta Previa.¹²

Placenta Previa a relatively common complication of pregnancy occurring in approximately 4-5% of antenatal patients and, from whatever cause, is associated with an increase in perinatal deaths and one of its causes. Hemorrhage during the antepartum period is a life-threatening emergency for mother and/or fetus. Late antepartum hemorrhage associated with an increased risk of postpartum hemorrhage, anemia, shock, low birth weight, intrauterine fetal death, and birth asphyxia. It contributes to 15-20% of maternal mortality in the world. (Mehul Patel et al., 2016).¹³

Placenta previa is one of the most serious complications during pregnancy and is associated with numerous adverse maternal and fetal-neonatal complications. Many of these are direct consequences of maternal antepartum and intrapartum hemorrhage. (Silver R. 2015).¹⁴

NEED OF THE STUDY

When the placenta is implanted partially or completely in the lower uterine segment it is called placenta previa. The objective of the study was to determine the incidence, obstetric risk factors, obstetric management, maternal mortality and morbidity, perinatal outcome in women presenting with placenta previa.¹⁵

About one-third cases of antepartum hemorrhage belong to placenta previa. The incidence of placenta previa ranges from 0.5-1% amongst hospital deliveries. In 80% cases, it is found to multiparous women. The incidence is increased beyond the age of 35, with high birth order pregnancies and in multiple pregnancy.¹⁶

Placenta previa affects 0.3% to 2% of pregnancies in the third trimester and has become more evident secondary to the increasing rates of cesarean sections.¹⁷

In this study 0.64% of the deliveries were complicated with placenta previa among them 23.6%

women were above 30 years of age and 80.2% were multigravidas. 60.4% had major degree placenta previa, 36.8% had prior cesarean deliveries, 7.5% had prior abortion, 39.7% preterm deliveries. 85.8% cases delivered by cesarean delivery, 12.7% cases had postpartum hemorrhage and 4.7% had placenta.

There were 86.8% ICU admissions, 3.8% cases of acute kidney injury in present series. Total 106 pregnant women with placenta previa were analyzed between January to December 2015. After applying the inclusion and exclusion criteria these women were analyzed with respect to their age, parity, gestational age and clinical features at presentation, history of warning bleeding, duration of hospitalization, need for blood transfusion, period of gestation at delivery, route of delivery and ICU admissions. For the newborn APGAR score, birth weight, need for NICU admission, still birth rate, neonatal mortality rate are noted down.¹⁸

Advancing maternal age, multiparity, prior cesarean section, and prior abortions are independent risk factors for placenta previa. Placenta praevia remains a risk factor for adverse maternal and perinatal outcome. The detection of placenta previa should encourage a careful evaluation with timely delivery to reduce the associated maternal and perinatal complications.¹⁹

A total of 57,251 women with singleton pregnancies gave birth during the 10-year study period. Among them, 6070 women had two consecutive births. For the first pregnancy, 1603 women delivered by cesarean delivery and 4467 by vaginal delivery. Among women with a history of cesarean delivery, placenta previa was an independent risk factor for hemorrhage (adjusted odds ratio [aOR]: 2.25, 95% confidence interval [CI]: 1.1–4.62), placenta accreta spectrum (PAS) disorders (aOR: 4.11, 95% CI: 1.68–10.06), and placenta previa (aOR: 6.24, 95% CI: 2.85–13.67) during the subsequent pregnancy. Puerperal infection, blood transfusion, and perinatal outcomes did not significantly differ between women with a history of placenta previa and women without this history.

Among women with a history of vaginal delivery, placenta previa increased the risk of PAS disorders (aOR: 5.71, 95% CI: 1.81–18.03) and placenta previa (aOR: 4.14, 95% CI: 1.07–16.04) during the subsequent pregnancy. There was no significant difference between the two groups in terms of hemorrhage, blood transfusion, puerperal infection, and perinatal outcomes.²⁰

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of Planned teaching program on knowledge regarding Placenta previa among Nursing students in selected colleges of mehsana district.

OBJECTIVE OF THE STUDY

- To assess the knowledge regarding Placenta previa.
- To evaluate the effectiveness of Planned teaching program on knowledge regarding Placenta previa
- To find out the association between knowledge with their selected demographic variables.
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HYPOTHESES

H0: There will be no significant difference between pretest and posttest knowledge score regarding Placenta previa among Nursing students at 0.05 level of significance.

H1: There will be significant difference between pretest and posttest knowledge score regarding Placenta previa after administration of Planned teaching programme among Nursing students at 0.05 level of significance.

MATERIAL AND METHOD

Pre-experimental one group pre-test post-test research design and Quantitative Approach. Effectiveness of Planned teaching programme on knowledge regarding Placenta previa among Nursing students in selected colleges of Mehsana district. The data was collected from 60 Nursing students. “Probability Purposive” sampling technique were used. A Planned knowledge questionnaire was selected to assess the knowledge regarding Placenta previa.

RESULT

Demographic data was analyzed using frequency and percentage. Frequencies, percentage, mean, mean percentage (%) and standard deviation was used to determine the knowledge score. The “t” value was computed to show the effectiveness of Planned teaching programme and chisquare test was done to determine the association between the pre-test knowledge of office employees with selected demographic variables.

□ Finding related to demographic data

In this study overall Among the 60 Nursing students, the majority of the samples 57(95%) were in the age group of 21-22 years,40 (67%) of the sample were in the female gender, 30(50%) of the sample were in the stream of education, 47(78%) of the samples were In Joint family, of the samples 48 (80%) were in previous source of information.

□ **Finding related to pre and post knowledge score**

Pre-test prior to the administration of Planned teaching programme, 33.33% of Nursing students poor knowledge (score: 0-10) and 66.67% Nursing students had average knowledge (score: 11-20) regarding Placenta previa among Nursing students.

Post-test that was marked improvement in the knowledge of Nursing student with (10%) of Nursing student gained good knowledge (score 21-30) and (90%) gained average knowledge (score 11-20) regarding Placenta previa among Nursing student. It was inferred from the below table that the planned teaching programme was effectiveness in improving knowledge on Placenta previa among Nursing student.

□ **Finding related to effectiveness of planned teaching programme**

Table 1: Distribution of subject on paired ‘t’ test between pre-test and post-test knowledge score regarding Placenta previa.

PARAMETER	MEAN	SD	MEAN %	t' VALUE
Pre-test	11.63	2.38	19.38	32.64
Post-test	16.97	2.73	28.28	

□ **Finding related to association between pre-test knowledge score of Nursing students with their selected demographic variables:**

To find out the pre-test knowledge score with selected demographic variables were found by using chi-square test. The results of the present study showed that there is no any significant association found between pre-test knowledge score and selected demographic variables like Age, gender, stream of education, type of family, Previous source of information and evaluate the knowledge regarding Placenta previa. So, the research fulfills study objective.

CONCLUSION

The present study aims to evaluate the effectiveness of Planned teaching programme on Knowledge regarding Placenta previa among the Nursing students at selected colleges. The study conducted by using a pre-experimental one group pretest-posttest Research Design. Selected area is there in study for sample collection at Mehsana. The sample size was 60 college Nursing students. The tool used for the study is self-Planned knowledge questionnaire. The response was

reanalyzed through descriptive (mean, frequency, percentage distribution, standard deviation) and inferential statistics (t test, Chi square). The findings were completed on the objective of the study.

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