# A Descriptive Study to Assess the Knowledge and Practice Regarding Adverse Effects of Excessive use of Mobile Phones among Nursing Students of Selected Nursing College of Bagalkot

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**Abstract:- A descriptive survey was carried out to assess the knowledge and practice regarding adverse effects of excessive use of mobile phones among Nursing students of selected Nursing college of Bagalkot. The study was conducted by Mr. Ajayakumar, Mr. Vijayakumar, Ms. Vijayalaxmi, Ms. Sushma, Ms. Sushmita, Mr. Veerabhadra, Mr. Vinod, Final year BSc. (N) and PB B.Sc students of Sajjalashree Institute of Nursing Sciences Navanagar,Bagalkot in partial fulfillment of the requirement for the Bachelor of Science in Nursing of Rajiv Gandhi University of Health Sciences, Bangalore.**

## I. THE OBJECTIVES OF THE STUDY

- To assess the knowledge of adverse effects of excessive mobile phone usage among Nursing students.
- To assess the practice on excessive mobile phone usage among Nursing students.
- To find out the co-relation between knowledge and practice regarding adverse effects of excessive mobile phones use.
- To find out the association between knowledge regarding adverse effects of excessive mobile phones use with selected socio-demographic variables.
- To find out the association between practice regarding adverse effects of excessive mobile phones with selected socio-demographic variables.

## II. MAJOR FINDINGS OF THE STUDY

- Majority of respondents were in the age group of 18-20 years (95%), and least percentage of the sample was in the age group above 20 years (3%) and below 20 (2%).
- More than three fourth of the respondents were Hindus 88 (88%) and remaining one third are others(12%).
- Majority of respondents were female (60%) and males about (40%).
- Nearly three fourth of respondents were from nuclear family (77%) and joint family about (23%).
- The respondents occupation of father were farmer (43%), government employee (23%), private employee (15%) and business (19%).
- The respondents occupation of mother's were housewives (85%), government employee (11%), private employee (3%) and self employee (1%).
- The education level of father of respondents were informal education (21%), secondary education (21%), P.U.C (23%) and degree and above (35%).
- The education level of mother's of respondents were informal education (26%), secondary education (40%), P.U.C (22%) and degree and above (12%).
- The respondents family monthly income were below 10.000/- (41%), 10.001-20.000 (34%), 20.001-30.000 (9%) and above 30.000 (16%).
- The mean overall knowledge score of students regarding Adverse effects of mobile phone was 9.38 and the standard deviation was 2.27
- The chi-square value showed that there was a significant relationship between knowledge of students with education of father.
- No significant relationship was found between the knowledge of the students with age, gender, religion,

occupation, education of mother, type of family, monthly income.

## III. INTRODUCTION

**"Your cell phone has already replaced your camera, your calendar, your alarm clock…. Don't let it replace your family."**

A cell is a device that can make and Receive telephone calls over a radio link whilst moving around a wide geographic area it does so by connecting to a cellular network provide by a mobile phone operator, allowing access to the public telephone network[1] The first handled cellular mobile phone was demonstrated by JOHN.F Mitchell and Martin Cooper of Motorola in 1973 . using a handset weighing 2kg . the first commercial automated cellular network (1G) analog was launched in Japan by Nippon telegraph and telephone in 1979 these first –generation system could support for more simultaneous calls but still used Analog cellular Technology . in 1991 , the second generation (2G) digital cellular technology was launched in F inland in by Radiolinja on the GSM standard. Ten years later, in 2001 . the third generation (3G) was launched in Japan by NTT DoCoMo on the WCDMA standard. By 2009, it had become clear . that . at some point 3G networks would be overwhelmed by the growth of bandwidth –intensive applications , such an streaming media. The first two commercially available technologies billed on 4Gwere the WIMAX standard , offered in north America by sprint , and the LTE standard first offered in Scandinavia by TELIASONERA[2]. Cooper wanted people to have freedom to talk on the phone away from their cause . so in reaction , he and Motorola embarked on a project to create a more portable device[3]

## IV. METHODOLOGY

Research methodology is a systematic way to solve the research problem. Research methodology involves the systematic procedure by which the research starts from the initial identification of the problem to its final conclusion. [12]The study was conducted to assess the knowledge and practice of Nursing students regarding adverse effects excessive of mobile phone usage.

➢ *Research Approach*

It involves the generation of data in interview form, which can be subjected to rigorous quantitative analysis in formal and rigid fashion. The research approach adopted in this present study was **descriptive survey**, is considered as appropriate because this study was intended to assess the knowledge and practice of nursing students regarding adverse effects of excessive mobile phone usage. "Descriptive survey involves the events that have already taken place, concern, condition that are existing opinions that are evident". The purpose of descriptive survey is to systematic collection and presentation of data to give a clear picture of a particular situation[12].

➢ *Research Design*

Research design facilitates the smooth sailing of various research operations there by making research as efficient as possible yielding maximal information with minimal expenditure.[14] The research design adopted for the present study was non experimental i.e. **descriptive research design** because it describes the relationship which exists between the selected demographic variables and knowledge and practice of Nursing students regarding adverse effects of excessive mobile phone usage.

➢ *Setting of the Study*

Setting refers to the physical location and condition in which the data collection takes place. For present study the setting of the study was **Sajjalashree Institute of Nursing Sciences, Navanagar, Bagalkot**.

➢ *Population*

A population is an aggregate of totality of all subjects that possess a set of specification. The target population is the group of population that the researcher aims to study and to whom the study findings will be generalized. The total population of the study was the Nursing students.The accessible population is the group of population that the researcher finds from the group of population in the study area. The population of the study was comprised of **Nursing students who are studying in Sajjalashree Institute Of Nursing Sciences, Navanagar, Bagalkot**.

➢ *Sample and Sampling Technique*

Sampling is a process of selecting a portion of the population to obtain data regarding a problem. In this study, researcher used **purposive sampling** for the selection of area and a **disproportional stratified random sampling** for the selection of the sample. For this purpose all the B.Sc nursing students were listed out from each class (strata) of and only **100** were chosen as a sample by using **simple random sampling**.

➢ *Method of Data Collection*

The researcher plan to collect relevant data from research subject by **structured questionnaires**. A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents. The questionnaire include closed ended questions were the respondents has to pick an answer from the given number of options.

## V. RESULTS

The analysis and interpretation of the data collected from the sample of 100 students of B.Sc nursing was organized as followed.The findings of the study were organized and presented in the following sections

❖ Section – I Frequency and percentage distribution of socio demographic Characteristics of sample.
❖ Section – II Standard deviation of knowledge on adverse effect of mobile phone usage among B.Sc nursing students and practice on using mobile phones.
❖ Section – III Correlation between the knowledge regarding adverse effects of mobile Phone usage and practice regarding using mobile phones.
❖ Section –IV Association between knowledge regarding adverse effect of mobile phone usage and selected socio demographic variables.
❖ Section- V Association between practice regarding adverse effect of mobile phone usage.

❖ *Section – I*

➢ *Sampling Distribution*

The sample characteristics selected for analysis in the study were age, religion, gender, occupation, education status, family monthly income, type of the family, have you attended any awareness program. The sample characteristics were categorized as follows.

➢ *Sample Characteristics*

Sampling characteristics included in the study were Age, Gender, Religion, Occupation, Educational status, Family income, Type of family, Have you attended any awareness program on adverse effects of excessive mobile phone use

| Characteristics | Category | Respondent | |
|---|---|---|---|
| | | Number | Percent |
| Age | Below 18 | 2 | 2% |
| | 18-20 | 95 | 95% |
| | Above 20 | 3 | 3% |
| Total | | 100 | 100% |

Table 1:- Percentage distribution of Age of students

Table 1 & Figure 1 shows that the majority of the respondent 95% of were in the age group of below 18years followed by 3% in the age group above 20years and 2% in the age group of below 18years .
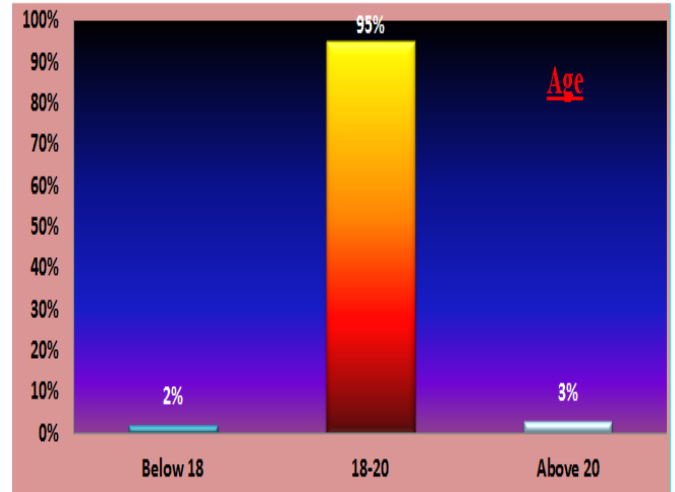


Fig 1:- Percentage distribution of Age of students.

| Characteristics | Category | Respondents | |
|---|---|---|---|
| | | Number | Percent |
| Gender | Male | 40 | 40% |
| | Female | 60 | 60% |
| Total | | 100 | 100% |

Table 2:- Percentage distribution of gender of students

Table no.2 & Figure no.2 shows that the majority 60% of the respondents were females and 40% were males.
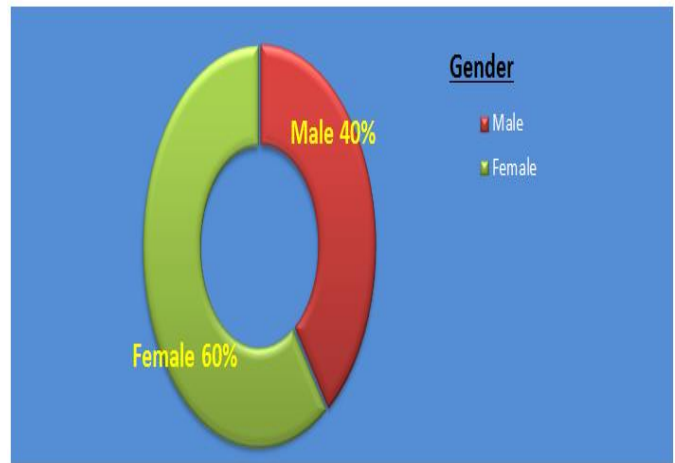


Fig 2:- Percentage distribution of gender of students

| Characteristics | Category | Respondents | |
|---|---|---|---|
| | | Number | Percent |
| Occupation of father | Farmer | 43 | 43% |
| | Government job | 23 | 23% |
| | Private job | 15 | 15% |
| | Business | 19 | 19% |
| Total | | 100 | 100% |

Table 3:- Percentage distribution of occupation of father

Table no.3 & figure no.3 shows that the majority of the respondents 43% were Farmers followed by 23% Government job, 15% Private job and 19% business man.
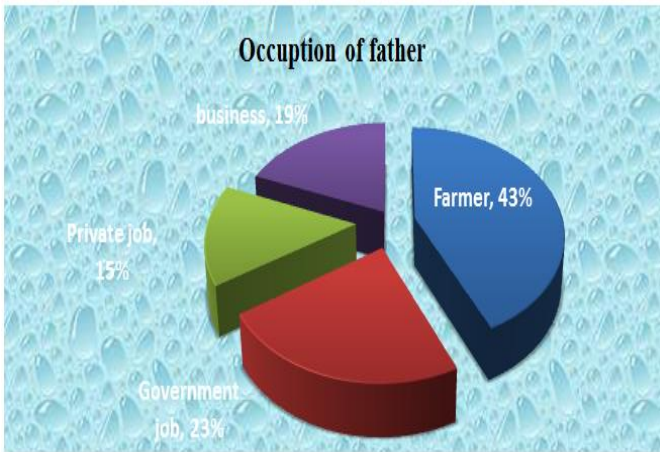

Fig 3:- Percentage distribution of occupation of father

| Characteristics | Category | Respondent | |
|---|---|---|---|
| | | Number | Percent |
| Occupation of mother | House wife | 85 | 85% |
| | Government job | 11 | 11% |
| | Private job | 03 | 03% |
| | Self employee | 01 | 01% |
| Total | | 100 | 100% |

Table 4:- Percentage distribution of occupation of mother

Table no. 4 & figure no.4 shows that the majority of respondents 85% were House wife followed by 11% Government job, 03% Private job and 01% Self employee.
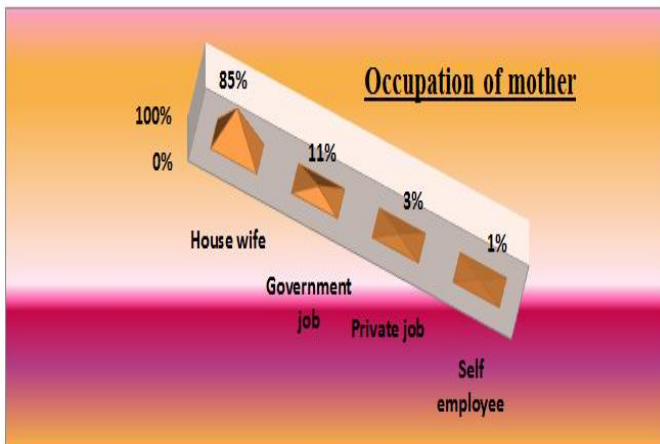

Fig 4:- Percentage distribution of occupation of mother

| Characteristics | Category | Respondents | |
|---|---|---|---|
| | | Number | Percent |
| Education level of father | No formal education | 21 | 21% |
| | Secondary education | 21 | 21% |
| | P.U.C | 23 | 23% |
| | Degree and above | 35 | 35% |
| Total | | 100 | 100% |

Table 5:- Percentage distribution of education level of father of students

Table no.5 & figure no. 5 shows that the majority of respondents 35% education level were degree & above, 23% P.U.C, 21% secondary education and 21% no formal education.
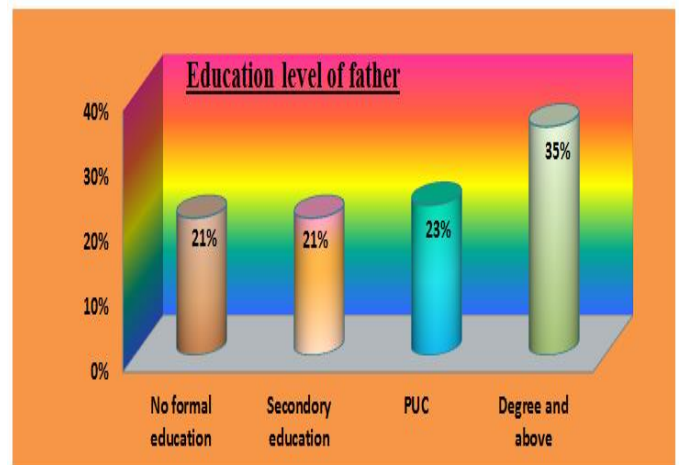

Fig 5:- Percentage distribution of education level of father of students

| Characteristics | Category | Respondents | |
|---|---|---|---|
| | | Number | Percent |
| Education level of mother | No formal education | 26 | 26% |
| | Secondary education | 40 | 40% |
| | P.U.C | 22 | 22% |
| | Degree and above | 12 | 12% |
| Total | | 100 | 100% |

Table 6:- Percentage distribution of education level of mother of students

Table no.6 & figure no.6 shows that the majority of respondents 26% were no formal education followed by 40% secondary education, 22% P.U.C and 12% degree & above.
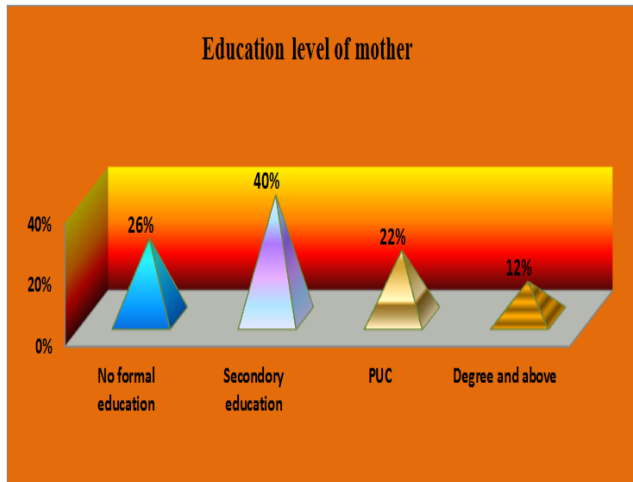
Fig 6:- Percentage distribution of education level of mother of students

| Characteristics | Category | Respondents | |
|---|---|---|---|
| | | Number | Percent |
| Monthly income | Below 10.000 | 41 | 41% |
| | 10.001-20.000 | 34 | 34% |
| | 20.001-30.000 | 09 | 09% |
| | 30.000 and above | 16 | 16% |
| Total | | 100 | 100% |

Table 7:- Percentage distribution of monthly income of students

Table no. 7 & figure no.7 shows that the majority of respondents 41% were below 10.000 followed by 34% 10.001-20.000, 09% 20.001-30.000 and 16% 30.000 and above.
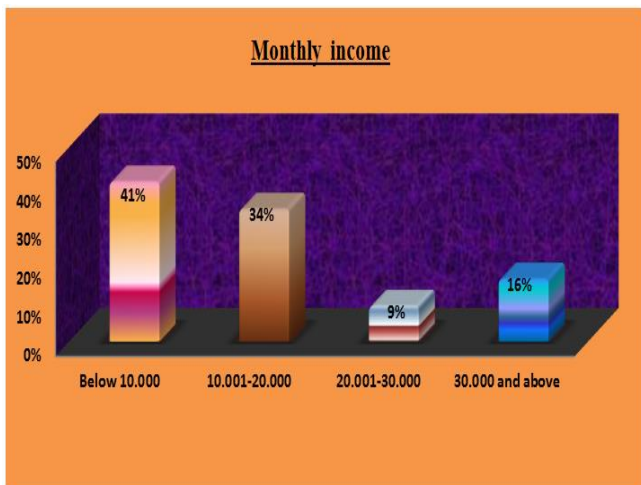


Fig 7:- Percentage distribution of monthly income of students

| Characteristics | Category | Respondents | |
|---|---|---|---|
| Religion | Hindu | 88 | 88% |
| | Muslim | 5 | 5% |
| | Christian | 3 | 3% |
| | Other | 4 | 4% |
| Total | | 100 | 100% |

Table 8:- Percentage distribution of religion of students

Table no.8 & figure no.8 shows that the majority of the respondents 88% were Hindu followed by 5% Muslim, 3% Christian and 4% Others.
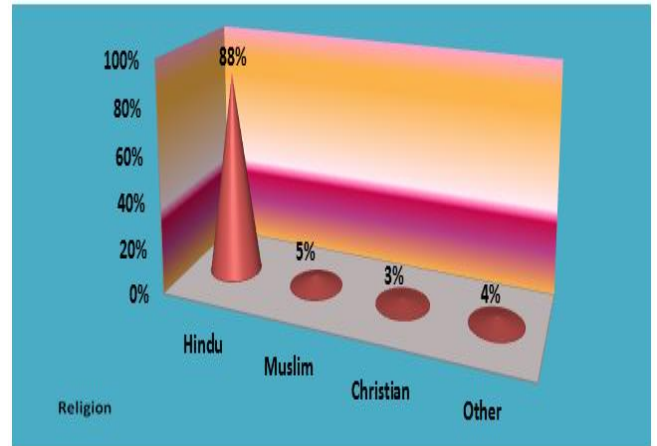


Fig 8:- Percentage distribution of religion of students

| Characteristics | Category | Respondents | |
|---|---|---|---|
| | | Number | Percent |
| Type of family | Nuclear | 77 | 77% |
| | Joint | 23 | 23% |
| Total | | 100 | 100% |

Table 9:- Percentage distribution of type of family of students

Table no.9 & figure no.9 shows that majority of respondents 77% were nuclear family and 23% joint family.
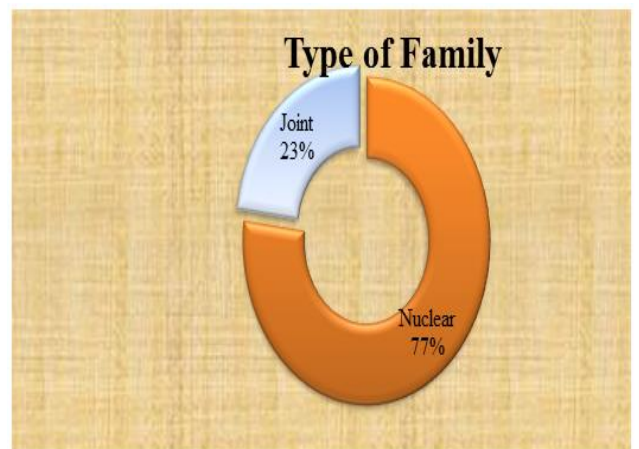


Fig 9:- Percentage distribution of family of students

| Characteristics | Category | Respondents | |
|---|---|---|---|
| | | Number | Percent |
| Awareness program | Yes | 42 | 42% |
| | No | 58 | 58% |
| Total | | 100 | 100% |

Table 10:- Percentage distribution of awareness program of students

Table no. 10 & figure no.10 shows that the majority of respondents 42% were attend the program and 58% were not attend the program.,
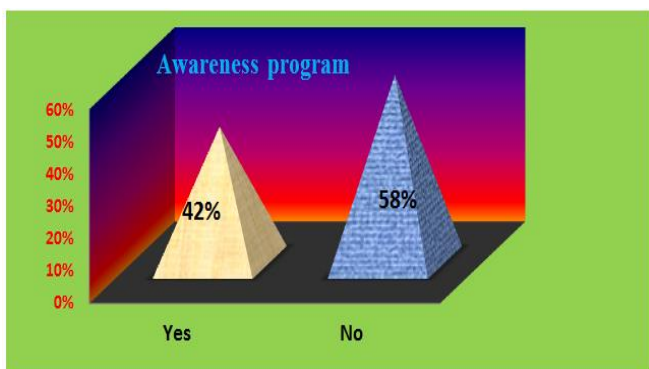


Fig 10:- Percentage distribution of awareness program of students

❖ *SECTION-II*

➢ *Standard deviation of knowledge of adverse effects of mobile phone usage among B.Sc nursing students.*

In order to find out the level of knowledge of students five range category was used. Categorization on the basis of the level of knowledge which is as follows;

| Very poor Knowledge | 0-4 |
|---|---|
| Poor Knowledge | 5-8 |
| Average Knowledge | 9-12 |
| Good Knowledge | 13-16 |
| Very Good Knowledge | 17-20 |

Table 11

| Levels of prevention practice | Range of scores | No of study subjects | Percentage |
|---|---|---|---|
| Very poor | 0-4 | o | 0% |
| Poor | 5-8 | 1 | 1% |
| Average | 9-12 | 32 | 32% |
| Good | 13-16 | 61 | 61% |
| Very good | 17-20 | 6 | 6% |

Table 12:- Level of knowledge of students regarding adverse effects of mobile phone usage (N=100)

**Table 12:** Depicts the findings of the knowledge of students on adverse effects of mobile phone. 61 (61%) of the students having good knowledge about adverse effects of mobile phone usage,32(32%) of the students having average knowledge, 6 (6%) of the students having very good knowledge, 1 (1%) of the students having poor knowledge and no one have very poor knowledge. The knowledge level were assessed by standard deviation values, the standard deviation is 2.27 respectively.

| Levels of practice | Range of scores | No of study subjects | Percentage |
|---|---|---|---|
| High | 0-3 | 45 | 45% |
| Medium | 4 – 7 | 54 | 54% |
| Low | 8-10 | 1 | 1% |

Table 13:- Level of Practice of mobile phone usage and its adverse effects among students of B.Sc nursing. (N=100)

**Table 3:** Depicts the findings of the practice of mobile phone usage and its adverse effects. 54 (54%) of the students doing high practice, 45 (45%) of the students doing medium practice and 1 (1%) of the students doing low practice. The practice level were assessed by standard deviation values, the standard deviation is 2.27 respectively.

❖ *Section-III*

Correlation between knowledge regarding adverse effects of mobile phone usage and practice of mobile phone usage and its adverse effects. The correlation value between knowledge and practice regarding adverse effects of mobile phone usage is 0.99, Which indicates there was positive co-relation between knowledge and practice regarding adverse effects of excessive use of mobile phones among Nursing students.

❖ *SECTION -IV*

Association between knowledge regarding adverse effects of mobile phone usage and socio demographical variables.

| Sl No | Variable | X² | Table value | Df | 5% level of significance |
|---|---|---|---|---|---|
| 1 | Age | 0.417 | 3.84 | 1 | Not significant |
| 2 | Gender | 1.91 | 3.84 | 1 | Not significant |
| 3 | Religion | 0.68 | 3.84 | 1 | Not significant |
| 4 | Occupation of father | 2.68 | 3.84 | 1 | Not significant |
| 5 | Occupation of mother | 0.887 | 3.84 | 1 | Not significant |
| 6 | Education of father | 2.57 | 3.84 | 1 | Not significant |
| 7 | Education of mother | 2.80 | 3.84 | 1 | Not significant |
| 8 | Monthly  income | 2.92 | 3.84 | 1 | Not significant |
| 9 | Type of family | 2.00 | 3.84 | 1 | Not significant |
| 10 | Attended awareness program | 1.27 | 3.84 | 1 | Not significant |

Table 4:- Association between knowledge regarding adverse effects of mobile phone usage and socio demographical variables.

Chi -squre test was done to find out the association between the knowledge of students of B.Sc nursing and socio demographic variables. Hence there was not significant relationship between knowledge of students and socio demographical variables.

❖ *SECTION V*

| Sl No | Variable | X² | Table value | Df | 5% level of significance |
|---|---|---|---|---|---|
| 1 | Age | 1.31 | 3.84 | 1 | Not significant |
| 2 | Gender | 2.24 | 3.84 | 1 | Not significant |
| 3 | Religion | 0.13 | 3.84 | 1 | Not significant |
| 4 | Occupation of father | 0.41 | 3.84 | 1 | Not significant |
| 5 | Occupation of mother | 0.15 | 3.84 | 1 | Not significant |
| 6 | Education of father | 5.85 | 3.84 | 1 | Significant |
| 7 | Education of mother | 2.24 | 3.84 | 1 | Not significant |
| 8 | Monthly  income | 0.32 | 3.84 | 1 | Not significant |
| 9 | Type of family | 1.93 | 3.84 | 1 | Not significant |
| 10 | Attended awareness program | 0.46 | 3.84 | 1 | Not significant |

Table 5:- Association between practice regarding mobile phone usage and its adverse effects   and demographic variables.

Chi -square test was done to find out the association between the practice  regarding mobile phone usage and its adverse effects and socio demographic variables, there education level of father at 5% level of significance with 1 df table value is 3.84 which was less than calculated value i.e.5.85 in education of father. Hence there was significant relationship between knowledge of nursing students and their education level of father.

## VI.  CONCLUSION

The following conclusions were drawn on the basis of the present study i.e. to assess the knowledge and practice regarding adverse effects of mobile phone usage. **Major findings of the study.**Majority of respondents were in the age group of 18-20 years (95%), and least percentage of the sample was in the age group above 20 years (3%) and below 20 (2%).More than three fourth of the respondents were Hindus 88 (88%) and remaining one third are others(12%).Majority of respondents were female (60%) and males about (40%).Nearly three fourth of respondents were from nuclear family (77%) and joint family about (23%).The respondents occupation of father were farmer (43%), government employee (23%), private employee (15%) and business (19%).The respondents occupation of mother's were housewives (85%), government employee (11%), private employee (3%) and self employee (1%).The education level of father of respondents were informal education (21%), secondary education (21%), P.U.C (23%) and degree and above (35%).The education level of mother's of respondents were informal education (26%), secondary education (40%), P.U.C (22%) and degree and above (12%).The respondents family monthly income were below 10.000/- (41%), 10.001-20.000 (34%), 20.001-30.000 (9%) and above 30.000 (16%).The mean overall knowledge score of students regarding Adverse effects of mobile phone  was 9.38 and the standard deviation was 2.27.The chi-square value showed that there was a significant relationship between knowledge of students with education of father. No significant relationship was found between the knowledge of the students with age, gender, religion, occupation ,education of mother, type of family, monthly income.

A. This study helps nurse researchers to develop appropriate health education looks for educating the students regarding adverse effects of mobile phone usage according to their demographic, socio economic , cultural and political characteristic.

B. Nurses should come forward to take up unsolved questions in the field of adverse effects of mobile phone usage to carryout studies and publish them for the benefit of youth . students, public and nursing fraternity. The public and the private agencies should also encourage research in this field through materials and funds.

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