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Effect Of Awareness Program On Knowledge Regarding Myocardial Infraction And Its Prevention, Indore

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ABSTRACT

The current study has been undertaken to assess knowledge score regarding Myocardial infraction and its prevention among peoples by awareness package in Mangliya, 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 Myocardial infraction and its prevention among peoples. The data was analyzed by using descriptive & inferential statistical methods. The most significant finding was that 22.2% of peoples were having average knowledge regarding Myocardial infraction and its prevention whereas 77.8% had fair knowledge after post-test. It was suggested that nurses must educate peoples regarding Myocardial infraction and its prevention.

Keyword- Impact, awareness package, knowledge & Myocardial infraction and its prevention.

I. Introduction

A heart attack (medically known as a myocardial infarction) is a deadly medical emergency where your heart muscle begins to die because it isn't getting enough blood flow. A blockage in the arteries that supply blood to your heart usually causes this. If a healthcare provider doesn't restore blood flow quickly, a heart attack can cause permanent heart damage and death.

A myocardial infarction (commonly called a heart attack) is an extremely dangerous condition that happens because of a lack of blood flow to your heart muscle. The lack of blood flow can occur because of many different factors but is usually related to a blockage in one or more of your heart's arteries. Without blood flow, the affected heart muscle will begin to die. If blood flow isn't restored quickly, a heart attack can cause permanent heart damage and death.

When a heart attack happens, blood flow to a part of your heart stops or is far below normal, which causes injury or death to that part of your heart muscle. When a part of your heart can't pump because it's dying from lack of blood flow, it can disrupt the pumping sequence for your entire heart. That reduces or even stops blood flow to the rest of your body, which can be deadly if it isn't corrected quickly.

II. Need for study

The most common cause of death and disability in the western world and worldwide is coronary artery disease. Based on 2015 mortality data from the National Health Interview Survey (NHIS-CDC), MI mortality was 114,023, and MI any-mention mortality (i.e., MI is mentioned as a contributing factor in the death certificate) was 151,863.

As per the National Health and Nutrition Examination Survey (NHANES)-CDC data from 2011 to 2014, an estimated 16.5 million Americans older than 20 years of age have coronary artery disease, and the prevalence was higher in males than females for all ages. As per the NHANES 2011 through 2014, the overall prevalence of MI is 3.0% in US adults older than 20 years of age.

Objective of the study III.

- 1. To assess the pre-test & post-test Knowledge score regarding Myocardial infraction and its prevention among peoples.
- 2. To assess impact of awareness package on knowledge regarding Myocardial infraction and its prevention among peoples.
- 3. To find out association between pre-test knowledge score regarding Myocardial infraction and its prevention among peoples with their selected demographic variables.

IV. **Hypotheses:**

RH₀: There will be no significant difference between pre test & post-test knowledge score on Myocardial infraction and its prevention among peoples.

RH₁: There will be significant difference between pretest & post-test knowledge score on Myocardial infraction and its prevention among peoples.

RH₂: There will be significant association between pre-test score on Myocardial infraction and its prevention among peoples with their selected demographic variables.

V. Assumption

- 1. Peoples may have deficit knowledge regarding Myocardial infraction and its prevention.
- 2. Awareness package will enhance knowledge of peoples regarding Myocardial infraction and its prevention.

V. 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 peoples selected by Non probability purposive sampling technique. The setting for the study was Mangliya, 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	=	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 Myocardial infraction and its prevention		
6 a.	•	7	13.0

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 Myocardial infraction and its prevention among peoples were shown by pre-test score and it is observed that most of the peoples 47 (87%) were poor (01-10) knowledge & some peoples have 8 (13.0%) were from average category.

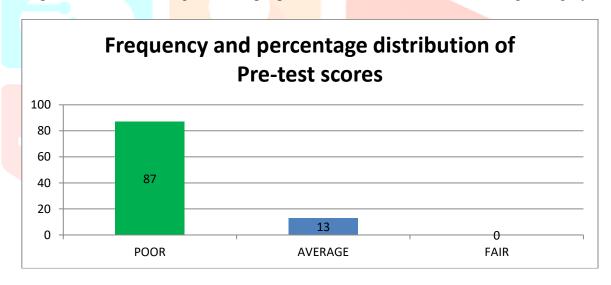


FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjects Table-2.1.2. - Mean (\overline{X}) and standard Deviation (s) of knowledge scores:

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 Myocardial infraction and its prevention among peoples in Mangliya, Indore.

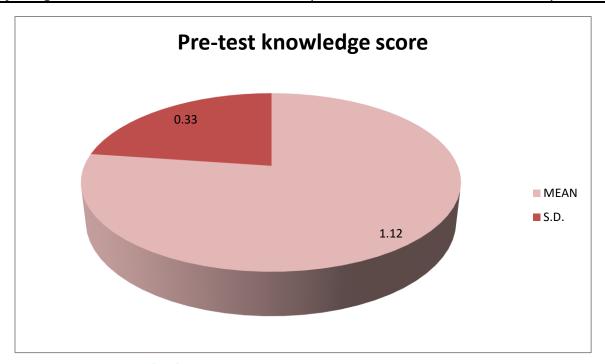


FIG.-2.1.1. - Mean (\overline{X}) and standard Deviation (s) of knowledge scores

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

Table-2.2.1- Frequency and percentage distribution of 1 ost test scores of studied subjects.						
Category and post-test	Frequency Frequency					
Score	(N=54)	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 Myocardial infraction and its prevention among peoples was shown by post test score and it is observed that most of the peoples 42 (77.8%) were **FAIR** (21-30) knowledge & other peoples have 12 (22.2%) category which are **AVERAGE** (11-20) posttest knowledge score in present study.

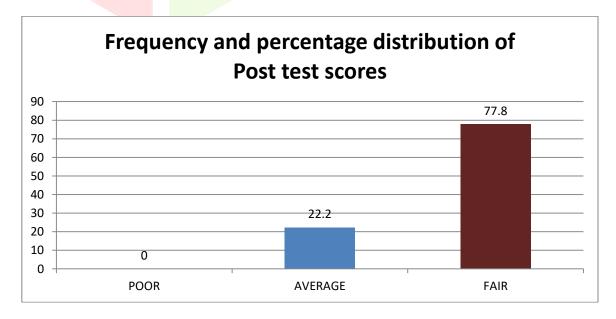


FIG.-2.2.1- Frequency and percentage distribution of Post test scores of studied subjects

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

Knowledge	Mean	Std Dev
Test	(\overline{X})	(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 Myocardial infraction and its prevention among peoples in Mangliya, 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.

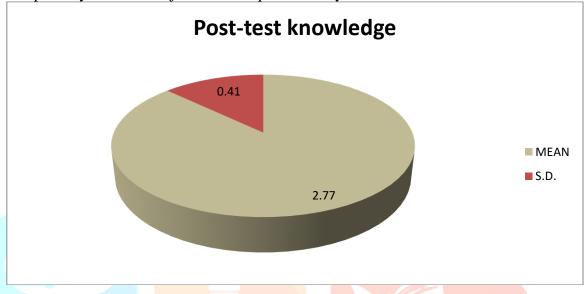


FIG.-2.2.2. - Mean (\overline{X}) and standard Deviation (s) of knowledge scores:

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

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	Test scores			
(in years)	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
19-22	5	2	0	7
23-26 27-30	23 19	5 0	0 0	28 19
Total	47	7	0	54
	$X^2=4.93$	p>0.05(Insignific	ant)	

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 Tota			
	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 (Insign	ificant)	

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			Test scores		Total
status			-1	//0.	
	4	POOR	AVERAGE	FAIR	
1000	7	(1-10)	(11-20)	(21-30)	
Married		5	0	0	5
Unmarried		42	7	0	49
Total		47	7	0	54
	-	$X^2=0.82$	p>0.05 (Insigni	ficant)	

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:

Educationa l status	Test scores			Total
	POOR (1-10)	AVERAGE (11-20)	FAIR (21-30)	
Under graduate	25	5	0	30
PG	20	0	0	20
Others	2	2	0	4
Total	47	7	0	54
	$X^2=8.20$	p<0.05 (signi	ficant)	

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		Test scores		
type				
	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 Myocardial infraction and its prevention with pre-test scores:

		Pro test storest		
Previous		Test scores		
Knowledge				
	POOR	AVERAGE FAIR		
	(1-10)	(11-20) (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.

VIII. Results

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

IX. 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<0.05) is being accepted.

Furthermore, awareness package related to Myocardial infraction and its prevention among peoples may consider as an effective tool when there is a need in bridging & modifying knowledge.

X. Limitations

- This was limited to Mangliya, Indore.
- This was limited to 54 peoples.

XI. References

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