



"AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING NORMAL PLACENTA AND ITS ABNORMALITIES AMONG 3RD YEAR GNM STUDENTS IN SELECTED NURSING SCHOOLS OF THE CITY."

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ABSTRACT

Aims: The aim of present study were to assess the pre-test knowledge regarding placenta and its abnormalities among the 3rd year GNM students in selected nursing schools, to assess the post-test knowledge regarding placenta and abnormalities among the 3rd year GNM students in selected nursing schools, to evaluate the effectiveness of video assisted teaching programmed regarding placenta and its abnormalities among the 3rd year GNM students in selected nursing schools. **Material and Methods:** Non probability convenient sampling technique was used to select the sample. Quantitative research approach with pre-experimental one group pre-test post-test design. The data collected during the month of November among the 3rd year GNM nursing students in selected nursing school of the city using socio demographic data sheet, structured knowledge questionnaire and video assisted teaching programme. **Results:** A total of 60 3rd year GNM nursing students participated in the study, 19-20 years of age group n=39, 21-22 years of age group n=16, 23-24 years of age group n=3, in which 3rd year GNM nursing students selected schools male n=7 and female n=53. On final scoring of test in pre-test score 17 were average, 37 were good, 2 were poor level of knowledge score. pre test effectiveness of video assisted teaching programme score 23 were average, 34 were good, 3 were poor. Post-test score 19 were good, 27 were very good, 8 were excellent level of knowledge score. Post effectiveness of video assisted teaching programme score 19 were average, 27 were very good, 8 were excellent. **Conclusions:** The study finds that the knowledge of age (in year), gender, area of residence, previous knowledge regarding normal placenta and its abnormalities, sources of information was significantly improved after receiving information in the form of video assisted teaching programme of selected normal placenta and its abnormalities.

KEYWORDS : effectiveness, video assisted teaching programme on normal placenta and its abnormalities.

INTRODUCTION**"Behind Every Healthy Baby Is A Healthy Placenta"**

-Harvey J. Kliman

The term Placenta comes from the Latin for cake, from Greek Placenta, meaning "flat".¹

The placenta is a temporary organ that connects the developing fetus via the umbilical cord to the uterine wall to allow nutrient uptake, thermo-regulation, waste elimination, and gas exchange via the mother's blood supply; to fight against internal infection; and to produce hormones which support pregnancy. Placentas are a defining characteristic of placental mammals, but are also found in marsupials and some non-mammals with varying levels of development.

The placenta functions as a fetomaternal organ with two components: the fetal placenta (Chorionfrondosum), which develops from the same blastocyst that forms the fetus, and the maternal placenta (Decidua basalis), which develops from the maternal uterine tissue. It metabolizes a number of substances and can release metabolic products into maternal or fetal circulations. The placenta is expelled from the body upon birth of the fetus.²

BACKGROUND OF THE STUDY

The placenta has multifaceted roles in fetal development and survival. Determination of placental abnormalities is very much essential in preventing intrauterine and prenatal morbidity and mortality. The aim of present endeavor was to study the placental histology and correlate with color flow Doppler ultrasonography, maternal and neonatal outcome.

Methods: A prospective comparative study was conducted in 50 antenatal women of >28 weeks gestation. Out of these, 25 cases of high risk pregnancies which included pregnancy induced hypertension, preeclampsia, and intrauterine growth retardation (IUGR) and anemia of chronic disease. Other 25 normal antenatal cases were taken as controls. All the women were subjected to color Doppler ultrasonography and study of placental histology done and results were correlated to maternal and neonatal outcome. **Results:** The Doppler flow was abnormal in 44% of high risk groups. Abnormal histological changes were seen in all the high risk cases (100%). The mean diameter of the placenta (20.69 cms) and the mean birth weight in high risk group (2.34kgs) were comparatively less than that of control group. Abnormal histological changes were maximally found in high risk groups of abnormal Doppler in comparison to control group. Prenatal mortality (2.22%), Apgar score (90.9%), IUGR (4.44%) are higher in cases with abnormal histology of placenta compared to normal cases. Placental abnormalities correlate well with the factors causing high risk pregnancies and the subsequent maternal and fetal outcomes. Placental examinations may help in better understanding of the mechanisms of placental dysfunctions that may contribute to more effective therapeutic strategies in the future.⁵

NEED OF THE STUDY

Normal placental structure and function is essential for a healthy pregnancy; the placenta is responsible for nutrient and oxygen transport, removal of waste products, protection from infection, modulation of the maternal immune system and hormone production to maintain pregnancy. The human

placenta is structurally adapted to fulfill this role as it is haemomonochorial, minimizing the distance between maternal and fetal circulations to maximize exchange. Disorders of the placenta including: FGR, pre-eclampsia, placental abruption and abnormal (velamentous) cord insertion are associated with over 50% of stillbirths and are frequently cited as the primary cause of death.

OBJECTIVES OF THE STUDY

1. To assess the pre test knowledge regarding placenta and its abnormalities among the 3rd year GNM students in selected nursing schools of the city.
2. To assess the post test knowledge regarding placenta and abnormalities among the 3rd year GNM students in selected nursing schools of the city.
3. To evaluate the effectiveness of video assisted teaching programme regarding placenta and its abnormalities among the 3rd year GNM students in selected nursing schools of the city.
4. To associate the knowledge score with selected demographic variable.

HYPOTHESIS

Hypothesis will be tested at 0.05 level of significance

H_0 – There will be no significant difference between pre test and post test knowledge score regarding video assisted teaching programme on normal placenta and its abnormalities among the 3rd year GNM students in selected nursing schools of the city.

H_1 – There will be significant difference between pre test and post test knowledge score regarding video assisted teaching programme on normal placenta and its abnormalities among the 3rd year GNM students in selected nursing schools of the city.

ETHICAL ASPECTS

- Permission was taken from the ethical committee.
- Proper explanation regarding the purpose of the study and nature of questionnaire involved in the study was given to the samples.
- Information about the sample was handled properly so that confidentiality and anonymity are maintained.

CONCEPTUAL FRAMEWORK

The conceptual framework selected for the study was based on Imogene King Goal Attainment theory.

SAMPLING CRITERIA

It is the criteria that specify the population characteristics.⁴⁸

INCLUSIVE CRITERIA

It is the criteria that specify characteristics that a population does have.⁴⁸

In this study, an inclusive criterion was, 3rd year GNM students who are:

1. Students of 3rd year GNM nursing students in selected nursing Schools.
2. Students who are willing to participate in this study
3. Students who will be selected by lottery system.

EXCLUSIVE CRITERIA

It is the criteria that involves people who does not possess the population characteristics.⁴⁸

In this study exclusive criteria was, 3rd year GNM students who are :

1. Students who are repeaters in the same class.
2. Other level of nursing students.
3. Not willing to participate in study.
4. Not available at the time of data collection.

METHODOLOGY :

Non probability convenient sampling technique was used to select the sample. Quantitative research approach with pre-experimental one group pre-test post-test research design. The data collected during the month of November 2019 among 3rd year GNM nursing students in selected schools . Total 60 samples were selected. After obtaining consent from the subjects, socio demographic and semi structured knowledge questionnaire were administered and data were collected.

TOOLS: PREPARATION OF TOOL

Development of tool

Based on the objectives of the study, demographic data, structured knowledge questionnaire were prepared to evaluate the knowledge of 3rd year GNM students knowledge regarding normal placenta and its abnormalities. (video assisted teaching programme). After extensive and systemic review of literature the investigator developed the tool. The source of tool construction were, review of literature from text books, journals, online sources reports and other publications and thesis and discussion with the experts i.e. experts from obstetric and gynecological nursing specialty and statistician who enlightened and refined the investigator idea about the tool preparation.

DESCRIPTION OF TOOLS

Section A – demographic variables

The investigator constructed this tool to collect the background data of the study subjects and to identify the influence of the sample characteristics with the knowledge in them.

It includes total 5 demographic variables such as age, gender, area of residence, previous knowledge regarding normal placenta and its abnormalities, sources of information.

Section B – Self structured knowledge questionnaire

The questionnaire consisted of 30 questions on knowledge regarding normal placenta and its abnormalities. Total score is 30. Each question carries 1 mark and zero for the wrong answer.

Knowledge score

Excellent	25-30
Very good	19-24
Good	13-18
Average	7-12
Poor	0-6

Video assisted teaching programme

The video assisted teaching programme was prepared with the following content areas to provide knowledge about normal placenta and its abnormalities they are,

1. Introduction of the normal placenta and its abnormalities
2. Definition of normal placenta
3. Development of normal placenta
4. Structure of normal placenta
5. Function of the placenta
6. Enlist and explain the placenta abnormalities
7. Structure of the umbilical cord
8. Explain abnormalities umbilical cord

RESULT:

In this chapter, different aspects of the study in terms of analysis and interpretation are discussed. The study reveals mean pre test knowledge score 13.85 and mean post test score was 19.18 the calculated value 7.54 is greater than tabulated value 2.00 at 0.05level of significance.

Hence it is statically interpreted that video teaching programme on knowledge regarding normal placenta and its abnormalities among 3rd year GNM students in selected

nursing schools was effective. Thus H_1 is accepted and H_0 is rejected.

Analysis also reveals that there is association of knowledge score with age(in year), gender, area of residences, previous knowledge, sources of knowledge while none of the other demographic variables were associated with knowledge score.

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