



Effectiveness of structured teaching programme knowledge and knowledge on practice regarding selected biophysical Foetal well-being tests

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Abstract

“You may not be able to change the winds. But you can adjust the sails”

Perinatal mortality remains one of the major problems in public health today. Majority (80%) of fetal deaths occur in the antepartum period. The primary objective of antenatal fetal assessment is not only to avoid foetal death, but also to give good maternal care during pregnancy and labour. The fetal health in the utero should be supervised with equal vigilance.

Cox (2005) stated that the rate of foetal heart is subject to considerable variations which afford us a fairly reliable means of judging the well-being of the child. As a general rule, its life should be considered in danger when the heart beat falls below 100 bpm or exceeds 160 bpm.

Foetal wellbeing can be assessed during antenatal and intranatal period by using Bio-physical test such as Non Stress Test (NST) and Contraction Stress Test (CST). By this test we can prevent most of the perinatal deaths. These tests are useful to check the foetal wellness rather than the illness. As health professionals we should have thorough knowledge about NST and CST in order to save the life of the mother and the foetus.

Keywords: structured teaching programme, NST, CST, FHR, EFM

Introduction

Kroushev, Beaves, Jenkins and Wallance (2008) stated in an article that the Royal Australian and Newzeland College of Obstetricians and Gynecology (RANZCOG) developed and introduced the fetal surveillance education program to provide high quality education to all the clinicians caring for labour women in Australia. A formal evaluation program was planned, the results showed that overall FSEP was considered a high quality resource rated equally well by midwives and obstetricians.

Statement of the problem

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Knowledge on Practice regarding selected Biophysical foetal well-being tests (NST-Non Stress Test, CST-Contraction Stress Test) among the final year B.Sc. Nursing students in a selected Nursing college.

Objectives

- To assess the existing knowledge regarding selected Bio-physical foetal well-being tests among the final year B.Sc. Nursing students.
- To assess the existing knowledge on practice regarding selected Biophysical wellbeing tests among the final year B.Sc. Nursing students.
- To compare the effectiveness of LCD assisted teaching with traditional lecture method of teaching on knowledge and knowledge on practice regarding Non stress test and contraction stress test.

To associate the pre-test level of knowledge and knowledge

on practice regarding Bio-physical well-being tests (NST and CST) with selected variables, such as percentage of marks obtained in the previous year, Number of weeks worked in the labour room and the Number of antenatal mothers cared in labour room

Research design and method

A true-experimental design was used to evaluate the effectiveness of structured-teaching programme on knowledge and knowledge on practice regarding selected biophysical foetal well-being tests (NST – Non Stress Test and CST – Contraction Stress Test) among the IV year B.Sc. Nursing students in a selected nursing college.

A total of 100 students studying in the final year B.Sc. Nursing students were selected as samples (50 for LCD group and 50 for Lecture group). Using a random assignment method, 50 even number students for the LCD group and 50 odd number students for the Lecture group were selected.

The researcher introduced herself to the subjects and developed a good rapport with them. Informed consent was obtained and the researcher assured the participants for the confidentiality of their responses. The pretest was conducted by using structured self-administered questionnaire which included knowledge related and practice related questions.

The same day STP was given to LCD group using lecture method of teaching. Post test was conducted after 7 days. When the posttest was given to the lecture group, the pretest was given to the LCD group students. The STP was given to the LCD group students using LCD. After 7 days the post test was conducted by distributing the same questionnaire.

The conceptual framework used for this study was General

Systems Theory model by Ludwig Von Bertalanffy (1968).

Result

Distribution of knowledge on practice on biophysical tests CST and NST among the final year B.SC. Nursing students

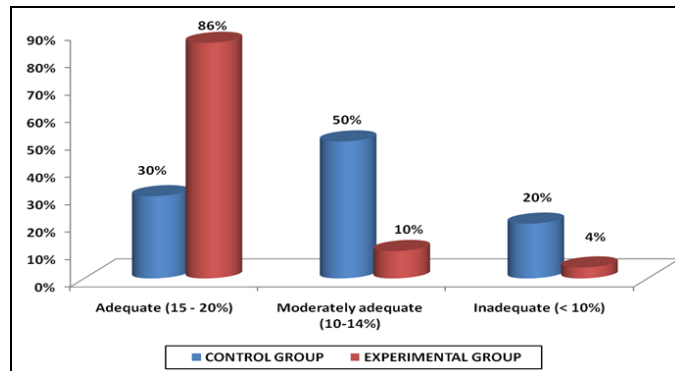


Fig 1

On analysis, the study findings revealed that in the pretest 100% of them had inadequate knowledge in the lecture group and LCD group. The post test revealed that the majority of students (54%) in the lecture group and 94% in the LCD assisted teaching group gained adequate knowledge. Regarding knowledge on practice in the pretest 86% of them had inadequate in lecture group and 94% of them had inadequate knowledge on practice in LCD group. The posttest revealed that 56% of them had gained moderately adequate knowledge on practice and in LCD group 96% of them had gained knowledge on practice regarding biophysical foetal well-being test. There was improvement in the mean knowledge score and also knowledge on practice score of both the groups after the educational program. Both the groups gained knowledge and knowledge on practice, significantly, but LCD group students gained more knowledge than the lecture group. This impact was statistically tested by paired 't' value and the result was found to be highly significant at $P < 0.001$.

Conclusion

There was significant improvement in the knowledge level of students regarding biophysical foetal well-being tests (NST and CST). The study concluded that the educational programme such as the LCD method of teaching is more effective than the lecture method of teaching in improving knowledge of the students regarding bio-physical fetal wellbeing tests.

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