

## Nursing Students Knowledge and Effectiveness of Planned Teaching Programme on Preventive Measures of Stillbirth

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### Abstract:

#### Background:

A Baby died in the womb after the 20<sup>th</sup> of pregnancy is stillbirth. The exact cause is known, but some factors such as smoking, pregnancy induced hypertension, diabetes, obesity, lack of nutrition etc. interfere with this condition. During pregnancy women experiences worry and fear, later sometimes pregnant women feel depressed if stillbirth occurs. This could be devastating stage for women and their family to accept this stillbirth because this may happen in normal pregnancy too.

**Materials and Methods:** One group pre-test-post-test, quasi experimental design was employed for the current study to assess the knowledge about preventive measures of stillbirth among GNM and B.Sc. Nursing students. A total of 60 Nursing students were selected by using Simple random sampling technique. Structured knowledge questionnaire was used to collect data. The content validity and reliability was established. Pre-test was conducted followed by planned teaching programme administration. After seven days the post-test was conducted. Descriptive and inferential analysis was done by using SPSS 20 version.

**Results:** Out of 60 students, highest around half of the 26 (43.3%) students fall in the age group of 22 years, majority 45 (75%) of participants were females, most of 24 (40%) were 3<sup>rd</sup> Year BSc. Nursing. In the Pre-test, majority 70% of participants had average knowledge regarding preventive measures of stillbirth whereas 26.7 % had poor knowledge and only 1.7% had good and very good knowledge. However, drastic changes in post-test in which majority 88.3% of them had very good knowledge and 11.7% had good knowledge. Mean pre-test (12.08) and post-test (21.72) knowledge scores. The calculated 't' value ( $t_{(59)} = 20.93, p < 0.05$ ) is greater than the table value ( $t_{(59)} = 1.67$ ) at 5% level. Moreover, there was no significant association between mean pre-test knowledge score and demographic variables at  $p < 0.05$ .

**Conclusion:** Nursing students are highly significant for dealing with the pregnant women during their clinical posting, as they care directly and educate them about preventive measure for stillbirth and also counsel them for betterment of antenatal mothers during pregnancy period.

**Keywords:** Nursing; students; knowledge; effectiveness; planned teaching programme; preventive; stillbirth

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### I. Introduction

Pregnancy is a period of pleasure for most parents, filled with hope, enthusiasm and expectations for the future, but during pregnancy women experiences worry and fear, later sometimes pregnant women feel depressed if stillbirth occurs. The fetus grows health problems in the womb and as a result, cannot survive to term. Known as still birth, these deaths can be injurious and difficult for any parent to have to deal with.<sup>1,2,3</sup>

Stillbirth has intense impact on women, families, and healthcare workers. The burden is highest in low- and middle-income countries (LMICs). The loss of a baby will impact on women, families, communities and healthcare workers. There will be pathetic position at this period of circumstances. A nurse responsibility to deal with the women and their family to cope up with this situation. There is need for respectful and caring care for women, partners, and families after bereavement.<sup>4</sup> Stillbirths hold an increasingly important place in the global maternal and newborn health agenda.<sup>5</sup>

**Objectives**

1. To determine the pre-test knowledge scores of Nursing students regarding preventive measures of stillbirth.
2. To evaluate the effectiveness of planned teaching programme for Nursing students regarding preventive measures of stillbirth.
3. To associate the pre-test knowledge scores of Nursing students regarding preventive measures of stillbirth with selected demographic variables.

**Hypotheses**

H<sub>1</sub>: The mean post-test knowledge score of Nursing students will be significantly higher than mean pre-test knowledge score.

H<sub>2</sub>: There will be a significant association between pre-test knowledge score and selected demographic variables.

**II. Methodology**

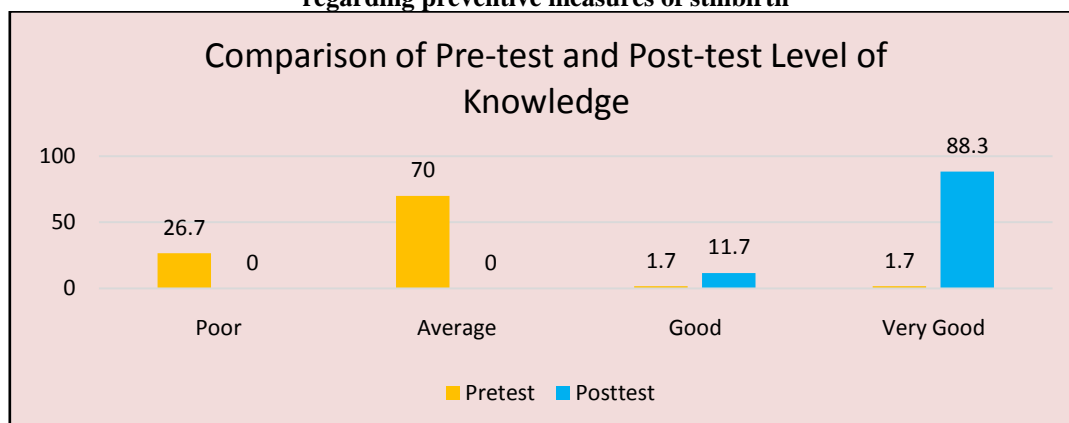
One group pre-test-post-test, quasi experimental design was employed for the current study to assess the knowledge about preventive measures of stillbirth among GNM and B.Sc. Nursing students. A total of 60 Nursing students were selected by using Simple random sampling technique. Inclusion and exclusion criteria was considered during sampling technique. A closed ended structured knowledge questionnaire which includes demographic variables and Structured knowledge questionnaire consisted of 26 items. The content validity of the tool was established in consultation with two experts in the field of Obstetric and gynaecological physician. The reliability of the tool was tested on six students by split half method. The reliability coefficient of the whole test was estimated by using Spearman Brown Prophecy formula. The tool was found reliable ( $r = 0.86, p < 0.05$ ). Prior Permission was obtained from the Principal of Nursing Institute. A consent was taken from the participants. Pre-test was conducted by using structured knowledge questionnaire and instructed to complete within 15 minutes, followed by planned teaching programme administration. The duration of the session was one hour. After seven days the post-test was conducted by using the same questionnaire to evaluate the effectiveness of the planned teaching programme.

**III. Result**

**Section I: Socio-Demographic variables**

Out of 60 students, around half of the 26 (43.3%) students fall in the age group of 22 years, followed by 21 (35%) were in 21 Years and remaining only few 13 (21.7%) fall in 23 years of age. Majority of the students 45 (75%) were females and 15 (25%) were males. Most of the students 24 (40%) were 3<sup>rd</sup> Year BSc. Nursing, 19(31.7%) were 4<sup>th</sup> year BSc Nursing and 17(28.3%) were 3<sup>rd</sup> Year GNM.

**Section II: Percentage Distribution of Pre-test and Post-test Knowledge level of Nursing students regarding preventive measures of stillbirth**



**Figure 1:** Bar diagram showing Pre-test knowledge and Post-test level of Knowledge

Figure 1 depicts that in pre-test, majority 70% of students had average knowledge regarding preventive measures of stillbirth whereas 26.7 % had poor knowledge and only 1.7% had good and very good knowledge. However, drastic changes in post-test in which majority 88.3% of them had very good knowledge and 11.7% had good knowledge.

**Section III: Effectiveness of planned teaching programme regarding preventive measures of stillbirth.**

**Table no.1:** Mean, Mean difference, Standard Deviation, df and 't' value of pre- and post-test knowledge score.

Mean score		Mean difference	SD	df	't' value	Table value
Pre test	Post test					
12.08	21.72	9.63	3.56	59.00	20.930 *S	1.67

p<0.05, \*S=Significant

Data in the table no.1 shows that, the significant difference between the mean pre-test (12.08) and post-test (21.72) knowledge scores. The calculated 't' value ( $t_{(59)}=20.93$ ,  $p < 0.05$ ) is greater than the table value ( $t_{(59)}=1.67$ ) at 5% level. Hence, the research hypothesis ( $H_1$ ) was accepted and inferred that the planned teaching was effective in improving the knowledge of Nursing students regarding preventive measures of stillbirth.

**Section IV: Association between Pre-Test Knowledge Score and Selected Demographic Variables**

The data presented in the above table no.2 shows that the calculated chi-square ( $\chi^2$ ) value of demographic variables age ( $\chi^2=1.984$ ), gender ( $\chi^2=1.100$ ) and course ( $\chi^2=1.426$ ) was less than the table value ( $\chi^2=3.84$ ). Hence, the research hypothesis ( $H_2$ ) was rejected and inferred that there was no significant association between mean pre-test knowledge score and demographic variables at  $p < 0.05$ .

**IV. Discussion**

The healthcare workers are strategically positioned to counsel parents on the possible causes and prevention of stillbirth. Pregnant woman may not be counselled on what to do to avoid having stillbirth which implies that the level of stillbirths would continue to rise. If the risk factors are present, appropriate timely intervention would not be instituted because the health worker is ignorant of the practical implication of such risk factor.<sup>6</sup>

The present study observed that there was drastic increase in the post-test which inferred that planned teaching programme was effective. In Pre-test, majority 70% of students had average knowledge regarding preventive measures of stillbirth whereas 26.7 % had poor knowledge and only 1.7% had good and very good knowledge. However, drastic changes in post-test in which majority 88.3% of them had very good knowledge and 11.7% had good knowledge.

Almost similar study was conducted to assess the level of knowledge of health care providers on the causes and prevention of stillbirths. A semi-structured questionnaire containing open and close ended questions was employed to collect data. The level of knowledge was determined by using a scale ranging from less than 5 as very poor, 5~8 as poor, 9~12 as fair and above 13 as good. Results revealed that of the 201 respondents, 161(80.1%) of them were between 21 to 35 years of age; mean age is 30 years and 113(56.2%) were single. In assessing the level of participants knowledge on the causes and prevention of still births, 126 respondents (62.7%) were rated as having very poor knowledge, 64 (31.8%) and 11 (5.5%) were grouped under poor and fair categories respectively. Levels of education, age, cadre, and marital status of the respondents were not significantly related to the level of knowledge of causes and prevention of stillbirths. Thus that there was a poor level of knowledge on the causes and prevention of stillbirths among all the cadres of health workers. Then target should be to improve the knowledge for nursing students regarding preventive measures of stillbirth.<sup>7</sup>

**V. Conclusion**

The current study attempted to assess the effectiveness of PTP regarding preventive measures of stillbirth among Nursing students. The study findings concluded that majority students had average knowledge in pre-test and gained knowledge after administration of education in post-test knowledge score. The planned teaching program had great potential for improving the knowledge regarding preventive measures of stillbirth.

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