"Impact of awareness package on knowledge regarding stages of labour among nursing students in selected college, Indore.''

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ABSTRACT
The current study has been undertaken to assess knowledge score regarding stages of labour among nursing students by awareness package in Index nursing college, Indore. The research design used for study was pre- experimental 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 knowledge score regarding stages of labour among nursing students. The data was analyzed by using descriptive & inferential statistical methods. The most significant finding was that 22.2% of nursing students were having average knowledge regarding stages of labour whereas 77.8% had fair knowledge after post-test. It was suggested that nurses must educate nursing students regarding stages of labour.
Keyword- Impact, awareness package, knowledge & stages of labour.

Introduction

Normal labor occurs at term and is spontaneous in onset with the foetus presenting by vertex. The process is completed within 18 hours and no complications arise. The physiological, psychological and emotional experience of labour affects every woman differently. The second stage of labour begins when the cervix is fully dilated and ends with the baby"s birth. The duration of the second stage of labour is difficult to predict with any degree of certainty. In multi gravida it may last as little as 5 min, but in primi gravida the process may take more than an hour. More important than the time factor is the evidence of progressive descent of foetus and condition of both mother and foetus. The two phases in progress are the latent phase, during which descent and rotation occurs, and following by the active phase with descent and the urge to push. In the active phase the fetal head is visible and the women experience a expulsive urge to push. As the foetus descends, soft tissue and bony structure of the pelvis exert pressure that forces the fetus to negotiate the birth canal by a series of passive movement. knowledge and recognition of the normal mechanism enables the midwife to anticipate the next step in the process of descent that in turn will dictate her conduct of delivery. Her understanding and constant monitoring of these movements ensure that normal progress is recognized, the delivery safely completed and early assistance sought if needed. Knowledge of the physiological process and of the actual mechanism of delivery forms the basis for determining midwifery care. Accurate observation of progress is vital, for the unexpected can always happen. (Dutta D.C 2004).

Need for study

In ancient India, care of women and practice of midwifery were totally in the hands of indigenous village dais. Even today majority of deliveries in rural India are being conducted by dais. For those in labour, the village dais was the only source of help at the time of delivery. This indigenous dais not only helped during childbirth but also acted as consultants for any condition of mother related to birth. They were midwifing in the literal sense. Dais gained their skill through observation and practices. Their knowledge of the process of childbirth was based on what they saw and experienced. No formal training was given. As long as it was a normal delivery and everything went smoothly, they did not have any problem. But when they come across a case of complications, the dais could not handle the situation and serious maternal mortality and morbidity were the result.

The Bhore committee (1946) reports "lack of skilled services by qualified midwives play an important part in prevailing high rates of maternal morbidity and infantile death in the first month after birth". (Dr. Salam April 2011) Worldwide every year approximately eight million women suffer from pregnancy related complications. Over half million of them die as a result. One woman in eleven may die of pregnancy related complications in developing countries, compared to one in five thousand in developed countries. It is further estimated that, for one maternal death at least sixteen more suffer from severe morbidities. India has an alarming high maternal mortality rate of about 407/100,000 live births. Most maternal deaths that are about 24% occur during child birth and almost 60% occur immediately after childbirth. More than 80% of maternal death is due to intranatal complications, like obstructed labour, hemorrhage and sepsis, which can be prevented with competent management during intranatal period. (Varner M.W 2009) Only antenatal care in isolation cannot prevent most maternal and newborn deaths, skilled midwives can prevent these complications through interventions during and following childbirth.

Objective of the study

1. To assess the pre-test & post-test Knowledge score regarding stages of labour among nursing students.
2. To assess impact of awareness package on knowledge regarding stages of labour among nursing students.
3. To find out association between pre-test knowledge score regarding stages of labour among nursing students with their selected demographic variables.

Hypotheses:

RH_0: There will be no significant difference between pre test & post-test knowledge score on stages of labour among nursing students.

RH_1: There will be significant difference between pre test & post-test knowledge score on stages of labour among nursing students.

RH_2: There will be significant association between pre-test score on stages of labour among nursing students with their selected demographic variables.

Assumption

1. Nursing students may have deficit knowledge regarding stages of labour.
2. Awareness package will enhance knowledge of nursing students regarding stages of labour.

Methodology

An evaluative approach was used and pre experimental one group pre-test post-test research design was used for the study. The samples consisted of 54 nursing students selected by Non probability purposive sampling technique. The setting for the study was Index nursing college, Indore. Data was gathered with help of demographic variables & administering a self structured knowledge questionnaire by analyst prior & after awareness package. Post-test was done after seven days of pre-test. Data were analysis using descriptive & inferential statistics.

Analysis and interpretation

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

n = 54

S. No	Demographic Variables	Frequency	Percentage
1	**Age in Years**		
a.	19-22	7	13.0
b.	23-26	28	51.9
c.	27-30	19	35.2
2	**Gender**		
a.	Male	27	50.0
b.	Female	27	50.0
3	**Marital status**		
a.	Married	5	9.3
b.	Unmarried	49	90.7
4	**Educational Status**		
a.	Under graduate	30	55.6
b.	Post graduate	20	37.0
c.	Others	4	7.4
5	**Family type**		
a.	Nuclear	23	42.6
b.	Joint	23	42.6
c.	Extended	8	14.8
6	**Previous knowledge related to stages of labour**		
a.	Yes	7	13.0
b.	No	47	87.0

SECTION-II- Table- 2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects:

Category and test Score	Frequency (N=54)	Frequency Percentage (%)
POOR(1-10)	47	87.0
AVERAGE (11-20)	7	13.0
GOOD (21-30)	0	0.0
TOTAL	54	100.0

The present table 2.1.1 concerned with the existing knowledge regarding stages of labour among nursing students were shown by pre-test score and it is observed that most of the nursing students 47 (87%) were poor (01-10) knowledge & some nursing students have 8 (13.0%) were from average category.

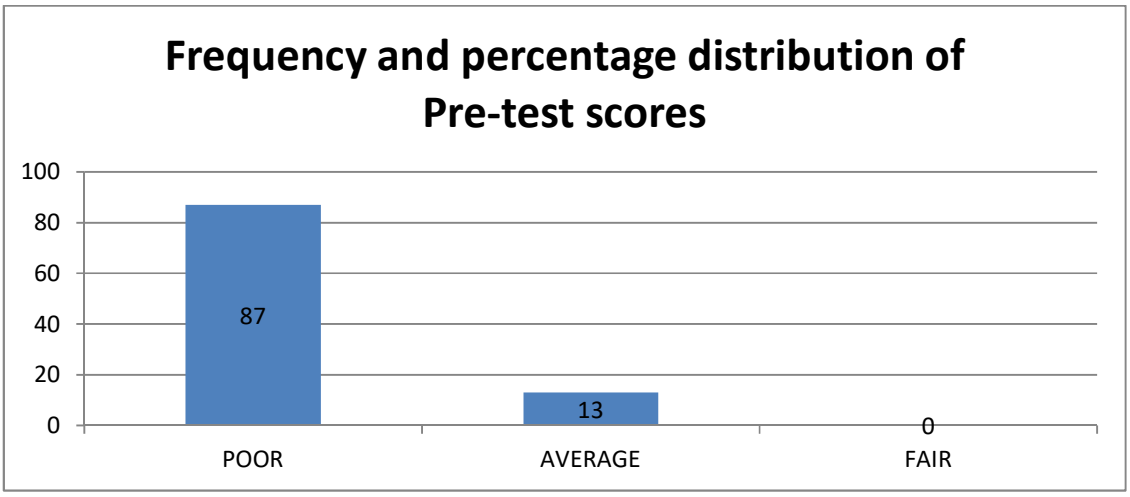

FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects

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	1.12	0.33

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 1.12± 0.33 while in knowledge regarding stages of labour among nursing students in Index nursing college, Indore.

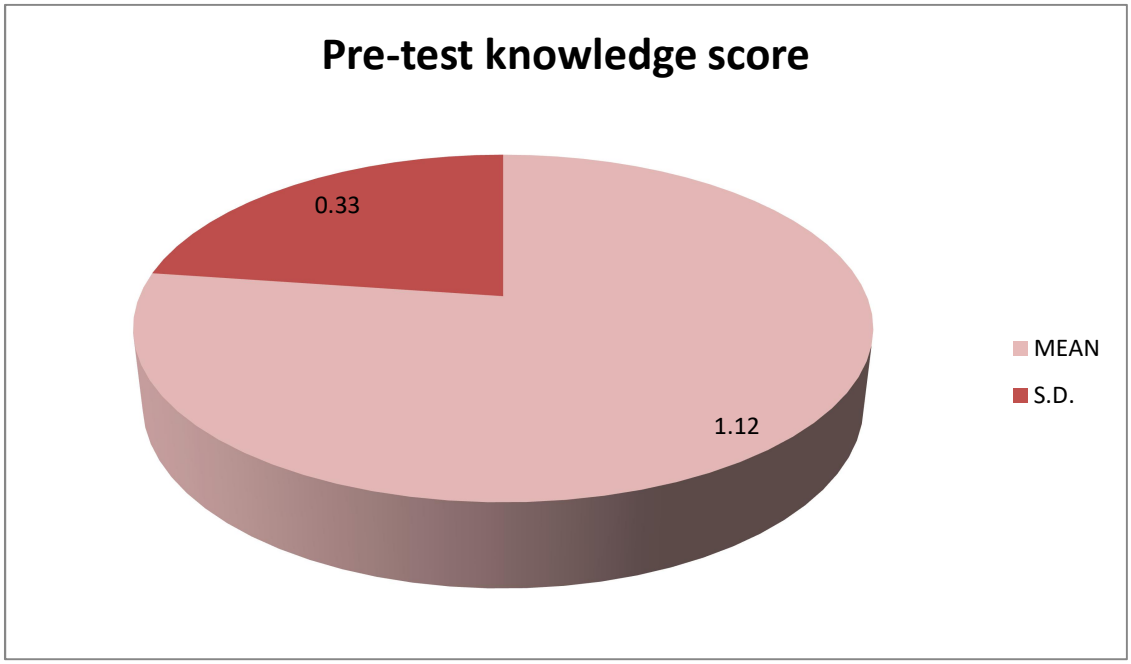

FIG.-2.1.1. - **Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores**

Table-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects:

Category and post-test Score	Frequency (N=54)	Frequency Percentage (%)
POOR(01-10)	0	0.0
AVERAGE (11-20)	12	22.2
GOOD (21-30)	42	77.8
TOTAL	54	100%

The present table 2.2.1 concerned with the existing knowledge regarding stages of labour among nursing students was shown by post test score and it is observed that most of the nursing students 42 (77.8%) were **FAIR** (21-30) knowledge & other nursing students have 12 (22.2%) category which are **AVERAGE** (11-20) post test knowledge score in present study.

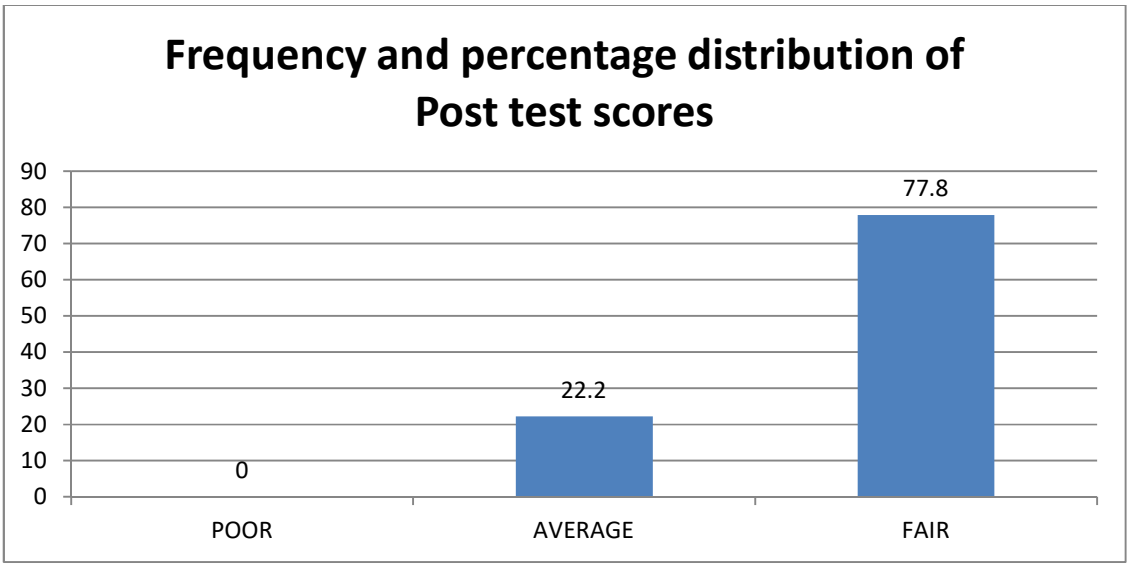

FIG.-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects

Table-2.2.2. - Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores:

Knowledge Test	Mean ($\overline{X}$)	Std Dev (S)
Post-test score	2.77	0.41

The information regarding mean, percentage of mean and SD of post test scores in shown in table 2.2.2 knowledge in mean post test score was 2.77 ± 0.41 while in knowledge regarding stages of labour among nursing students in Index nursing college, Indore.

Hence, it is confirmed from the tables of section-II that there is a significant difference in mean of test scores which partially fulfill 2nd objective of the present study.

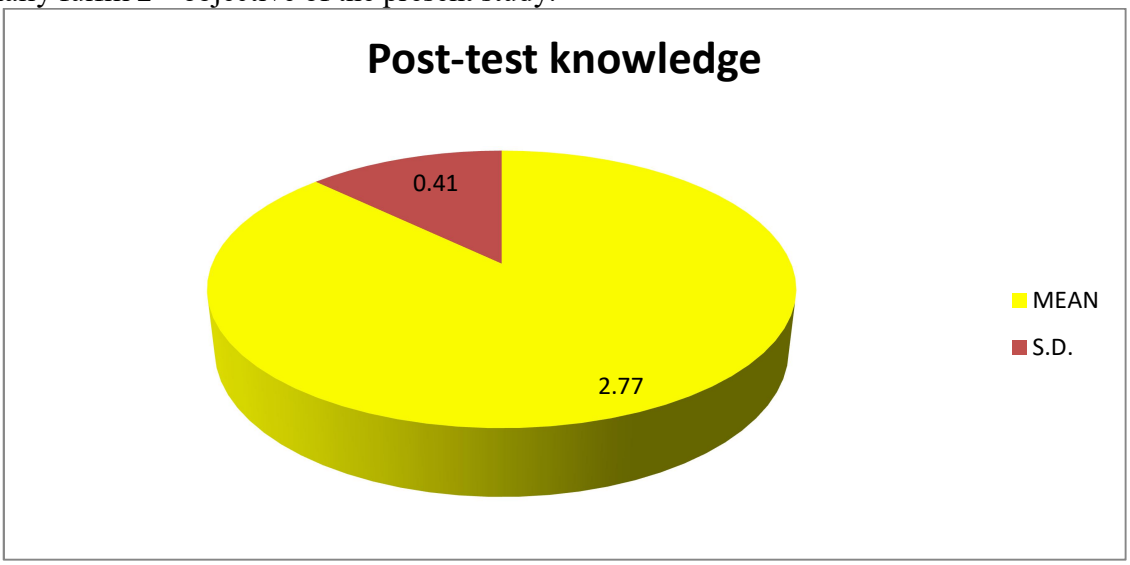

FIG.-2.2.2. - Mean ($\overline{X}$) and standard Deviation (s) of knowledge scores:

TABLE 2.2.3: Impact of awareness package by calculating Mean, SD, Mean Difference and't' Value of Pre-test and Post-test knowledge.

Knowledge Score of Nursing students	Mean ($\overline{X}$)	S. D. (s)	Std. Error of Mean	D. F.	t-value	Significance
Pre-test	**1.12**	**0.33**	0.07	53	**-23.30**	P<0.0001*
Post-test	**2.77**	**0.41**				

When the mean and SD of pre-test & post-test were compared & 't' test was applied. It can be clearly seen that the't' value was -23.30 and p value was 0.0001 which clearly show that awareness package was very effective in enhancing the knowledge of nursing students.

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

Table- 3.1 Association of age of nursing students with pre-test scores:

Age	**Test scores**			**Total**
(in years)	**POOR (1-10)**	**AVERAGE (11-20)**	**FAIR (21-30)**	
19-22	5	2	0	**7**
23-26	23	5	0	**28**
27-30	19	0	0	**19**
Total	**47**	**7**	**0**	**54**
	X^2=4.93	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 4.93 for 2 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 pre-test scores:

Gender	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**FAIR (21-30)**	
Male	23	4	0	**27**
Female	24	3	0	**27**
Total	**47**	**7**	**0**	**54**
	X^2=0.16	p>0.05 (Insignificant)		

The association of gender & test scores is shown in present table 3.2. The probability value for Chi-Square test is 0.16 for 1 degrees of freedom which indicated gender & test scores. Moreover, it is reflected that gender isn't influenced with current problem.

Table- 3.3 Association of marital status with pre-test scores:

Marital status	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**FAIR (21-30)**	
Married	5	0	0	**5**
Unmarried	42	7	0	**49**
Total	**47**	**7**	**0**	**54**
	X^2=0.82	p>0.05 (Insignificant)		

The association of marital status & test scores is shown in present table 3.3. The probability value for Chi-Square test is 0.82 for 1 degrees of freedom which indicated marital status & test scores. Moreover, it is reflected that marital status isn't influenced with current problem.

Table- 3.4 Association of educational status with pre-test scores:

Educational status	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**FAIR (21-30)**	
Under graduate	25	5	0	**30**
Post graduate	20	0	0	**20**
Others	2	2	0	**4**
Total	**47**	**7**	**0**	**54**
	X^2=8.20	p<0.05 (significant)		

The association of educational status & test score is shown in present table 3.4. The probability value for Chi-Square test is 8.20 for 2 degrees of freedom which indicated educational status and test scores. Moreover, it is reflected that educational status is influenced with present problem.

Table- 3.5 Association of family type with pre-test scores:

Family type	**Test scores**			**Total**
	POOR (1-10)	**AVERAGE (11-20)**	**FAIR (21-30)**	
Nuclear	21	2	0	**23**
Joint	19	4	0	**23**
Extended	7	1	0	**8**
Total	**47**	**7**	**0**	**54**
	X^2=0.77	p>0.05 (Insignificant)		

The association of family type & test score is shown in present table 3.5. The probability value for Chi-Square test is 0.77 for 2 degrees of freedom which indicated family type and test scores. Moreover, it is reflected that family type isn't influenced with present problem.

Table- 3.6 Association of previous knowledge related to stages of labour with pre-test scores:

Previous Knowledge	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
Yes	5	2	0	**7**
No	42	5	0	**47**
Total	**54**	**7**	**0**	**54**
	X^2= 1.73	p>0.05 (Insignificant)		

The association of previous knowledge & test scores is shown in present table 3.6. The probability value for Chi-Square test is 1.73 for 1 degrees of freedom which indicated previous knowledge & test scores. Moreover, it is reflected that previous knowledge isn't influenced with current problem.

Results

The result of this study indicates that there was a significant increase in post-test knowledge scores compared to pre-test scores of stages of labour. The mean percentage knowledge score was observed 1.12 ± 0.33 in pre-test & after implementation of awareness package post-test mean percentage was observed with 2.77 ± 0.41.

Conclusion

Thus, after the analysis and interpretation of data we can conclude that the hypothesis RH1 that, there will be significance difference between pre-test knowledge score with post-test knowledge score among nursing students at (P<0.05) is being accepted.

Furthermore, awareness package related to stages of labour among nursing students may consider as an effective tool when there is a need in bridging & modifying knowledge.

Limitations

- This was limited to Index nursing college, Indore.
- This was limited to 54 nursing students.

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