



A Study to Assess the Usage, Perception and Effect of Safe Delivery Application Regarding Emergency Obstetrics and Newborn Care in Final Year Students of Selected Nursing Colleges, NCR

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Article History	Abstract
Received: 12 June 2023 Revised: 23 Sept 2023 Accepted: 13 Dec 2023	<p>Introduction: Health professionals who oversee routine and complex deliveries in remote places might utilize the Safe Delivery Application, a mobile health tool. The programme includes practical training DVDs on important obstetric procedures that can aid health professionals in putting their newly acquired knowledge into practice and can decrease the rate of infant mortality rate and maternal mortality rate. Objectives: The main objective of the study to assess the usage, perception and effect of safe delivery application regarding emergency obstetrics and newborn care in final year students of selected nursing colleges. Methodology: -The research design for this study was Quasi experimental design to assess the usage, perception and effect regarding SDA. Total enumerative sampling technique were used to select 300 final year nursing students, NCR. Informed written consent was taken from each nursing student. A structured questioners and likert scale were administered to assess the usage, perception and effect for SDA. The collected data was analyzed by using descriptive statistics and inferential statistics. Frequency and percentage distribution was used for demographic variables and assessing the usage, perception and effect among nursing students. Chi-square was used to find out the association between usage and perception among final year nursing students and selected demographic variables. Result: The data obtained was analyzed by using descriptive and inferential statistics. The results show that there was a usage & knowledge gap among nursing students (mean 11.66, SD 3.34) but after using the safe delivery application the post-test scores improved to (mean 20.67 SD 12.26) in terms of usage & perception were significantly higher than the pre-test score. This shows that the safe delivery application was effective in improving the knowledge regarding the usage, perception and effect of SDA regarding final-year nursing students on active management of third-stage labor, postpartum hemorrhage, and neonatal resuscitation were successful.</p>
CC License CC-BY-NC-SA 4.0	Keyword: Nursing College, Perception, Student

1. Introduction

In 15% of planned births worldwide, a life-threatening issue will occur while a woman is expecting, in labour, or right after giving birth. Providers of obstetric emergency care and newborn care are essential, particularly in countries with high rates of maternal and neonatal death.

Many low-income countries lack the training required for medical personnel to deliver pregnant patients safely. on order to fill this demand, SDA—which provides animated clinical education films on the basics of emergency obstetrics and neonatal care—was established. The SDA aims to broaden the knowledge and skills

of healthcare students operating outside the core of the health system in order to enhance the standard of care and perhaps save the lives of mothers and babies.

According to the findings of the numerous research, health professionals see the SDA as a useful tool that helps with memorising, updating of knowledge and skills, and confidence building in order to reduce the risk of maternal and newborn death.

2. Materials and Methods

Independent variable: - safe delivery application.

Dependent variable – The determinant that is affected by other variables that are measured. As a result of manipulating the independent variable or variables in an experiment, these variables should change. It is the assumed result. Usage, perceptions, and effect are the dependent variables in this study.

Demographic variables: - demographic variables may be either categorical (e.g., gender, race, education, Age, Marital Status, Residence, primary source of information, heard safe delivery app, did you install in your mobile, attended workshop previously, received safe champion certificate)

3. Result and Discussion

Demographic Analysis and Perception

In this section, we conducted an in-depth analysis of the demographic characteristics of the final year nursing students participating in the study. We explored variables such as age, religion, education status, marital status, residence, primary source of information, familiarity with safe delivery apps, and participation in workshops and certificate programs.

Experimental Group Findings:

The majority of participants in the experimental group fell within the age range of 23-25 years, with Hindus being the predominant religious group.

Educational backgrounds were diverse, with a significant percentage enrolled in B.Sc. Nursing programs.

Most participants were unmarried and resided in rural areas.

Primary sources of information varied, with a substantial reliance on teachers and the internet.

A notable proportion had heard about safe delivery apps, but the installation rate was low.

Surprisingly, none of the participants in the experimental group had previously attended workshops or received safe champion certificates.

The analysis of these demographic characteristics revealed no significant associations between age, religion, education status, marital status, primary source of information, familiarity with safe delivery apps, or attendance at workshops and the participants' perception levels.

However, there was a significant improvement in the usage of delivery-related information in the experimental group following the intervention, as evidenced by the increase in mean scores for active management of the third stage of labor, post-partum hemorrhage, and neonatal resuscitation.

Control Group Findings:

To the experimental group, the control group had a majority of participants in the 20-22 age range, with Hindus comprising the largest religious group.

Educational backgrounds were predominantly B.Sc. Nursing.

Most participants in the control group were unmarried and resided in urban areas.

The primary source of information was mainly through teachers and the internet.

Nearly half of the control group had heard about safe delivery apps, with a significant proportion having installed them on their mobile devices.

Unlike the experimental group, some participants in the control group had attended workshops, but none had received safe champion certificates.

The analysis of demographic characteristics in the control group similarly revealed no significant associations between age, religion, education status, marital status, residence, primary source of information, or attendance at workshops and the participants' perception levels.

Despite the absence of significant associations between demographic variables and perception levels, there was a noteworthy improvement in the usage of delivery-related information in the control group after the intervention.

In conclusion, the analysis of demographic characteristics did not reveal direct associations with participants' perception levels. However, both experimental and control groups showed significant improvements in the usage of delivery-related information after the intervention. This underscores the effectiveness of the interventions in enhancing knowledge and practical skills related to safe delivery practices. Further analysis and discussion will be undertaken to explore the broader implications of these findings for nursing education and maternal healthcare.

Summary:

The analysis and interpretation of data gathered from 300 nursing students are the topics of this chapter. According to their goals, the study's key findings were discussed. Descriptive statistics, such as percentage, mean, standard deviation (SD), and inferential statistics, such as the chi-square test, were employed to analyse and interpret the data. Frequency distribution tables were used to display the analysis' results, which were then analysed, interpreted, and discussed in light of the study's goals and the findings of subsequent research.

4. Conclusion & Recommendation

Follow-up research can be done to see how well nursing students use the safe delivery application. A correlational study can be conducted to the analysis of knowledge, practice regarding usage of safe delivery application among nursing students.

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