"A Descriptive Study To Assess The Knowledge Regarding Safe Delivery Application Among The B.Sc. Nursing Students In Selected Nursing College, Bhopal''

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Abstract-
The current study has been undertaken to assess the pre-test Knowledge score regarding safe delivery application among B.Sc. Nursing Students in Selected nursing college, Bhopal. The research design used for study was descriptive in nature. The tool for study was self-structured knowledge questionnaire which consists of 2 parts-PART- I consisted questions related to Socio-demographic data; PART-II consisted of self -structured knowledge questionnaire to assess the pre-test knowledge score regarding safe delivery application among B.Sc. Nursing Students. The data was analyzed by using descriptive & inferential statistical methods. The most significant finding was that 80.0% subjects have poor knowledge, 20.0% have average knowledge score while 0.0% B.Sc. Nursing Students were having good knowledge score.

Keyword- Safe delivery application and B.Sc. Nursing Students.

I. Introduction

The Safe Delivery App (SDA), which provides animated clinical instruction videos in basic emergency obstetric and neonatal care, has been developed in response to the fact that health workers in many low-income countries are not sufficiently trained to deliver pregnant women safely. The SDA aims to improve knowledge and skills of health workers located in the periphery of the health system in order to improve quality of care and potentially save the lives of mothers and newborns. The App is a digital tool developed by the Maternity Foundation, the University of Copenhagen and the University of Southern Denmark for equipping healthcare workers (HCWs) in managing obstetric and neonatal emergencies. The App empowers HCWs by placing evidence-based, and up-to-date clinical guidelines in their hands through their mobile phones or tablets. A randomised control trial conducted in Ethiopia showed a significant improvement in skills and knowledge of HCWs who used the App for perinatal care compared with a control group that followed regular training models. Subsequently, other studies also found an increase in knowledge of management of postpartum haemorrhage and neonatal resuscitation in all those who used the mobile application.

II. Need of the study

mother and perinatal mortality continue to be a substantial concern in many low- and middle-income countries despite growing worldwide efforts to put mother and child health on the political agenda. The number of maternal deaths, neonatal deaths, and stillbirths that occur annually is estimated to be 303,000, 2,7 million, and 2,6 million, respectively. The majority of these deaths might have been avoided if the women had had access to the recommended levels of quality care during pregnancy, childbirth, and the postpartum period. Deaths of mothers have terrible effects on the wellbeing of the families. Additionally, millions of postpartum women experience serious, permanent injuries. Despite the overall decrease in mortality among children younger than 5 years, the proportion of deaths that occur in the neonatal period is increasing and there is an urgent need to focus on the large burden of stillbirths, which has not been prioritised in the Millennium Development Goals. Hence, there is an urgent need for global action to improve ma-ternal and neonatal health in low- and middle-income settings.

III.Objective of the study

1. To assess the pre-test knowledge scores regarding safe delivery application among B.Sc. Nursing Students.
2. To find out association between pre-test knowledge score regarding safe delivery application among B.Sc. Nursing Students with their selected demographic variables.

IV. Hypotheses:

RH_0: There will be no significant association between pre-test score on safe delivery application among B.Sc. Nursing Students with their selected demographic variables.

RH_1: There will be significant association between pre-test score on safe delivery application among B.Sc. Nursing Students with their selected demographic variables.

V. Methodology

A descriptive research design was used to assess the pre-test knowledge score regarding safe delivery application among B.Sc. Nursing Students residing in Selected nursing college, Bhopal. The study was carried out on 40 B.Sc. Nursing Students selected by convenience sampling technique. Demographical variable and self-structured 30 knowledge questionnaire were used to assess the Knowledge score regarding safe delivery application by survey method.

VI. Analysis and interpretation

SECTION-I Table -1 Frequency & percentage distribution of samples according to their demographic variables. n = 40

S. No	Demographic Variables	Frequency	Percentage
1	**Age in Years**		
a.	Less than 20	26	65.0
b.	Greater than 20	14	35.0
2	**Gender**		
a.	Male	11	27.5
b	Female	29	72.5
3.	**Living area**		
a.	Rural	28	70.0
b.	Urban	12	30.0
4	**Year of the course**		
a.	1st year	13	32.5
b.	2nd year	14	35.0
c.	3rd year	7	17.5
d.	4th year	6	15.0
5.	**Previous knowledge regarding SDA**		
a.	Yes	9	22.5
b.	No	31	77.5

SECTION-II- Table- 2.1.1- Frequency and percentage distribution of knowledge score of studied subjects:

Category and test Score	Frequency (N=40)	Frequency Percentage (%)
POOR (1-10)	32	80.0
AVERAGE (11-20)	8	20.0
GOOD (21-30)	0	0.0
TOTAL	40	100.0

The present table 2.1.1 concerned with the existing knowledge regarding safe delivery application in children among B.Sc. Nursing Students were shown by pre-test score and it is observed that most of the B.Sc. Nursing Students 32 (80.0%) were poor (01-10) knowledge, 8 (20.0%) were have average (11-20) knowledge score and rest of the B.Sc. Nursing Students have 0 (0.0%) were from good (21-30) category.

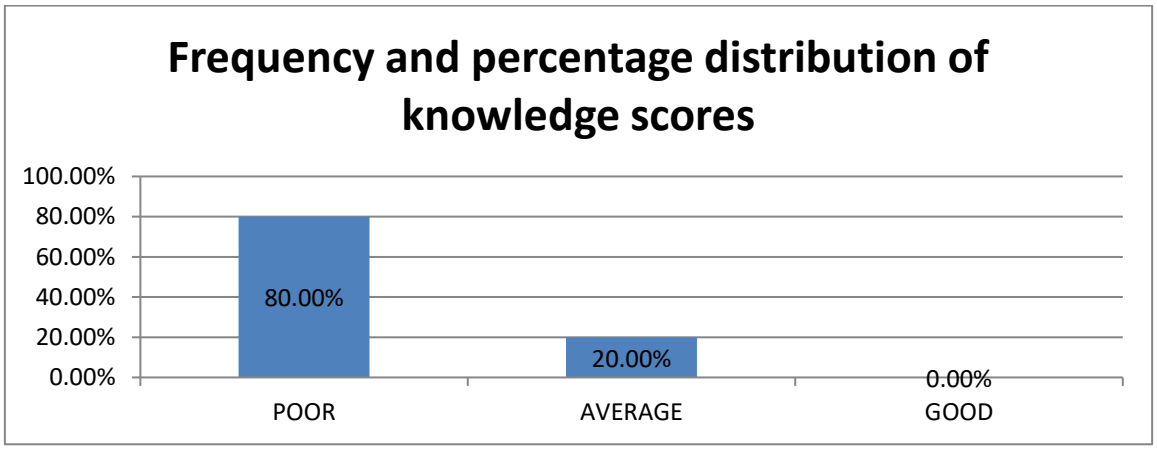

FIG.-2.1.1- Frequency and percentage distribution of Knowledge score of studied subjects

Table-2.1.2. - Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores:

Knowledge Pre –test	**Mean ($\overline{X}$)**	**Std Dev (S)**
Pre-test score	9.47	1.70

The information regarding mean, percentage of mean and standard deviation of test scores in shown in table 2.1.2 knowledge in mean pre-test score was 9.47 ± 1.70 while in knowledge regarding safe delivery application among B.Sc. Nursing Students.

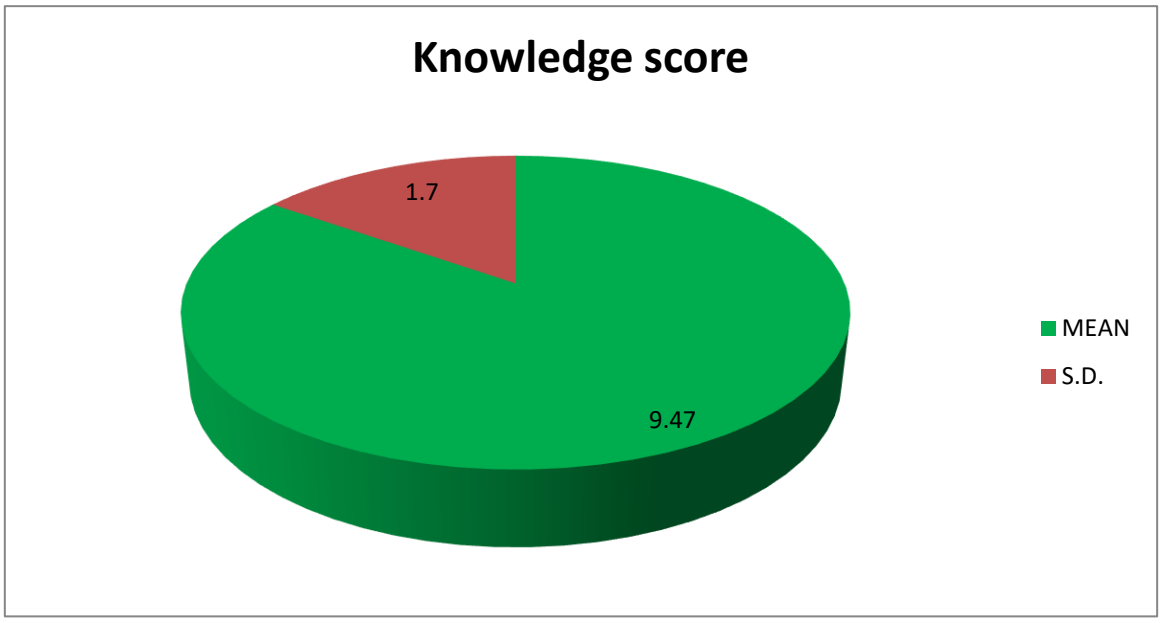

Figure no.-1 Mean and SD of knowledge score of B.Sc. Nursing Students.

SECTION-III Association of knowledge scores between test and selected demographic variables:

Table- 3.1 Association of age of B.Sc. Nursing Students with knowledge score:

Age	**Test scores**			**Total**
(In years)	**POOR (1-10)**	**AVERAGE (11-20)**	**GOOD (21-30)**	
Less than 20	21	5	0	**26**
Greater than 20	11	3	0	**14**
Total	**32**	**8**	**0**	**40**
X= 0.02	p>0.05 (Insignificant)			

The association of age & test scores is shown in present table 3.1. The probability value for Chi-Square test is 0.02 for 1 DF which indicated insignificant value (p>0.05). Hence, it is identified that there is insignificant association between age & test scores. Moreover, it is reflected that age isn't influenced with current problem.

Table- 3.2 Association of Gender with knowledge score:

Gender	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**GOOD (21-30)**	
Male	9	2	0	**11**
Female	23	6	0	**29**
Total	**32**	**8**	**0**	**40**
X= 0.03	p>0.05 (significant)			

The association of gender & test scores is shown in present table 3.2. The probability value for Chi-Square test is 0.03 for 1 df which indicated gender & test scores. Moreover, it is reflected that gender isnot influenced with current problem.

Table- 3.3 Association of living area with knowledge score:

Living area	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
Rural	23	5	0	**28**
Urban	9	3	0	**12**
Total	**32**	**8**	**0**	**40**
X= 0.26	p>0.05 (significant)			

The association of living area & test scores is shown in present table 3.3. The probability value for Chi-Square test is 0.26 for 1 df which indicated living area & test scores. Moreover, it is reflected that living area is not influenced with current problem.

Table- 3.4 Association of year of course with knowledge score**:**

Year of course	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
1st year	11	2	0	**13**
2nd year	11	3	0	**14**
3rd tear	7	0	0	**7**
4th year	3	3	0	**6**
Total	**32**	**8**	**0**	**40**
X= 5.31	p>0.05 (Insignificant)			

The association of year of course & test score is shown in present table 3.4. The probability value for Chi-Square test is 5.31 for 3 degrees of freedom which indicated year of course and test scores. Moreover, it is reflected that year of course isn't influenced with present problem.

Table- 3.5 Association of previous knowledge with knowledge score:

previous knowledge	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
Yes	8	1	0	**9**
No	24	7	0	**31**
Total	**32**	**8**	**0**	**40**
X= 0.57	p>0.05 (significant)			

The association of previous knowledge & test scores is shown in present table 3.5. The probability value for Chi-Square test is 0.57 for 1 df which indicated previous knowledge & test scores. Moreover, it is reflected that previous knowledge is not influenced with current problem.

VII. Results

The findings of the study revealed that 80.0% subjects have poor knowledge, 20.0% have average knowledge score while 0.0% B.Sc. Nursing Students were having good knowledge score towards safe delivery application in children. The mean knowledge score of subjects was 9.47 ± 1.70. The association of knowledge score of B.Sc. Nursing Students was found to be statistically significant with Living area. ($p<0.05$).

VIII. Conclusion

It was concluded that majority of B.Sc. Nursing Students had poor knowledge score regarding safe delivery application in children. B.Sc. Nursing Students should also educate regarding safe delivery application to control disease.

IX. Limitations

- This was limited to Selected nursing college, Bhopal.
- This was limited to 40 B.Sc. Nursing Students.

X. Reference

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