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Original Research Article

The impact of structured awareness programme on effects of alcoholism among the adolescence of Mizoram

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ABSTRACT

Alcoholism is now becoming a major problem of all the nations. Approximately 2.5 million die each year from the harmful use of alcohol accounting for about 4 % of all deaths in the world. Because of these problems created by alcoholism, the study was conducted with the aim to create awareness on effects of alcoholism among adolescence students of higher secondary students of Mizoram as a preventive program. An evaluative research approach was adopted with one group pre-test and post-test design. The sample comprised of 100 students selected by using lottery method from three higher secondary schools in Aizawl, Mizoram. The tool was developed and reliability of the tool was established by Pearson's covariance coefficient i.e. 0.87.

The teaching programme was found to be effective in increasing the knowledge of students as evidenced by 't' (99) = 27.13, $p < 0.05$. The study also reports that there was significant association between pre-test knowledge score with mother's education as evident from $p = 0.020$ at 0.05 level of significance, but no significant association between pre-test knowledge score and other selected demographic variables were found.

Conclusion: The planned awareness programme was an effective method to increase the knowledge of the students. Mother's education played an important role in educating their children towards effects of alcoholism. The study can be implicated in practical nursing field for health promotion and prevention of alcoholism and alcohol related disorders.

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1. Introduction

Alcoholism (also known as alcohol dependence syndrome) is defined as “a cluster of behavioural, cognitive, and physiological phenomena that develop after repeated alcohol use and that typically include a strong desire to consume, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to alcohol use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal state” (ICD-10).¹

Alcoholism is now becoming a major problem of all the nations because it has given rise to the mortality rate. Approximately 2.5 million die each year from the harmful use of alcohol accounting for about 4% of all deaths in the world. More than half of these deaths occur from NCDs (Non-communicable diseases) including cancers, cardiovascular disease and liver cirrhosis.^{2,3} Alcohol consumption is the world's third largest risk factor for disease and disability; in middle-income countries, it is the greatest risk. Alcohol is a causal factor in 60 types of diseases and injuries and a component cause in 200 others. Almost 4% of all deaths worldwide are attributed to alcohol, greater than deaths caused by HIV/AIDS, violence or

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tuberculosis. Alcohol is also associated with many serious social issues, including violence, child neglect and abuse, and absenteeism in the workplace.^{4,5}

Globally adolescents account for one fifth of the population i.e. more than one billion. Four out of five adolescents live in developing countries. According to population Bureau in 1996, 30% of the total population was that of adolescents (284.02 million). Adolescence is a period of the lifecycle when individuals are managing multiple and complex developmental tasks. They have less self-control, emotional stability, and more likely to smoke, drink, use drugs, and get into trouble with the law. Alcohol misuse among adolescents is increase and excessive drinking is associated with psychological, social and physical harm to the individual, family and society.⁶ Over the past 30 to 40 years, alcohol consumption has increased in quantity and frequency. The age at which people start drinking has also declined. The population groups at risk are those undergoing rapid socio-economic and cultural changes; they view alcohol as a symbol of prestige and social status.⁷

A Rapid Assessment Study of Drug Abuse in Target Communities in India (RAS DATC) conducted in urban sites namely, Bangalore, Chennai, Imphal, Jodhpur, Kolkata, Lucknow, Mumbai, Patna and Pune reported that among a total of 1.271 drug users, commonly abused drugs are alcohol. According to national scenario, it is estimated about 5 million people dependent on alcohol.⁸ On alcohol consumption Andhra Pradesh occupied the first rank in India, state wise pattern of alcohol consumption in India. Andhra Pradesh (11.8), Bihar (17.4%), Gujarat (3.9%), Haryana (8.3%), Himachal Pradesh (16.7), Karnataka (3.3%), Kerala (7.5%), Madhya Pradesh (12.1%), Maharashtra (5.8%), Orissa (10.2%), Punjab (17.4%), Rajasthan (8.6%), Tamil Nadu (8.1%), Uttar Pradesh (4.0%), West Bengal (4.5%), North Eastern Region (15.7%) (Maha's, 2000).⁹

In response to the health and social problems imposed by alcoholism and related alcohol abuse to the society, Government of Mizoram passed the legislation law called Mizoram Liquor Total Prohibition Act (MLTP Act) in 1995 and is being enforced in the state. Despite all the efforts made by the concerned departments and various Non-Governmental Organizations (NGOs), the problems related to alcoholism and its related abuse and its negative consequences are reported to increase every year in the state.

There are many adolescents who are not yet controlled by this social evil or still ignorant about it but are target population in the near future, that could be saved and protected by providing information's about the bad consequences of this lifelong disease. So, we may build strong and productive individuals, families and a country as a whole. Literature review showed that alcoholism is a common serious problem but only a few studies were conducted and adolescent students are the target population

for this problem. Health education is an important strategy of all the programmes to prevent and control alcoholism. Hence, the structured awareness programme would provide a basis for prevention and control of alcoholism among higher secondary students who are our leaders in the near future.

2. Materials and Methods

The study was conducted with the statement of problem "The impact of structured awareness programme on effects of alcoholism among the students of selected higher secondary schools in Mizoram."

3. Objectives

The objectives of the study are as follows

1. To find out the association between the pre-test knowledge and selected demographic variables like sex, monthly income of the family, education of the parents, presence of alcoholic in the family member.
2. To evaluate the effectiveness of planned teaching programmed on effects of alcoholism

3.1. Hypotheses

1. **H₁**: There is significant association between the pre-test knowledge score and demographic variables: sex, monthly income of the family, education of the parents, and presence of alcoholic in the family member.
2. **H₂**: There is significant mean difference between pre-test and post-test knowledge on effects of alcoholism.

3.2. Data collection

The data to assess the impact of structured awareness programme was collected by adopting an evaluative research approach. Pre-experimental (one group pre-test and post-test) research design was selected. The sampling technique used was simple random sampling method from three higher secondary schools in urban areas of Mizoram namely Thenzawl Higher Secondary School, Mount Carmel School and Staines' Memorial School respectively. Total 100 students were selected by lottery method. Prior to data collection, a formal written permission was obtained from the Principals of selected schools. The reliability of the tool was established by Pearson's covariance co-efficient i.e. 0.87. Data was collected after obtaining consent from the students. The questionnaire was consisted of 2 sections, section A is the demographic profile and section B is knowledge questionnaire. Pre-test was conducted by self-administered questionnaire; it took 20 minutes to complete. It was followed by structured awareness programme on effects of alcoholism which is provided by using audiovisual aids. The respondents were co-operative and attentive during the teaching program.

Table 1: Association between pre-test knowledge and selected variables n=100

Sample characteristics	Frequency (f)	Percentage (%)	df	Chi square	P-value
Sex					
Female	44	44%18	25.170	0.120	
Male	56	56%			
Monthly income of the family					
Less than Rs.10000	14	14%	36	37.793	0.387
Rs.10000-Rs.30000	49	49%			
Above Rs.30000	37	37%			
Education of the parents					
Mother's education					
Primary	5	5%	72	98.629	0.020*
Middle	20	20%			
Matriculation	27	27%			
Higher Secondary	24	24%			
Graduate and above	24	24%			
Father's education					
Primary	6	6%	72	73.051	0.443
Middle	11	11%			
Matriculation	24	24%			
Higher Secondary	17	17%			
Graduate and above	42	42%			
Presence of alcoholic member in the family					
No	78	78%	18	16.173	0.580
Yes (if yes)	22	22%			
Father	15	15%			
Sister	2	2%			
Brother	4	4%			
Any family member	1(Uncle)	1%			

* < 0.05 significance

Table 2: Descriptive statistics of knowledge scores of higher secondary students on effects of alcoholism n=100

	Pre-test (K ₁)	Post-test (K ₂)
Range	7-27	26-34
Mean	17.98	29.45
Median	8.00	29.50
Standard deviation	±3.679	±1.909

Maximum possible score=35

Table 3: Impact of structured teaching programme on knowledge scores of higher secondary students on effects of alcoholism

Sl. No	Knowledge score	Mean	Mean difference	t-value	df	P value
1	Pre-test(K ₁)	17.98	11.47	27.13	99	<0.05
2	Post-test(K ₂)	29.45				

4. Result and Analysis

Post-test was done on the seventh day after pre-test with the same structured knowledge questionnaire and all the respondents were present again and were very co-operative and interested and serious in the study. The average time taken for the post test was 15 minutes. The data obtained was analysed in terms of frequency, percentage, mean, mean percentage, median, standard deviations, chi-square and paired 't' test.

The analysis and interpretation of data collected from 100 higher secondary students to determine to assess the impact of planned awareness programme on effects of alcoholism. The data revealed that 44 (44%), out of 100 higher secondary students are female, and 56% are male. Regarding presence of alcoholic in the family member, majority of the students i.e. 78% of the students have no alcoholic in their family members, whereas 22% of the

students have alcoholic in their families.

The finding presented in the table shows that the computed Chi-square values for sex, monthly income, education of father and presence of alcoholic member in the family are not significant at (0.05) level. It is therefore concluded that pre-test knowledge is independent with the above parameters. In other words, these factors cannot influence on the findings of the study. However, significant p-values in case of mother's education reveal that there is certain link of this factor with the pre-test knowledge score i.e. p value = 0.020. It implies that better education of the mother enhances better knowledge of the children. Hence the Research hypotheses H_1 could not be accepted except for mothers' education. The experimental and Control group of the study was homogenous other than mothers education level.

The data shows that the range of pre-test is 7-27 while in post-test, it is 26-34 and mean (17.98) as well as median (18.00) knowledge scores of pre-test are certainly lower than the corresponding scores (29.45 and 29.50) for post-test. The score of pre-test ($SD \pm 3.679$) seemed to be more dispersed than the score of post test scores ($SD \pm 1.909$). This shows that there is apparent increase in post-test mean knowledge after the planned teaching programme.

The data presented in table shows that the mean difference between the pre-test (K_1) and post-test (K_2) score was 11.47. In order to find whether the difference is statistically significant 't' value was computed. The results shows that there was significant difference between the pre-test and post-test knowledge scores with 't' value = 27.13 at <0.05 level of significance.

Hence, the hypothesis H_2 : There is significant mean difference between pre-test and post-test knowledge on effects of alcoholism is accepted. This shows that there was positive impact of planed awareness programme among the higher secondary students' in-terms of gained knowledge regarding effects of alcoholism.

5. Discussion

The immediate and long-term risks associated with alcohol use, especially among adolescent students can be reduced for developing and implementing planned teaching programme on effects of alcoholism as effective prevention programs as well as to provide knowledge and change belief systems and social norms to reinforce the message that underage alcohol use is unacceptable. The knowledge enhancement programme is also aimed to enhance young peoples' self-esteem, self-motivation, and identity formation to enable them to take responsibility for their own health by making informed, deliberate, and healthy choices regarding alcohol use.

Association between pre-test knowledge and selected variables

The findings of the present study showed that there was no significant association between the pre-test knowledge score and selected demographic variables such as sex, monthly income of the family, father's education and presence of alcoholic in the family member at the level of 0.05. Although there was significant association between pre-test knowledge score and mother's education as evident from p value = 0.020 at 0.05 level of significance.

The present study is supported by the study conducted by Sharma RR¹⁰ (2001) in Rajasthan to assess the knowledge about psycho active substance abuse among college students. The investigator adopted a comparative descriptive research approach. The sample consisted of 50 male and 50 female college students. A self-structured questionnaire was used to collect the data. The findings of the study showed a significant higher knowledge scores among females than males ($t=2.27$). Age, family income, father's education and year of study did not have any relationship with knowledge scores.

In contrast to the present study, Vasumathi¹¹ (2001) conducted a study to assess the knowledge and attitude of 180 undergraduate students of Kerela towards alcoholism using a structured knowledge questionnaire. The results of the study showed that students (98.33%) knowledge was inadequate in all the areas. The result also showed that there was significant positive relationship between knowledge and year of study, family income and drug abuse.

Effectiveness of planned awareness programme in terms of gain knowledge

In the present study, the mean post-test (K_2) knowledge score (29.45) was higher than the mean pre-test (K_1) knowledge score (17.98). The obtained 't' value 27.13 at 0.05 level of significance. This supports that the planned awareness programme was effective in gaining the knowledge level of higher secondary students regarding effects of alcoholism. In order to determine the effectiveness of the planned teaching programme on effects of alcoholism, the following research studies were discussed.

The finding of the present study is consistent with the study by Shivakumara J¹² (2004) who conducted a descriptive evaluative approach study on 'Impact of health education programme on knowledge of students towards drug abuse in selected colleges of Mangalore among 120 students of Science, Arts or Commerce as optional subjects. There was marked gain in knowledge after the health education programme i.e. mean pre-test knowledge score was (19.95).against mean post-test knowledge score (40.3). A paired 't' test was computed to find the difference in knowledge score and was statistically significant at 0.05 level ($t=37.744$, $p \leq 0.05$). The findings of the study support the effectiveness of educational programme to increase the knowledge of college students on drug abuse and its related problems.

Autry K A. et al.¹³ conducted a study on 69 school children aged 8-12 years participating in after school programme at Indianapolis. After obtaining the baseline information by questionnaire, the investigator conducted a 6 session educational programme to explore the effectiveness of teaching children survival skills to resist alcohol and drugs. The results from the study demonstrated that students who have a plan to resist drug use are more likely not to use drugs. The study also suggested that school programme was effective to gain knowledge as well as stop using drugs.

Again, the present study is further supported by Emerensia X¹⁴ (2001) by conducting a study on the effectiveness of a planned teaching programme in the case of adolescent girls with regard to menstruation for mothers in the selected communities in Kerala. The sample of the study consisted of 30 mothers by using convenience sampling technique. A structured knowledge questionnaire was used for data collection. The findings revealed that the mean pre-test score was 22.63 out of 45 and the mean post-test score was 36.4 out of 45. The 't' value showed that there was significant difference between pre-test and post-test $t = 17.1268$, $P < 0.05$). This indicates that the planned teaching programme was effective in gaining knowledge.

6. Summary

The findings of the study reveals that, majority of the higher secondary students i.e. 92% had moderately adequate knowledge in pre-test knowledge score. The teaching programme was found to be effective in increasing the knowledge of students as evidenced by 't' = 27.13, $p < 0.05$. The study also reports that there was significant association between pre-test knowledge score with mother's education as evident from p value = 0.020 at 0.05 level of significance, but no significant association between pre-test knowledge score and other selected demographic variables.

7. Conclusion

Conclusion was drawn from the findings that the students had moderately adequate knowledge and the planned teaching programme was an effective method to increase the knowledge of the students and mother's education played an important role in educating their children towards effects of alcoholism. The study can be implicated in practical nursing field for health promotion and prevention of alcoholism and alcohol related disorders. Further study can also be done based on the findings and recommendations of the study.

8. Source of Funding

None.

9. Conflict of Interest

None.

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