"EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HARMFUL EFFECTS ON USE OF MOBILE PHONES AMONG PRE-UNIVERSITY STUDENTS IN SELECTED COLLEGE, BARABANKI, UTTAR PRADESH."

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ABSTRACT:

Background: Mobile phone is a small, portable communication device that enables us to make phone call. The signal transmission is the basic concept for the use of mobile phone. The easy portability and convenience of mobiles is allowing the people to easily communicate with one another without the scope of place and time. In the modern world the mobile phone has become a mandatory piece for almost all the teenagers. Almost six hours per day is spent with the mobiles be it talking, messaging, video calling or gaming. The excessive use of mobiles is becoming an addiction these days. **Aims and objectives:** To assess the knowledge and plan isnd implement the structured teaching programme regarding harmful effects on use of mobile phones among pre – university students. **Methodology:** A pre-experimental design was adopted for the study conducted on 60 pre university students after obtaining permission from the Principal of the Intermediate college, Barabanki. The samples were collected by purposive sampling technique. Data regarding health hazards on use of mobile phones were collected through a structured knowledge

questionnaire and analysed using descriptive and inferential statistics. **Results:** The study findings revealed that in pre test scores the finding, 51% of pre university students were having inadequate knowledge, 43% had moderate knowledge and 6% had adequate knowledge. Further in the post test it shows that 0% had inadequate knowledge, 9% had moderate knowledge and 91 % had adequate knowledge among the pre university students. **Conclusion:** The study concluded that there is a need to instill awareness and knowledge to the pre university students regarding the harmful effects on use of mobile phones and thereby prevent themselves from the complications caused.

Keywords: Knowledge, Structured teaching programme, pre university students, harmful effects, mobile phone.

I.INTRODUCTION:

As compared to smoking and other addictive habits the mobiles also are injurious to health. It triggers the early onset of various neurological and psychiatric disorders namely Alzheimer's disease. The rate of incidence of brain cancer has rapidly increased about 25- 30% since 2005. According to the National Cancer Institute on a yearly basis almost 1,85000 are diagnosed with either primary or metastatic brain tumour or brain related complications and also interpreted that one of the contributing factor for the diagnosis of brain tumours is the use of mobiles excessively.

The mobile phones use the radio frequency radiation for its operations. The exposure is continuous and helps in irradiating the whole body of a person and thus cause harmful effects. Hence, the continuous and excessive exposure to this radiation can bring about various ill effects to health of a person. When using the mobile phone, it is held very close to the ears and the parietal occipital region of the head thus causing various neurological related disorders.

The various signs and symptoms includes headache, ear pain, blurring of vision, short term memory loss, numbness, tingling, burning sensation, sleep disturbance, fatigue and anxiety. The single DNA strand breakdown in the brain cells is increased after long term and continuous exposure to high radiofrequency waves. The various researches done by others scientists also interprets that with long term use of mobile phones may cause tumours to develop in the brain causing damage which could lead to various disorders.

According to a survey conducted, overall, globally 66.8% of people were down with either one of the health issues cause due to excessive use of mobile phones. In India, a similar situation was observed with people residing in various urban and rural areas. The total estimate of mobiles purchased in India stands at 232 million on an annual basis. This interprets that the addiction towards mobile phones is drastically increasing day by day.

The addiction of the mobile phone by the younger generation has become a global phenomenon in the modern years. The mobiles have become a part of daily life essential among the youth and it shows its effects on various aspects related to relationships, health etc. The married couple are facing the greatest

miseries overall, where most cases involve with either cheating one another, divorce requests, not spending quality time with partner and so on.

As pre university students are very much addicted to the mobile phones and they lack adequate knowledge about harmful effects on excessive use of mobile phones, the researcher would like to carry out the study to assess the knowledge of pre university students regarding harmful effects on use of mobile phones.

Statement of the problem:

A study to assess the effectiveness of structured teaching programme on knowledge regarding harmful effects on use of mobile phones among pre-university students in selected college, Barabanki, Uttar Pradesh.

Objectives:

➢ To assess the pre-existing knowledge regarding harmful effects on use of mobile phones among pre university students.

➢ To plan and implement structured teaching programme on harmful effects on use of mobile phones among pre university students.

➢ To assess the effectiveness of structured teaching programme on harmful effects on use of mobile phones among pre university students.

➢ To find out association between pre test knowledge scores regarding harmful effects on use of mobile phone with selected demographic variables among pre university students.

Research hypothesis:

RH₁: There will be a significant increase in the post test knowledge compared to the pre test regarding harmful effects on use of mobile phones among pre university students.

RH₂: There will be significant association between knowledge on harmful effects on use of mobile phone with the selected demographic variables.

Assumptions:

1. The pre university students may not have adequate knowledge regarding harmful effects on the excessive use of mobile phones.

2. The pre university students may not have adequate knowledge regarding the complication associated that may arise with the excessive use of mobile phones.
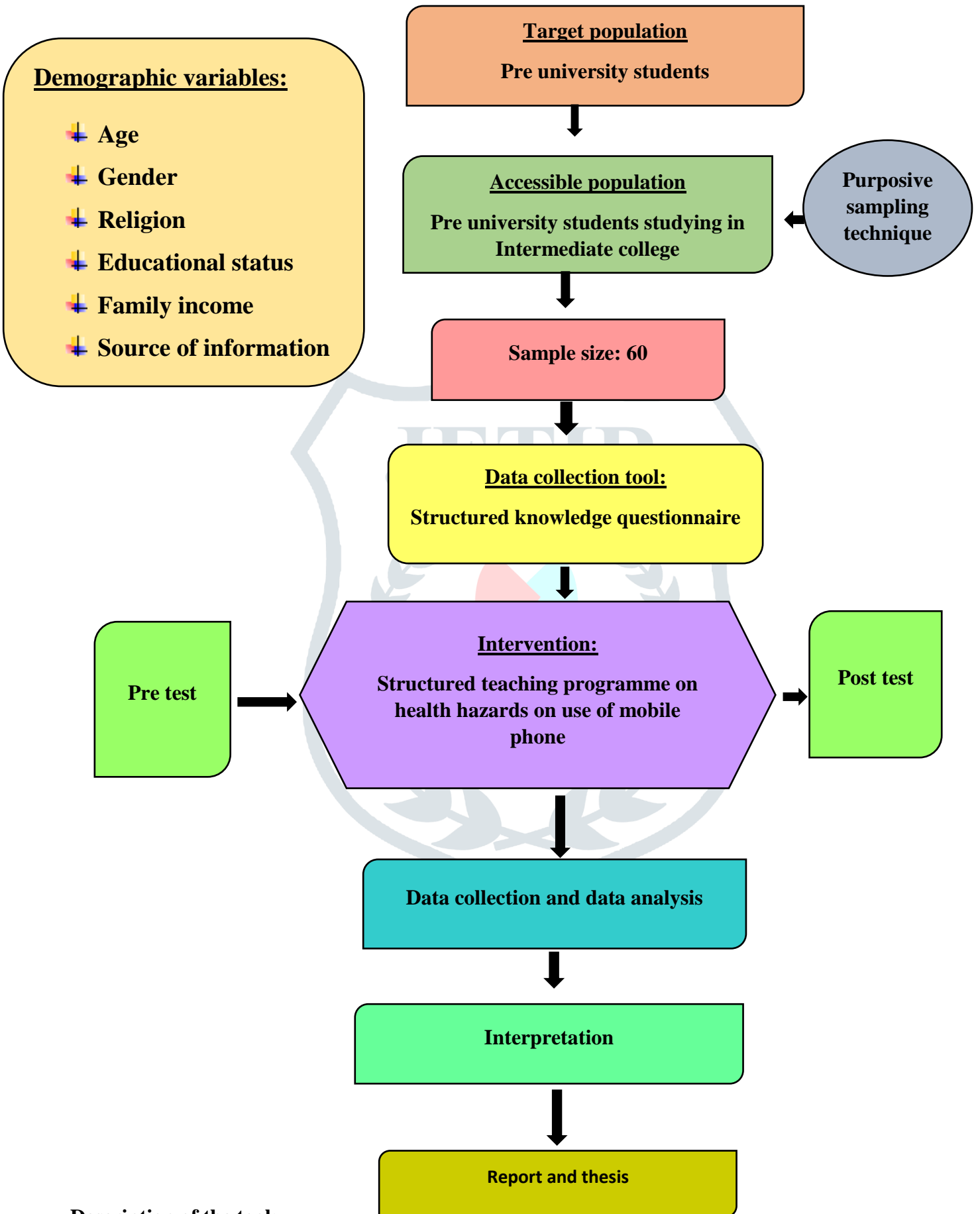
II.MATERIALS AND METHODS:

The present study was undertaken at Barabanki, Uttar Pradesh due to geographical proximity, feasibility of the study and the availability of the samples. The intermediate college is located at a distance of 1.5 km

from the college of nursing. The target population comprised of all pre university students and the accessible population consisted of pre university students of the selected setting.

The samples consisted of 60 pre university students who fulfilled the inclusion criteria for the study. The inclusion criterion for the sample was pre university students who were willing to participate in the study and the exclusion criteria comprised of the samples who were not available on the day of data collection. Purposive sampling technique was chosen considering the limited time frame and the availability of the samples. The research variables were knowledge among pre university students and the demographic variables were age, gender, religion, educational status, family income and source of information.

Demographic variables:

- Age
- Gender
- Religion
- Educational status
- Family income
- Source of information

Target population

Pre university students

Accessible population

Pre university students studying in Intermediate college

Purposive sampling technique

Sample size: 60

Data collection tool:

Structured knowledge questionnaire

Pre test

Intervention:

Structured teaching programme on health hazards on use of mobile phone

Post test

Data collection and data analysis

Interpretation

Report and thesis

Description of the tool:

The tool used for the present study comprised of two sections:

Section A: Demographic data consisted of 6 items for obtaining information about the selected background factors of pre university students such as age, gender, religion, educational status, family income and source of information.

Section B: Structured Knowledge Questionnaire on harmful effects on use of mobile phone

The structured knowledge questionnaire consisted of 30 questions related to the use of mobile phones and what can be the consequences faced on excessive use as well and also a focus on the control or preventive measures. The knowledge level was divided into three aspects based on the total score obtained by the structured questionnaire. The maximum score was 30.

Interpretation of the level of knowledge:

➢ Inadequate knowledge: <50% of score
➢ Moderate knowledge: 51 – 75% of score
➢ Adequate knowledge: > 76% score

Data collection procedure:

A formal written permission was obtained from the Principal of Intermediate college, Barabanki, Uttar Pradesh. The data collection was done within the given time frame among the pre university students who fulfilled the inclusion criteria. After a brief out on the process, oral consent was obtained from the samples. The knowledge was assessed by administration of the structured knowledge questionnaire. The data was entered into excel sheet and analysed through Statistical Package for Social Sciences/ PC + Ver 17.

Ethical considerations:

The study was conducted after the approval of ethics committee of the College of Nursing. Permission was obtained from the Principal of Intermediate college, Barabanki, Uttar Pradesh. The researcher adhered to all the ethical principles i.e., informed consent, principle of beneficence, justice, privacy and confidentiality.

III.RESULTS:

The data were grouped and analysed using descriptive and inferential statistics.

The analysis of demographic variables revealed that majority of samples, 58.3% were in the age group of 16 years, 50% each belonged to male and female respectively, 66.6% were Hindus, 53.3% were studying Intermediate first year, 50% had their family income to > Rs 30000 and 50% had their source of information through means of books and pamphlets.

Table 1: Variable wise mean and standard deviation of knowledge scores of pre university students on harmful effects on use of mobile phones.

(n = 60)

S. No	Demographic data	F	%	PRE TEST		POST TEST		Mean difference
				Mean	SD	Mean	SD	
1.	**Age:**							
	a)16 years	35	58.3	14.94	1.3	25.98	4.37	11.04
	b)17 years	15	25	10.6	1.07	21.93	2.93	11.33
	c)18 years	10	16.7	13.1	2.64	23.25	4.94	10.15
2.	**Gender:**							
	a) Male	30	50	12.52	2.34	24.5	4.74	11.98
	b) Female	30	50	11.64	3.13	26.79	5.63	15.15
3.	**Religion:**							
	a) Hindus	40	66.66	14.75	1.97	26.43	5.24	11.68
	b) Christian	15	25	10.93	2.95	23.90	4.72	12.97
	c)Muslim	05	8.34	5.6	01	21.43	3.95	15.83
	d)Others	0	0	0	0	0	0	0
4.	**Educational status:**							
	a) Inter first year	32	53.3	13.5	3.45	26.3	4.93	12.8
	b) Inter second year	28	46.7	12.67	1.28	24.98	4.51	12.31
5.	**Family income:**							
	a)Upto Rs. 10000	03	05	11.66	2.72	21.32	5.07	9.66
	b) Rs.10001-20000	12	20	10.62	0.92	20.09	4.96	9.47
	c)Rs.20001– 30000	15	25	9.43	1.34	24.56	3.65	15.13
	d)>Rs.30000	30	50	13.49	2.97	26.34	6.94	12.85

6.	Source of information:						
	a) Mass media	10	16.6	13.1	2.32	23.4	4.09	10.3
	b)Books/Pamphlets	30	50	14.5	3.45	26.98	6.76	12.48
	c)Friends / relatives	15	25	13.6	3.31	25.67	4.53	12.07
	d) Others	05	8.4	10.87	2.93	21.93	4.95	11.06

Table 1 : reveals variable wise mean and standard deviation of knowledge scores among the pre university students of which in the age group of 16 years scored highest mean scores in pre test as well as in post test (Mean = 14.94, SD = 1.3, Mean = 25.98 , SD = 4.37), in case of gender in pre test males scored highest mean scores (Mean = 12.52, SD = 2.34) in the post test the females scored highest mean scores (Mean = 26.79, SD = 5.63), in terms of religion Hindus scored highest mean scores in pre test as well as in post test (Mean = 14.75, SD = 1.97, Mean = 26.43 , SD = 5.24), in the aspect of educational status subjects studying intermediate first year scored highest mean scores both in pre test and post test (Mean = 13.5, SD = 3.45, Mean = 26.3, SD = 4.93), in the aspect of family income subjects with family income of less than 10000 score highest mean scores in pre test (Mean = 11.66, SD = 2.72), whereas in post test subjects with family income of >Rs. 30000 scored highest mean scores (Mean = 26.34, SD = 6.94), in terms of source of information subjects who got information through means of books/ pamphlets scored highest mean scores both in pre test as well as in pre test (Mean = 14.5, SD = 3.45, Mean = 26.98, SD = 6.76).

Figure 1: Percentage distribution of pre university students according to the knowledge scores in pre test and post test:
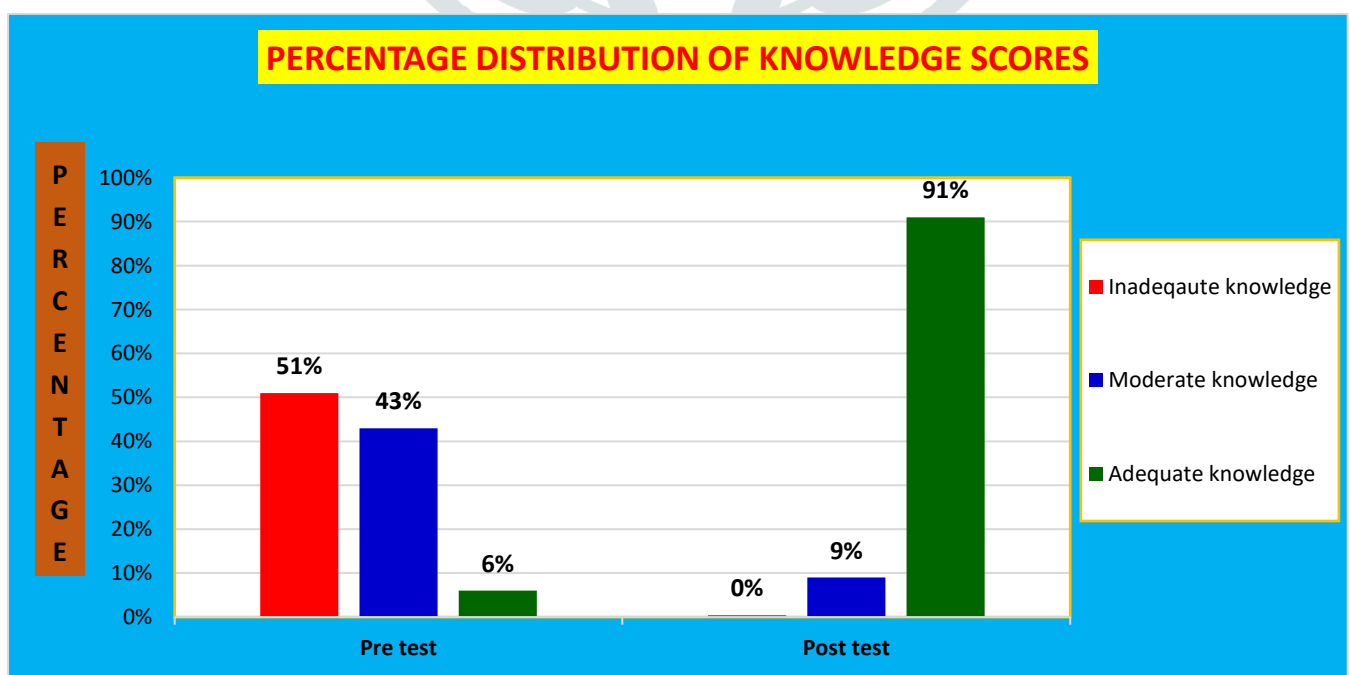
Figure 1 shows that pre test and post test knowledge scores among pre university students. The pre test shows that 51% of pre university students were having inadequate knowledge, 43% had moderate knowledge and 6% had adequate knowledge. Further in post test it reveals that 0% had inadequate knowledge, 9% had moderate knowledge and 91 % had adequate knowledge among the pre university students. Therefore, there is a significant and notable improvement in post yest knowledge scores compared to pre test. Thus, the structured teaching programme was effective in increasing their knowledge scores.

Table 2: Overall knowledge gain with structured teaching programme on harmful effects of use of mobile phone in terms of mean and paired "t" test:

(n = 60)

Knowledge scores	Pre test	Post test
Mean	24.5	46.98
Mean percentage	39.76	77.89
Standard deviation	1.82	7.96
Paired – 't' test	23.45	
Df	59	
Table 't' value	2.023	

Table 2 interprets that there was an improvement in mean scores of subjects that is 39.76 in pre test whereas in post test is 77.89. the calculated – t value is 23.45 which is very much higher than the table value 2.023. It shows that there is significant difference seen in pre test and the post test knowledge scores.

Thus since the structured teaching programme on harmful effects on use of mobile phone was effective the stated hypothesis H_1: There will be a significant increase in the post test knowledge compared to the pre test regarding harmful effects on use of mobile phones among pre university students can be accepted.

Table 3: Chi – square values of pre test knowledge scores of pre university students with their demographic variables:

S. NO	DEMOGRAPHIC VARIABLES	PRE TEST CHI - SQAURE	DF	TABLE VALUE	SIGNIFICANCE
1	Age	4.84	4	7.82	NS
2	Gender	3.37	2	5.99	NS
3	Religion	4.23	6	12.59	NS
4	Educational status	12.39	2	5.99	S
5	Family income	5.76	6	12.59	NS
6	Source of information	6.49	6	12.59	NS

*Significant at 5% level; NS = Not significant; S = Significant

Table 3 concludes that there exist no significant association between pre test knowledge scores and demographic variables like age, gender, religion, family income and source of information whereas there is significant association existing between pre test scores and demographic variable i.e., educational status. Therefore, the stated H_2 hypothesis: There will be significant association between knowledge on harmful effects on use of mobile phone with the selected demographic variables is rejected.

IV.DISCUSSION:

The use of mobile phones in excess starts revealing harmful effects on one's body be it physical, emotional, psychological etc. In a long term use the persons become so dependent on the mobile phone that even their thinking capacity gradually tends to decline in nature. There is much lack of awareness among the pre university students related to the harmful effects, associated complications to health. However, this can be reversible on proper and limited usage of mobile phones and thereby the harmful effects that can be caused can be prevented. The best preventive strategy is to by far try to limit the use of mobile phones on daily basis.

The researcher had undertaken the present study to assess the knowledge gained with structured teaching programme on harmful effects on use of mobile phone among pre university students through one group pre test and post test method. The teaching was carried through a structured programme to the pre university students on harmful effects of mobile phones. A post test was conducted to the same group to find out the knowledge gained with the help of structured teaching programme.

Data is analysed with the help of descriptive and inferential statistics. In the total samples, majority of samples were 35 (58.3%) were in age group of 16 years, 30 (50%) each belonged to male and females respectively, 40 (66.66%) were Hindus in religion, 32 (53.3%) were studying in intermediate first year, 30 (50%) had their family income of > Rs 30000 and 30 (50%) had their source of information through means of books/ pamphlets.

The chi square values computed between knowledge scores and selected demographic variables like age (4.84), gender (3.37), religion (4.23), educational status (12.39), family income (5.76), source of information (6.49).

The effectiveness of structured teaching programme on harmful effects on use of mobile phone is highly effective among pre university students, the stated H_1 hypothesis for the present study that there will be a significant increase in the post test knowledge compared to the pre test regarding harmful effects on use of mobile phones among pre university students can be accepted. The stated H_2 hypothesis that there will be significant association between knowledge on harmful effects on use of mobile phone with the selected demographic variables is rejected.

Therefore, finally it can be concluded that the education on harmful effects on use of mobile phones brought about awareness and also increased their knowledge among pre university students and thereby it helped them to reduce the harmful effects and the associated complications that can be caused on excessive use of mobile phones.

V.CONCLUSION:

This research project has provided a rich experience for the researcher and thus helped to realise the need for inculcating awareness on harmful effects on use of mobile phones among the pre university students as it has become a common habit for them in the modern period. Therefore, there is an urgent need to develop a strong positivity towards limiting the usage of mobile phones and thus protecting oneself from its harmful effects. Since pre university students age group is like an intermediate stage of life thus it is the appropriate age to help pre university students build good and health habits and follow the right paths of life.

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VII.SOURCE OF SUPPORT: Nil

VIII.CONFLICT OF INTEREST: None declared

IX. ACKNOWLEDGEMENT:

X.CONTRIBUTORS:

RM: Conceptualization of the study, collection, analysis of the data, writing of the manuscript, finalization of the manuscript and will acta s the guarantor of the paper.

LA: Conceptualization of the study, analysis of the data, writing of the manuscript, finalised the manuscript, edited and critically evaluated the manuscript.