



# ASSESS THE IMPACT OF AWARENESS PACKAGE ON NEUROLOGICAL ASSESSMENT AMONG PEOPLES IN RURAL AREA INDORE

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## ABSTRACT

The current study has been undertaken to assess knowledge score regarding neurological assessment among Peoples by awareness package in 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 neurological assessment among Peoples. The data was analyzed by using descriptive & inferential statistical methods. The most significant finding was that 26.5% of Peoples were having average knowledge regarding neurological assessment whereas 73.5% had good knowledge after post-test. It was suggested that nurses must educate Peoples regarding neurological assessment.

**Keyword-Impact, Neurological assessment, peoples.**

## I. Introduction

A neurological exam, also called a neuro exam, is an evaluation of your child's nervous system that can be done in the healthcare provider's office. It may be done with instruments, such as lights and reflex hammers. It usually does not cause any pain to the child. The nervous system consists of the brain, the spinal cord, and the nerves from these areas, as well as the muscles (the neuromuscular system). There are many aspects of this exam, including an assessment of motor and sensory skills, balance and coordination, mental status (the child's level of awareness and interaction with the environment), reflexes, and functioning of the nerves. The extent of the exam depends on many factors, including the initial problem that the child is experiencing, the age of the child, and the condition of the child. During a neurological exam, your child's healthcare provider will test the functioning of the nervous system. The nervous system is very complex and controls many parts of the body. The nervous system consists of the brain, spinal cord, 12 nerves that come from the brain, and the nerves that come from the spinal cord. The nervous system regulates the muscles. The circulation to the brain, arising from the arteries in the neck, is also frequently examined. In infants and younger children, a neurological exam includes the measurement of the head circumference.

## II. Objective of the study

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

## III. Hypotheses:

**RH<sub>0</sub>:** There will be no significant difference between pretest & post-test knowledge score on neurological assessment among Peoples.

**RH<sub>1</sub>:** There will be significant difference between pretest & post-test knowledge score on neurological assessment among Peoples.

**RH<sub>2</sub>:** There will be significant association between pre-test score on neurological assessment among Peoples with their selected demographic variables.

#### IV. Assumption

1. Peoples may have deficit knowledge regarding neurological assessment.
2. Awareness package will enhance knowledge of Peoples regarding neurological assessment.

#### V. Methodology

An quantitative evaluative approach was used and pre-experimental one group pre-test post-test research design was used for the study. The samples consisted of 98 Peoples selected by Non probability convenient sampling technique. The setting for the study was 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.

#### VI. Analysis and interpretation

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

n = 98

S. No	Demographic Variables	Frequency	Percentage
<b>1</b>	<b>Age in Years</b>		
a.	21-26	30	30.6
b.	27-32	55	56.1
c.	33-38	11	11.2
d.	39-44	2	2.0
<b>2</b>	<b>Educational Status</b>		
a.	No formal education	3	3.1
b.	Primary	12	12.2
c.	Secondary	32	32.7
d.	Higher secondary	38	38.8
e.	UG & PG	13	13.3
<b>3</b>	<b>Family income</b>		
a.	10000-15000	27	27.6
b.	150001-20000	35	35.7
c.	Above 20000	36	36.7
<b>4</b>	<b>Previous knowledge related to neurological assessment</b>		
a.	Yes	13	13.3
b.	No	85	86.7

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

Category and test Score	Frequency (N=98)	Frequency Percentage (%)
<b>POOR (1-10)</b>	83	84.7
<b>AVERAGE (11-20)</b>	15	15.3
<b>GOOD (21-30)</b>	0	0.0
<b>TOTAL</b>	98	100.0

The present table 2.1.1 concerned with the existing knowledge regarding neurological assessment among Peoples were shown by pre-test score and it is observed that most of the Peoples 83 (84.7%) were poor (01-10) knowledge & some Peoples have 15 (15.3%) were from average category.

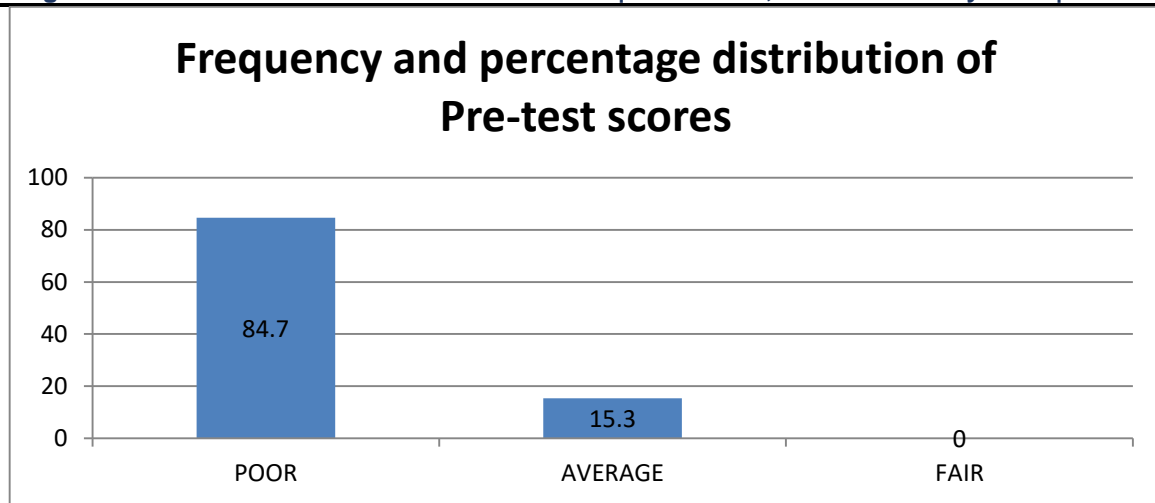


FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects

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

Knowledge Pre -test	Mean ( $\bar{X}$ )	Std Dev (S)
Pre-test score	1.15	0.36

The information regarding mean, percentage of mean and standard deviation of test scores is shown in table 2.1.2 knowledge in mean pre-test score was  $1.15 \pm 0.36$  while in knowledge regarding neurological assessment among Peoples in Indore.

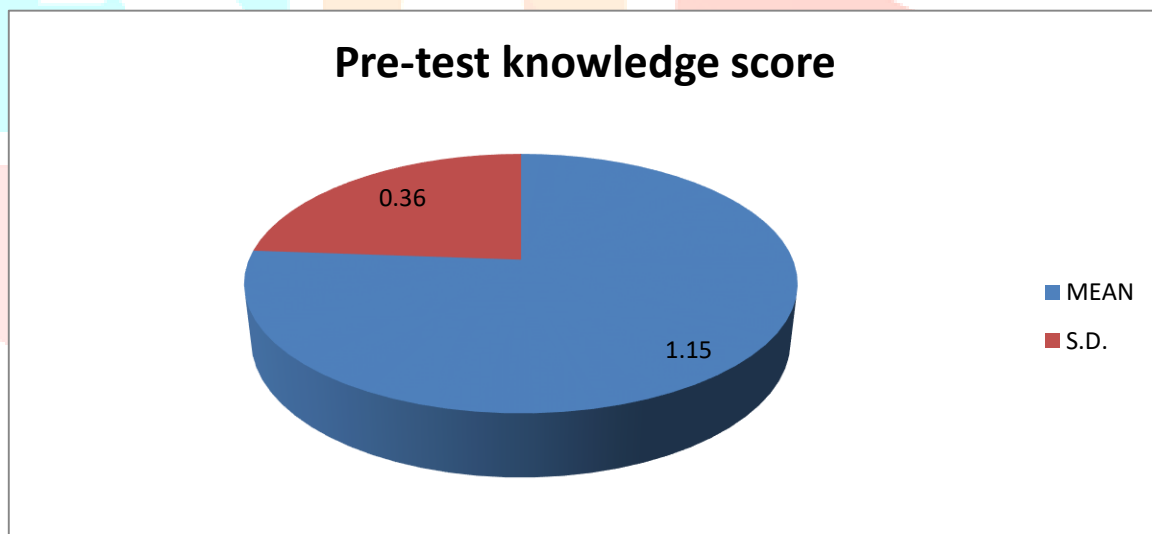


FIG.-2.1.1. - Mean ( $\bar{X}$ ) and standard Deviation (s) of knowledge scores

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

Category and post-test Score	Frequency (N=98)	Frequency Percentage (%)
POOR (01-10)	0	0.0
AVERAGE (11-20)	26	26.5
GOOD (21-30)	72	73.5
TOTAL	98	100%

The present table 2.2.1 concerned with the existing knowledge regarding neurological assessment among Peoples was shown by post test score and it is observed that most of the Peoples 72 (73.5%) were **GOOD** (21-30) knowledge & other Peoples have 26 (26.5%) category which are **AVERAGE** (11-20) posttest knowledge score in present study.

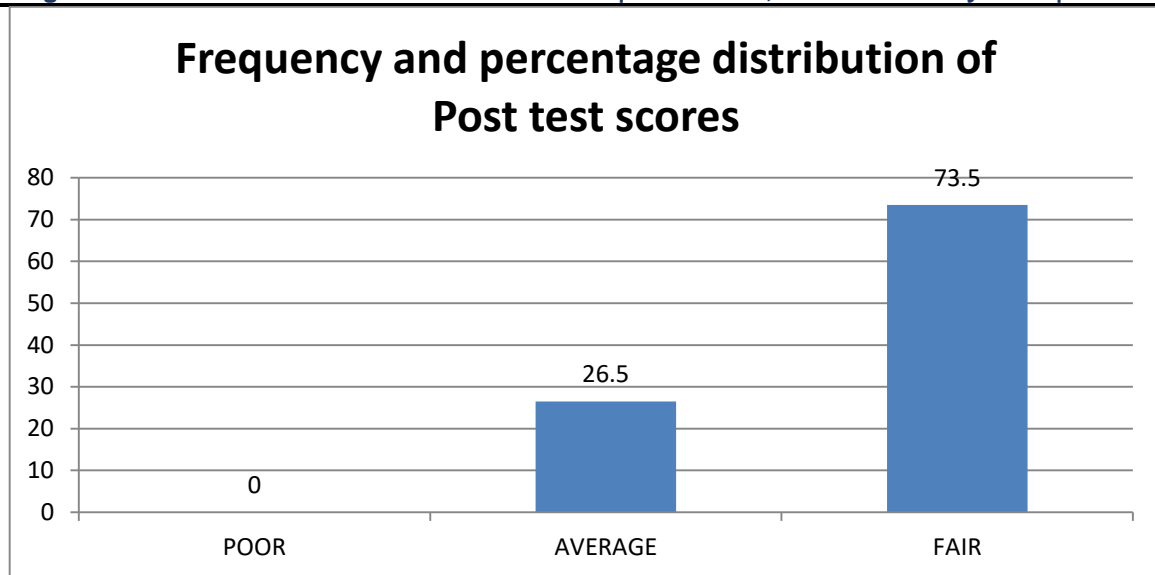


FIG.-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects

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

Knowledge Test	Mean ( $\bar{X}$ )	Std Dev (S)
Post-test score	2.73	0.44

The information regarding mean, percentage of mean and SD of post test scores is shown in table 2.2.2 knowledge in mean post test score was  $2.73 \pm 0.44$  while in knowledge regarding neurological assessment among Peoples in 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 2<sup>nd</sup> objective of the present study.

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 Peoples	Mean ( $\bar{X}$ )	S. D. (s)	Std. Error of Mean	D. F.	t-value	Significance
Pre-test	1.15	0.36	0.05	97	-29.22	P<0.0001*
Post-test	2.73	0.44				

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 Peoples.

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

Table- 3.1 Association of age of Peoples with pre-test scores:

Age (in years)	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
21-26	27	3	0	30
27-32	44	11	0	55
33-38	10	1	0	11
39-44	2	0	0	2
<b>Total</b>	<b>83</b>	<b>15</b>	<b>0</b>	<b>98</b>
$X^2=2.27$ $p>0.05$ (Insignificant)				

The association of age & test scores is shown in present table 3.1. The probability value for Chi-Square test is 2.27 for 3 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 educational status with pre-test scores:**

Educational status	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
No formal	3	0	0	3
Primary	10	2	0	12
Secondary	28	4	0	32
Higher sec.	34	4	0	38
UG & PG	8	5	0	13
<b>Total</b>	<b>83</b>	<b>15</b>	<b>0</b>	<b>98</b>
$X^2= 6.80$		$p>0.05$ (Insignificant)		

The association of educational status & test score is shown in present table 3.2. The probability value for Chi-Square test is 6.80 for 4 degrees of freedom which indicated educational status and test scores. Moreover, it is reflected that educational status isn't influenced with present problem.

**Table- 3.3 Association of family income with pre-test scores:**

Family income	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
10000-15000	24	3	0	27
15001-20000	30	5	0	35
Above 20000	29	7	0	36
<b>Total</b>	<b>83</b>	<b>15</b>	<b>0</b>	<b>98</b>
$X^2=0.87$		$p>0.05$ (Insignificant)		

The association of family income & test score is shown in present table 3.3. The probability value for Chi-Square test is 0.87 for 2 degrees of freedom which indicated family income and test scores. Moreover, it is reflected that family income isn't influenced with present problem.

**Table- 3.4 Association of previous knowledge related to neurological assessment with pre-test scores:**

Previous Knowledge	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	GOOD (21-30)	
Yes	9	4	0	13
No	74	11	0	85
<b>Total</b>	<b>83</b>	<b>15</b>	<b>0</b>	<b>98</b>
$X^2= 2.76$		$p>0.05$ (Insignificant)		

The association of previous knowledge & test scores is shown in present table 3.4. The probability value for Chi-Square test is 2.76 for 1 degrees of freedom which indicated previous knowledge & test scores. Moreover, it is reflected that previous knowledge isn't influenced with current problem.

## VII. Results

The result of this study indicates that there was a significant increase in post-test knowledge scores compared to pre-test scores of neurological assessments. The mean percentage knowledge score was observed  $1.15\pm 0.36$  in pre-test & after implementation of awareness package post-test mean percentage was observed with  $2.73\pm 0.44$ .

## VIII. 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 Peoples at ( $P<0.001$ ) is being accepted.

Furthermore, awareness package related to neurological assessment among Peoples may consider as an effective tool when there is a need in bridging & modifying knowledge.

### IX. Limitations

- This was limited to Indore.
- This was limited to 98 Peoples.

### X. References

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