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# Comparative study of alcoholism among male nursing students and male general degree students in selected colleges at Bangalore

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**ABSTRACT**

Alcoholism is a significant problem in India. Alcohol misuse is considered as a serious public health issue in India and at large in the world. In addition to its prevalence among the adult population, this behaviour is equally present among adolescents also.[1] Alcoholism is a condition in which an individual loses control over his alcohol intake. It is constantly unable to refrain from drinking once he begins. Impairment may involve physiological, psychological or social dysfunction the increasing production, distribution, promotion and easy availability of alcohol coupled with the changing values of society has resulted in alcohol-related problems emerging as a major public health concern in India. The rate of alcohol intake and related problems is increasing.



## Introduction

Alcoholism is a significant problem in India. Alcohol misuse is considered as a serious public health issue in India and at large in the world. In addition to its prevalence among the adult population, this behaviour is equally present among adolescents also.[1] Alcoholism is a condition in which an individual loses control over his alcohol intake. It is constantly unable to refrain from drinking once he begins. Impairment may involve physiological, psychological or social dysfunction the increasing production, distribution, promotion and easy availability of alcohol coupled with the changing values of society has resulted in alcohol-related problems emerging as a major public health concern in India. The rate of alcohol intake and related problems is increasing. Alcohol abuse can result in poor nutrition, memory disorders, difficulty with walking and balance, liver disease, high blood pressure, muscle weakness, heart problems, anemia (a blood disorder that causes weakness and fatigue; see anemias entry), problems with blood clotting, low resistance to infections, disorders of the digestive system, problems with the pancreas, low blood sugar, high blood fat content, reduced sexual abilities, reproductive problems, and weak bones.[2]

Alcoholism can also lead to a number of personal problems, including depression, unemployment, family problems, and child abuse. The effects of alcoholism also extend to society at large. Alcohol dependence is more common in males. Certain laboratory markers of alcohol dependence includes Gamma – Glutamyl Transpeptidase (GGT) is raised about 40 IU/L in about 80% of the alcohol dependent Individuals. GGT returns to normal (i.e. within 48 hours) on abstinences from alcohol. Mean Corpuscular Volume (MCV) is more than 92 fl (normal 80-90 fl) in about 60% of alcoholic dependent individuals.[3,4]

In terms of work, many alcohol-users had missed going to work, frequently borrowed money from colleagues and friends, had shown poor productivity and faced a lack of respect from employers and colleagues. Further, increase in borrowings (six times more among users) had resulted in there being a greater economic burden on the individual, while depriving the family members of basic essential needs. The study, although based on limited data, has estimated that while gains in terms of revenue from alcohol sales are Rs 216 billion every year, losses from adverse effects of alcohol are estimated to be Rs 244 billion, apart from the immeasurable losses due to multiple and rollover effects of alcohol use. [5]

## Materials and Methods:

Study design: The present study was a non-experimental comparative design study.

### Sample

A total sample (N=60) for the study, comprised of male nursing students and male degree students, of 20-23 years age group. They were randomly selected from nursing and degree colleges in Bangalore. Both the groups were matched in terms of age, family type, parents background , place of living and education. The data was collected individually from each respondent. Prior to collection of data the respondents were assured that their responses would be kept confidential and will be used only for academic purposes.

### Research variable

In the present study, the research variable is the knowledge of male nursing and degree students on alcoholism

### Sample Size

A total number of 60 male degree students and 60 male nursing students from Reputed (confidential) Degree and Nursing College, who met in the inclusion criteria, were selected by using purposive sampling technique.

### Sampling Criteria

The sampling criteria was selected by the 2 types like inclusion criteria exclusion criteria are classified in to the age group ,reading and writing skills , study period and alcoholism treatment.

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**Description of the Tool**

The tool used for the study comprised of a structured knowledge questionnaire on alcoholism. The tool was consisting of two parts namely part I and part II.

**Part I:**

It deals with demographic variable which include age, educational status of parents monthly income, type of family, place of living and religion.

**Part II:**

It deals with assess the knowledge of alcoholism .It includes meaning, causes, signs and symptom, prevention and complication

**Scoring and Interpretation**

Structured knowledge questionnaire of 32 items. Score 'one' was given for correct answer and. Score 'zero' was given for wrong answer.

**Content Validity**

Content validity of the tool was ensured by a team of 8 experts. The experts include 1 psychiatric doctor, 1 specialist in deaddiction, 4 nursing experts specialized in mental Health Nursing, 1 nursing experts specialised in medical nursing and 1 statistician. Based on the experts' suggestion, the tool got its final form.

**Reliability**

Reliability refers to the accuracy and consistency of the measuring tools. The reliability of the tool was established by using split half method (r=0.8476). In order to establish the reliability, the tool was administered to 5 nursing and 5 degree male students who fulfilled the inclusion criteria. These samples were excluded from the main study. The tool was found to be reliable with the reliability co- efficient of 0.93.[6]

**Pilot Study**

Pilot study was conducted during the month of august 2009 at Bangalore city nursing and degree college in Bangalore on 10 samples, 5 samples from nursing and 5 samples from degree college. The pilot study was done to check the clarity of items in the tool and feasibility in conducting the study. Nursing and degree college students who fulfilled the inclusion criteria were selected by purposive sampling technique. Confidentiality was assured to all the participants. Tool administered to participants and data were analyzed and found it to be feasible. The pilot study participants were excluded from the main study. The pilot study did not show any major flown in the design. [7]

**Procedure for Data Collection**

Formal permission was obtained from the concerned authority to conduct the study. The study was conducted during the month of September and October 2009. Samples were selected in accordance with laid down criteria's. Consent was obtained from each participants after giving assurance of confidentiality. Knowledge score was assessed by structure questionnaire. Thus data collection was completed within stipulated time period.[8,11]

**Plan for data analysis**

The demographic variables were described descriptively in terms of frequency and percentage. A't' test was done to compare the knowledge score of nursing and degree students on alcoholism. A $\chi 2$ was done to find out Association between the mean knowledge scores of nursing students and degree students on alcoholism with selected demographic variables. [9,10]

**Protection of Human Rights**

The proposed study was conducted after the approval of dissertation committee of Varalaksmi College of Nursing. Permission was obtained from concerned authority of respective colleges Consent of each subject parents was obtained before starting the data collection. Assurance was given to them that the anonymity of each individual would be maintained.

**Results:**

**Description of demographic profile of the sample**

This section deals with distribution of participants according to the demographic characteristics. The obtained data on demographic profile are described under the following sub heading which include age, educational status of parents, , income per month, religion, type of the family and place of livings,. The data was analyzed by using descriptive statistic and are summarized in terms of frequency and percentage.(Table:1) [12].

The above table shows that maximum number of male nursing students 44(77.3%) belongs to 20-21 age group, 10(16.7%) belongs to 22-23 age group, 6 (10%) belongs to >23 age group. About 25 (41.7%) male student's parents had secondary education, 12 (20%) had Higher secondary education, 12 (20%) had graduate education. Concerning to monthly income of the family, 10(16.7%) were earning Rs<10,000, 41(68.3%) were earning Rs 10,001- 20,000, and 24 (20.0%) were earning Rs. 20,000. Regarding the type of the family, majority 40(800%) were nuclear families and 12(20.0%) were joint families. About 20(33.3 %) were coming from Urban, 21(35) were from semi urban, 13(21.7) were from rural and 6(10) were from semi rural. [13]

Regarding male degree students, the above table shows that, majority of students 36(60%) belongs to 20-21 age group, 12(20%) belongs to 22-23 age group and 12(20%) belongs to >23 age group .About 22 (36.5%) male student's parents had secondary education, 28 (46.7%) had Higher secondary education, 10 (16.7%) had graduate education. Concerning to monthly income of the family, 36(40.0%) were earning Rs 10,001- 20,000, and 24 (20.0%) were earning Rs .20,000. Regarding the type of the family, majority 37(60.7%) were nuclear families and 23 (39.3%) were joint families. About 17(28.3 %) were coming from Urban, 18(30%) were from semi urban, 12(20%) were from rural and 13(21.7%) were from semi-rural. [14,15] .The reports are shown in figure 1-5

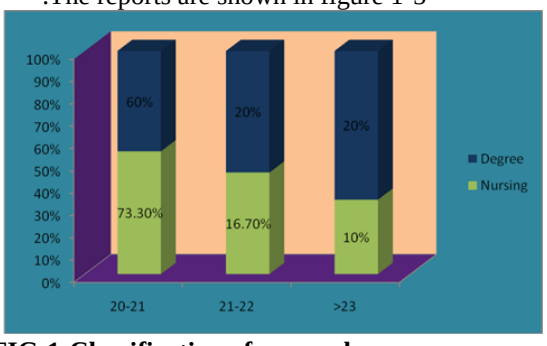


**FIG-1:Classification of respondense on age group**

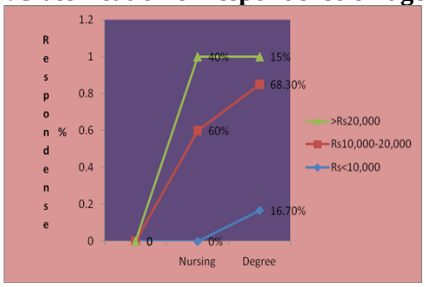


**FIG-2:Classification of respondense on monthly income basis**

**Table -1. Frequency and percentage distribution of demographic variables**
**n=120**

| S.No | Demographic variables | MALE | NURSING | MALE | DEGREE | COMB | INED |
|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % |
| 1. | Age Group (years) | | | | | | |
| | 20-21 | 44 | 73.3 | 36 | 60.0 | 80 | 66.7 |
| | 22-23 | 10 | 16.7 | 12 | 20.0 | 22 | 18.3 |
| | >23 | 6 | 10.0 | 12 | 20.0 | 18 | 15.0 |
| 2. | Educational status of parents | | | | | | |
| | Illiterate | 0 | 0 | 0 | 0 | 0 | 0 |
| | Primary | 0 | 0 | 11 | 18.3 | 11 | 9.2 |
| | Secondary | 22 | 36.7 | 25 | 41.7 | 47 | 39.7 |
| | Higher secondary | 28 | 46.7 | 12 | 20.0 | 40 | 33.3 |
| | Graduate &above | 10 | 16.7 | 12 | 20.0 | 22 | 18.3 |
| 3. | Monthly Income | | | | | | |
| | Rs<10,000 | 0 | 0 | 10 | 16.7 | 10 | 8.3 |
| | 10,000-20,000 | 36 | 60.0 | 41 | 68.3 | 77 | 64.2 |
| | >20,000 | 24 | 40.0 | 9 | 15.0 | 33 | 27.5 |
| 4. | Type of family | | | | | | |
| | Nuclear | 48 | 80.0 | 37 | 60.7 | 85 | 70.8 |
| | Joint | 12 | 20.0 | 23 | 39.3 | 35 | 29.2 |
| | Extended | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. | Place of living | | | | | | |
| | Urban | 20 | 33.3 | 17 | 28.3 | 37 | 30.8 |
| | Semi urban | 21 | 35 | 18 | 30.0 | 39 | 32.5 |
| | Rural | 13 | 21.7 | 12 | 20.0 | 25 | 20.8 |
| | Semi rural | 6 | 10 | 13 | 21.7 | 19 | 15.8 |
| | | 60 | 100 | 60 | 100 | 120 | 100 |

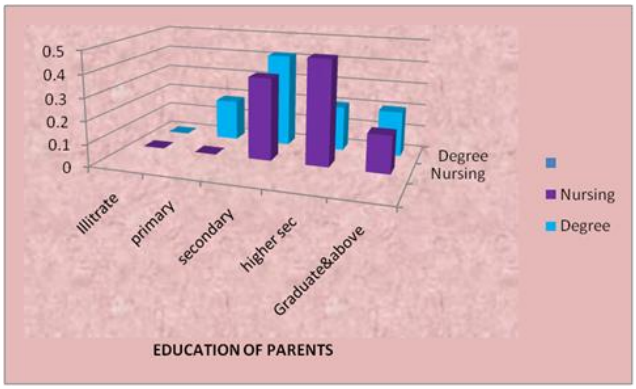


**FIG: 3Association between knowledge level and parent's Education.**

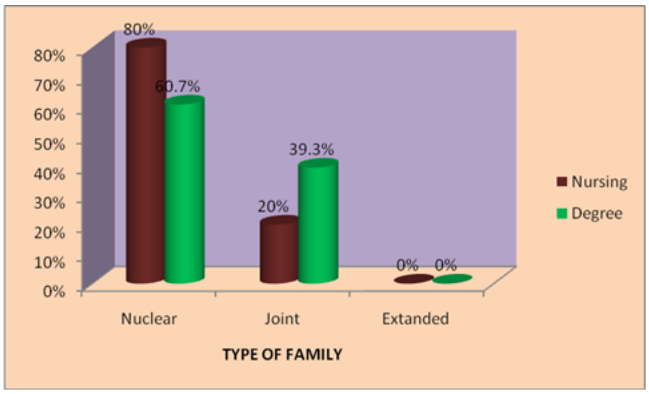


**FIG-4:Classification of respondense on type of family**


**FIG-5:Classification of respondense on the base of place of living**

**Table -2 .Mean Knowledge scores of male nursing students on alcoholism (N=60)**

| No. | Content | Statements | Max. Score | Respondents Knowledge | | |
|---|---|---|---|---|---|---|
| | | | | Mean | Mean(%) | SD(%) |
| I | Total questions regarding alcoholism | 32 | 32 | 25.56 | 79.8 | 2.96 |

The above table shows that, the mean % knowledge scores of male nursing students on alcoholism such as 79.8 and SD of 2.96.(Table:2,3 and4)

**Table -3.Mean Knowledge scores of male degree students on alcoholism**

N=60

| No. | Content | Statements | Max. Score | Respondents Knowledge | | |
|---|---|---|---|---|---|---|
| | | | | Mean | Mean(%) | SD(%) |
| I | Total questions regarding alcoholism | 32 | 32 | 14.96 | 46.7 | 3.46 |

The above table shows that, the mean % knowledge scores of male degree students on alcoholism such as 46.7 and SD of 3.46.

**Table -4 Over all male nursing and degree students Mean Knowledge score on Alcoholism**

n=60

| Aspects | Max score | Respondents Knowledge | | | Paired' 't' Test |
|---|---|---|---|---|---|
| | | Mean | Mean (%) | SD (%) | |
| Nursing | 32 | 25.56 | 79.8 | 2.96 | 19.57** |
| Degree | 32 | 14.96 | 46.7 | 3.46 | |

P<0.055

The above table shows that the mean knowledge score of Nursing students is higher than the Degree students. So the research hypothesis H1 is accepted, because the obtained value was higher than the table value at 0.05 level of significance.(Fig:6,Tab;5)

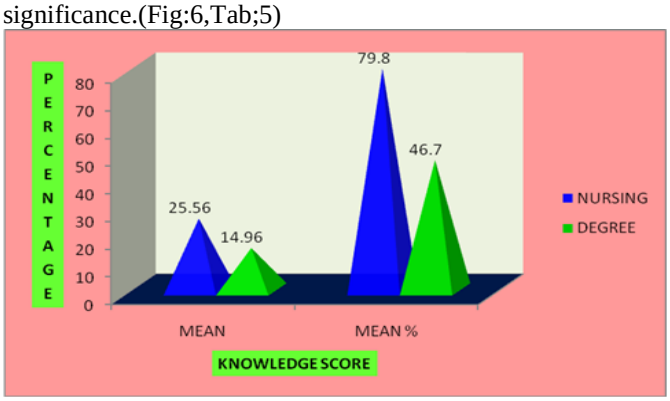


**FIG : 6 Comparison of knowledge score between Nursing and Degree students.**

**Table – 5 Classification of Respondents on Knowledge level on alcoholism**

| Knowledge Level | Category | Classification of Respondents | | | |
|---|---|---|---|---|---|
| | | Male nursing | | Male degree | |
| | | Number | Percent | Number | Percent |
| Inadequate | < 50 % Score | 10 | 16.7 | 46 | 76.6 |
| Moderate | 51-75 % Score | 42 | 70.0 | 12 | 20 |
| Adequate | > 75 % Score | 8 | 13.3 | 2 | 3.3 |
| Total | | 60 | 100.0 | 100 | 100.0 |

The above table shows that in male degree students majority 46(76.6%) were having inadequate, 12(20%) were having moderate knowledge and 2 (3.3) were having adequate knowledge. Male nursing students results shows that majority 42(70.0%) were having moderate knowledge ,8(13.3%) were having adequate knowledge and 10 (16.7%) were having inadequate knowledge.(fig.7.Tab:6)

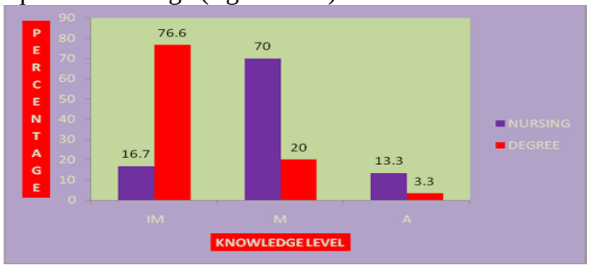


**FIG 7. Comparison of knowledge level between Nursing and Degree students.**

**Table – 6 Association between knowledge score of male nursing regarding alcoholism and selected socio demographic variables.**

| Demographic variables | Samples | RESPONDENTS | | | | | | $X^2$ Value | P Value |
|---|---|---|---|---|---|---|---|---|---|
| | | Inadequate | | Moderate | | Adequate | | | |
| | | N | % | N | % | N | % | | |
| AGE(YRS) 20-21 | 44 | 6 | 60 | 34 | 80.9 | 4 | 50 | 5.66 | <0.05 NS |
| 22-23 | 10 | 2 | 20 | 6 | 14.2 | 2 | 25 | | |
| >23 | 6 | 2 | 20 | 2 | 4.8 | 2 | 25 | | |
| FAMILY TYPE Nuclear | 48 | 8 | 80 | 36 | 85.7 | 4 | 50 | 5.34 | >0.05 *** |
| Joint | 12 | 2 | 20 | 6 | 14.3 | 4 | 50 | | |
| MONTHLY INCOME Rs<10,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.89 | >0.05 NS |
| Rs10,001-20,000 | 36 | 6 | 60 | 24 | 57.2 | 6 | 75 | | |
| Rs>20,001 | 24 | 4 | 40 | 18 | 42.8 | 2 | 25 | | |
| EDUCATION OF PARENTS Secondary | 22 | 6 | 60 | 15 | 35.7 | 1 | 12.5 | 18.52 | <0.05 *** |
| Higher secondary | 28 | 2 | 20 | 24 | 57.2 | 2 | 25 | | |
| Graduate &Above | 10 | 2 | 20 | 3 | 7.1 | 5 | 62.5 | | |
| PLACE OF LIVING Urban | 20 | 3 | 30 | 15 | 35.7 | 2 | 25 | 33.52 | <0.05 *** |
| Semi urban | 20 | 2 | 20 | 16 | 38.1 | 3 | 37.5 | | |
| Rural | 13 | 2 | 20 | 9 | 21.4 | 2 | 25 | | |
| Semi rural | 6 | 3 | 30 | 2 | 4.7 | 1 | 12.5 | | |

* Significant at 5% Level, NS : Non-significant

The above table shows that there was a significant association between knowledge level of male nursing students with the variables like type of family, educational level of parents and place of living, because the obtained values were higher than the table values at 0.05 level of significances. So research hypothesis H2 is accepted and null hypothesis was rejected.(fig.8.9,10)(Table:7)

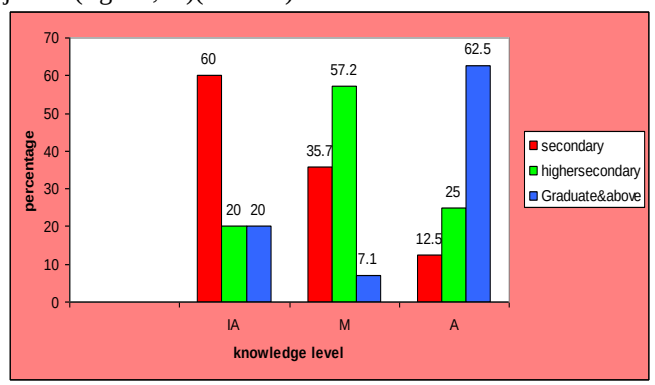


**FIG- 8 : Association between knowledge level and Parents Education.**

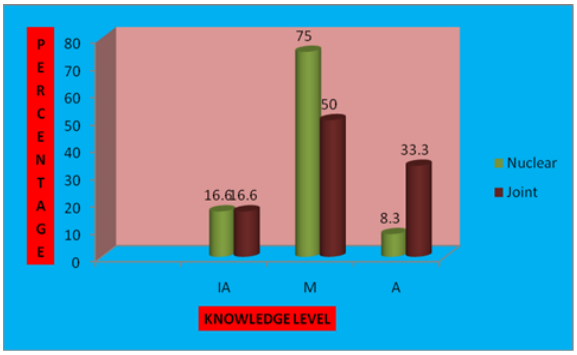


**FIG – 9: Association between knowledge level and Type of Family**

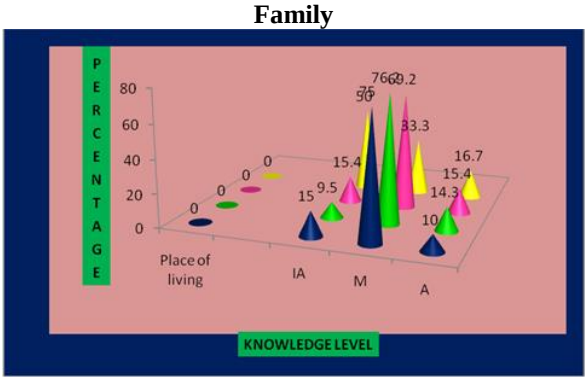


**FIG 10: Association between knowledge level and Place of Living**

**Table – 7 Association between knowledge score of male degree students regarding alcoholism and selected socio demographic variables.**

| Demographic variables | Samples | RESPONDENTS | | | | | | $x^2$ Value | P Value |
|---|---|---|---|---|---|---|---|---|---|
| | | Inadequate | | Moderate | | Adequate | | | |
| | | N | % | N | % | N | % | | |
| AGE(YRS) 20-21 | 36 | 29 | 72.5 | 5 | 33.3 | 2 | 40 | 8.42 | >0.05 *** |
| 22-23 | 12 | 6 | 15 | 5 | 33.3 | 1 | 20 | | |
| >23 | 12 | 5 | 12.5 | 5 | 33.3 | 2 | 40 | | |
| FAMILY TYPE Nuclear | 48 | 8 | 80 | 36 | 85.7 | 4 | 50 | 0.63 | <0.05 NS |
| Joint | 12 | 2 | 20 | 6 | 14.3 | 4 | 50 | | |
| MONTHLY INCOME Rs<10,000 | 10 | 6 | 15 | 2 | 13.3 | 2 | 40 | 4.9 | >0.05 NS |
| Rs10,001-20,000 | 41 | 30 | 75 | 9 | 60 | 2 | 40 | | |
| Rs>20,001 | 9 | 4 | 10 | 4 | 26.6 | 1 | 20 | | |
| EDUCATION OF PARENTS Primary | 11 | 8 | 20 | 2 | 13.3 | 1 | | 17.9 | <0.05 *** |
| Secondary | 25 | 20 | 50 | 4 | 26.6 | 1 | | | |
| Higher secondary | 12 | 10 | 25 | 1 | 6.6 | 1 | | | |
| Graduate &Above | 12 | 2 | 5 | 8 | | 2 | | | |
| Place of living Urban | 17 | 10 | | 5 | | 2 | | 2.43 | <0.05 NS |
| Semi urban | 18 | 11 | | 6 | | 1 | | | |
| Rural | 12 | 9 | | 2 | | 1 | | | |
| Semi rural | 13 | 10 | | 2 | | 1 | | | |
| *** Significant at 5% Level, NS : Non-significant | | | | | | | | | |

The above table shows that there was a significant association between knowledge score of male degree students with the variables like type of age, religion and educational level of parents, because the obtained values were higher than the table values at 0.05 level of significances research hypothesis H is accepted and null hypothesis was rejected.(Fig:11,12)

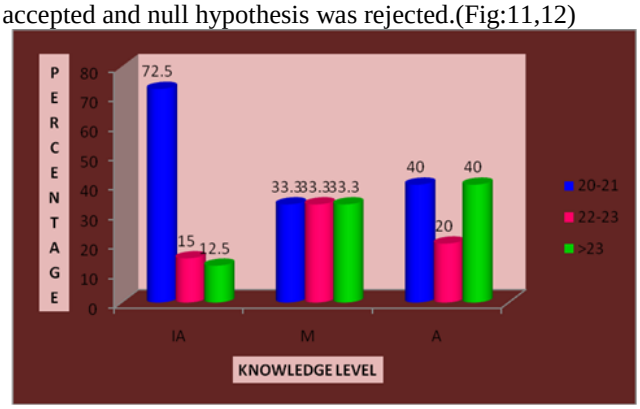


**FIG 11. Association between the knowledge level and age**

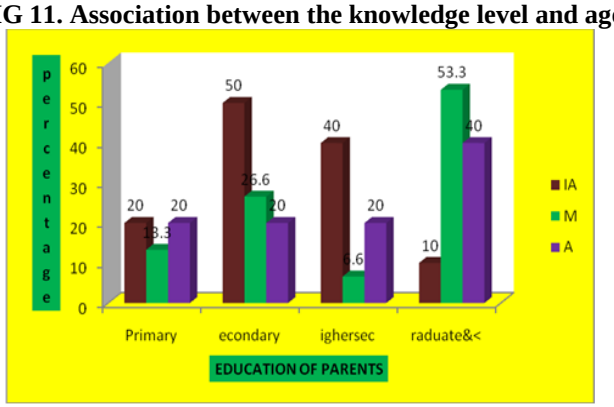


**FIG: 12.Association between the knowledge level of degree students and parents education.**

**Discussion**

This research study deals with the discussion in accordance with the objectives of the study and hypothesis. The statement of the problem was "A study to compare knowledge scores of male nursing and degree students on alcoholism

**Objective 1: to asses knowledge scores of male nursing students on alcoholism**

The mean % knowledge scores of male nursing students on alcoholism is 79.8 and SD of 2.96

**Objective 2: to asses knowledge scores of male degree students on alcoholism**

The mean % knowledge scores of 2 male degree students on alcoholism is 46.7 and SD of 3.46

**Objective 3 : compare knowledge scores of male nursing and degree students on alcoholism**

The overall male nursing student mean is 25.56 and mean % of 79.8 with SD of 2.96 and male degree students mean knowledge score is 14.96 and mean % was 46.7 with SD of 3.46 So there is different between the knowledge score of male nursing and degree students. Since male nursing student knowledge mean score is higher than the male degree students and, the obtained value t= 19.57 which is also highly significant at 0.05 level than the table value so, the research hypothesis (H1) is accepted and null hypothesis is rejected.

**Objective 4: Determine association between of knowledge score of male nursing and degree regarding alcoholism with selected socio demographic variables**.

There was a significant association between knowledge score of male nursing students with the variables like type of

family, educational level of parents and place of living, because the obtained values were higher than the table values at 0.05 level of significances research hypothesis $H_1$ is accepted and null hypothesis was rejected. And also there was a significant association between knowledge score of male degree students with the variables like type of age, religion and educational level of parents, because the obtained values were higher than the table values at 0.05 level of significances. So research hypothesis $H_2$ is accepted and null hypothesis was rejected.

**References:**

1. Rassool GH, Winnington J. Adolescents and alcohol misuse. Nurse stand. 2003 Jul; 17(44): 24.
2. Julia.I.Brooking. A Text Book of Psychiatric and Mental Health Nursing. Fourth edition; Churchill Livingstone, London, 1994; 214.
3. Elaine Anne Pasquali. Mental Health Nursing. Fourth edition; C.V.Mosby Company, London, 1994; 439,440.
4. Linda Carman Copel. Psychiatric and Mental Health care. Second Edition; Springhouse Corporation, Pennsylvania, Nambi S. Psychiatry for Nurses. Fourth edition; Jay Pee Brothers, New Delhi,1990. 83-105.
5. Lalitha K.. Mental Health and Psychiatric Nursing. Fifth edition; Gajana Book Publisher, Bangalore, 73 -74.
6. Srinivas K.R.et al. Alcoholism a concern of the nation. Nightingale nursing times. September 2006; 29-32.
7. Subhashini John Davi. Alcoholism and rehabilitation social welfare. December 1992; Volume XV: 34-38.
8. Rees D Solvent. Exposure alcohol consumption & liver injury. Scand J Work Environment health 1993; 236-240.
9. Mansur J Monterio. Alcoholism screening test in Brazilian psychiatric impatient hospital setting. 1983; 215-218.
10. Samilama and Vijayalakshmi. Adolescent and mental health. The nursing journal of India. May 2006; 106-108
11. Anbu T. Level of self esteem among adolescent boys and girls of alcoholic father. Nurses of India. November 2006; 12-13
12. Cotrim HP, Freitas La, Parana R. Hepatitis; toxic liver diseases in industrial workers. Atlanta, 1996; 85-88.
13. Burns C.J. Liver enzymes activity alcoholism and body mass index. J. Occupy Environ Med. 1996; 38(12); 1248-1252.
14. Barberino J.L. Cavalbo. Liver enzymes. Pan American journal of Pan American public health organization, Vol. 17: No.1 Jan 2005; 878-880.
15.Silvani _Neto Am, Gidi_De_Oliverira. Level of glutamyl transferase (GGT) and alanamino transferase (ALT) among use of alcohol, smoking habits. Bahiya Brazil. January 2005.