PILOT STUDY REPORT- BRIEF INTERVENTIONS IN THE ALCOHOL USE AMONG THE ADOLESCENTS

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Abstract:
Back Ground: Alcohol is one of the leading causes of death and disability globally. About two billion people worldwide consume alcoholic beverages and one-third (nearly 76.3 million) is likely to have one or more diagnosable alcohol use disorders.[1]

Aim: This study was aimed to assess the level of alcohol use and to evaluate the brief interventions in the alcohol use among the adolescents.

Methods: A quasi experimental design with evaluative approach method was adopted. The study was restricted to the sample size of about 48. Students aged between 18-19 yrs were selected by stratified sampling technique. The investigator used the structured questionnaire which includes the demographic variables and the AUDIT-Alcohol use disorder identification test. It is a standardized self report tool consisting of 10-alcohol screening questions developed by W.H.O. As a part of the general health awareness programme, the investigator gave a briefing on the alcoholic questionnaire and the respondents were told the procedure of filling up of the questionnaire.

Results: Results revealed that 69 % of samples belong to the risky use, 29 % to low risk level, and 2 % to high risk level. No samples were fall under the category of dependence. Brief interventions are effective in reducing the risk of alcohol use among adolescents in long course of time. Privacy and the confidentiality of the information provided are strictly maintained throughout the research process.

Conclusion: Adolescents have the risky level of alcoholic use and hence preventive measures should be planned and implemented for the vulnerable adolescents to prevent the alcohol abuse in future.

Key words: alcohol, adolescent, alcoholic use

Background of the Study:

Adolescence (from Latin: Adolescere meaning "to grow up") is a transitional stage of physical and psychological human development that generally occurs during the period from puberty to adulthood. Adolescence being the formative period of life, boys and girls, they start the habit under peer pressure, household influence, parental influence, and by dint of inquisitive mind and experimentation.

Adolescence can be broadly divided into three stages: Early (10–13 years), middle (14–16 years), and late (17–19 years). During adolescence cognitive development takes place; adolescents develop abstract thinking and reasoning. Emotionally, they develop a sense of identity during late adolescence; social involvement, peer interaction, as well as sexual interest, develop in this phase. Different behavioral experimentation is seen in early adolescence, risk taking in middle adolescence, and later adolescents learns to assess their own risk taking. [2]

Above all it offers opportunities for growth in competence, autonomy, self-esteem and intimacy. However, it also carries great risks. Drug abuse is one of them among adolescents.

During adolescence, many people begin to experiment with alcohol, but relatively little is known about alcohol's effects. This early initiation of alcohol use is one of the most powerful predictors of later alcohol abuse [3]

The risk factors for drug abuse by adolescents may be biological predisposition to drug abuse, personality traits that reflect a lack of social bonding, a low socio-economic status of family, family bonding, family relationship and parental guidance and care, a history of being abused or neglected, low emotional or psychiatric problems, stress and inadequate coping skills and social support, association with drug-using peers, rejection by peers due to poor communication skills, poor academic skills, failure in school, a history of anti-social behavior and delinquency. [4&5]

In addition, Adolescents also tend to show greater extremes in emotional volatility, anxiety and even self–consciousness also appear to be peak. This anxiety and stress may play an important part in adolescents' initiation of alcohol or other drug use [6,7,8 & 9]

As the path to drug abuse is too complex, simple solutions to this problem are unlikely to be effective.

According to WHO: Global Status report on alcohol and health (2014), 38.3.% of the global population consumed alcohol. The global figure of India stood at 16%.Around 30% of the total population of India consumed alcohol in the year 2010 in which 93% of alcohol was consumed in the form of spirits, followed by beer with 7% and less than 1% of the population consumed wine and over 11% of the Indian population indulged in heavy or binge-drinking from the period of 2010-2012. The per capita consumption of alcohol increased from 1.6 liters from the period of 2003-2005, to 2.2 liters from the period of 2010-2012. An average individual over the age of 15 consumed over 8 liters of alcohol per annum in the south Indian states. According to this report, the amount of alcohol consumption has raised in India between the periods of 2008 to 2012 . [10]

According to an Organization for Economic Cooperation and Development (OECD) report (2015) ,In India, alcoholism is increased by about 55 percent between 1992 and 2012 and it is raising concern among the youth of the country.

Alcohol related deaths and deaths caused by diseases due to alcoholism are a major cause for concern in the country. In 2012 alone about 3.3 million deaths in India were attributed to alcohol consumption. This amounts to some 5.9 percent of the global deaths that year.

On the WHO's 'Years of Life Lost' (YLL) scale – a measure of premature mortality – alcohol attributed years of life lost puts India on a precarious 4 on a scale of 1 to 5. It gives a clear fact that a large number of people from India lose their lives early due to alcohol consumption.

Apart from the above mentioned social and health concerns, chronic alcoholism is one of the greatest causes for poverty in the country. [10]

In India, there is no uniform law related to legal age of drinking, as it varies from state to state. According to Tamil Nadu Liquor (License and Permit) Rules, 1981Section 25 rules XV, the legal age for drinking alcohol is 21years in Tamil Nadu, 18years in Puducherry and Rajasthan and it is 25 in Delhi. [11]

About 35 per cent of teens across the globe have had at least 1 drink by the age of 15, whereas, about 65 per cent of teens have had at least 1 drink by the age of 18. 61 per cent of the 190 countries have a drinking age of 18 or 19 years old. [12]

A Study by Sharma Priyanka etal (2016) on Adolescent Drug Abuse in India concluded that preventive strategies are required to be planned for drug abuse. More studies on drug abuse are required to be done in India in order to see the current situations and to find out the solutions for this situation. [13]

Hence it is understood that the harmful use of alcohol is a serious health issue and it affects virtually all individuals on an international scale. Particularly in the developing countries like INDIA, it is essential to screen for the prevalence and pattern of alcohol use especially among the adolescent group and to make some necessary initiatives in preventing usage of alcohol consumption.

Rationale for the Main Research Study:
- ✓ Since substance use starts in adolescence and youth, the present study has been planned to bring out a status report on substance abuse among the college-going students.
- ✓ The rationale of this study is a step to acknowledge the level of risk in alcohol use among the youngsters and to conduct the brief interventions in term of self realizing their consumption level and anticipating the risks associated with its use by regular follow up visits and thereby reducing the risk in alcohol abuse and dependence.

Objectives of the Study:
- ✓ To identify the existing level of alcohol usage among the late adolescents
- ✓ To evaluate the effectiveness of brief interventions in the level of alcohol usage among the late adolescents

Methodology and Materials:

The main purpose of this pilot study is to evaluate feasibility of conducting the main research, time, cost, adverse events, and effect size (statistical variability) in an attempt to predict an appropriate sample size and to improve upon the study design prior to main study.

A quasi experimental study design with evaluative approach was conducted with the aim to assess the level of alcoholic use and to evaluate the brief interventions in the alcohol usage among adolescents at puducherry. The study was restricted to the sample size of about 48 students (in a chosen college) aged between 18-19 yrs. Convenient sampling technique was used to select the college. The Target Population is late adolescents and who were willing to participate in the study. Permission was taken from the respective head of the institution prior to data collection.

Totally 52 male students were given permission, out of which 48 students included based on inclusion criteria in the study. A day was fixed for the conduction of general health awareness programme, and as a part of it, AUDIT self report questionnaire, a screening tool for alcohol use was administered. The investigator gave a briefing on the questionnaire attached with the table of standard drinks .When the consent forms were filled and returned, the respondents were told the procedure of filling up of the questionnaire. The questionnaires were to be filled in the classroom itself and not to be filled outside or to be taken to their residences. The students

were requested to answer honestly without any fear or shyness. Data was collected and interpretated. Privacy and confidentiality was maintained throughout the research process.

Inclusion Criteria:
- ✓ Students age of 18 and 19yrs.
- ✓ male and female students studying in arts and science colleges
- ✓ Students who are willing to participate in the study
- ✓ Students who are scoring positive in AUDIT.(0-19)

Exclusion Criteria:
- ✓ Students who are already exposed to short term courses and treatment for alcoholism.
- ✓ Students who are on leave at the time of the data collection period
- ✓ Students who are too ill to answer screening questions at a particular visit.
- ✓ Students who are studying in the colleges functioning with institutional anti-alcoholic policy

Intervention:

Brief interventions are any intervention, that involves a minimum use of time and intensity to raise a person's awareness about their alcohol use and the potential or existing risks associated with that use. In this study, brief interventions refer to the nurse conducted opportunistic interventions aiming to raise a person's awareness about their alcohol use. The main aim is to inform samples that they are drinking at levels that increase their risk of developing abuse or dependence disorders, in future and to encourage them to decrease consumption to reduce that risk.

One brief face to face session (5 minutes) was conducted on the same day of screening for all the samples in experimental group. In the treatment group**,** samples were presented with multi -component alcohol education programme through power point presentation**.** And were given feedback about their score in the AUDIT, and they were emphasized to make responsibility to change their drinking patterns, they were also given the information on myths and risks associated with the alcohol use as well as the benefits with the stoppage of alcohol use. And through pamphlets distribution, samples were encouraged to select among the menu of alternative strategies for changing their behavior. .Follow up visits was conducted for the assessment of post test level of AUDIT score.

Results:

Objective 1: To identify the existing level of alcohol usage among the late adolescents

Table 1: Frequency and Percentage Wise Distribution Pre Test Level of Alcohol Use Among Late Adolescents in Experimental and Control Group

Level of Audit	Group			
	Control Pre Test		Experimental Pre Test	
	F	%	F	%
Low risk	9	39	5	20
Risky	14	61	19	76
High risk	0	0	1	4
Very high risk	0	0	0	0
Total	23	100	25	100

N=48

Inference: In the pretest level of AUDIT, majority of the samples (61%) and (76%) falls in the risky level of alcohol use in control group and experimental group respectively

Table 2: Frequency and Percentage Wise Distribution of Post Test Level of Alcohol Use Among Late Adolescents in Experimental and Control Group

Level of Audit	Group			
	Control Post Test		Experimental Post Test	
	F	%	F	%
Low risk	10	43	6	24
Risky	13	57	18	72
High risk	0	0	1	4
Very high risk	0	0	0	0
Total	23	100	25	100

Inference:

In the posttest level of AUDIT, majority of the samples (57%) and (72%) falls in the risky level of alcohol use in control group and experimental group respectively

Objective 2:

To evaluate the effectiveness of brief interventions in the alcohol usage among late adolescents, Paired t test was used to determine the effectiveness of brief intervention among the samples. The mean value of pretest

International Journal of Applied and Advanced Scientific Research (IJAASR)
Impact Factor: 5.655, ISSN (Online): 2456 - 3080
(www.dvpublication.com) Volume 2, Issue 2, 2017

score is 9.44 (SD= 2.87) and the post test mean score is 9.28(SD=3) with corresponding mean difference is 0.6.The calculated t value is 0.25, corresponding p –value is statistically non significant.

Discussion:

Demographic variables results shows that, among 48 male samples, majority 83% belongs to hindhu religion ,33% grewed up in urban,75% lives at home ,56% from nuclear family type and 94% belongs to middle class family. Majority 73% and 48% of samples father and mother had primary level of education respectively.

Findings on the factors accessing the alcohol use, among the samples, majority 73% of samples had the family history of alcohol use and usually gets alcohol from their friends and scored 50-59% of in their past academic performance. 73% of samples reported that they have initiated the use in 15-17 yrs with the main reason of peer pressure and to relieve the stress.

In the pretest level of AUDIT, majority of the samples (61%) and (76%) falls in the risky level of alcohol use in control group and experimental group respectively. And in the posttest level of AUDIT, majority of the samples (57%) and (72%) falls in the risky level of alcohol use in control group and experimental group respectively.

Since this pilot study mainly conducted, to determine the feasibility and availability of the samples for the research, the researcher was confident in proceeding for the main data collection process. The effectiveness of intervention may be statistically significant, if the sample size is larger in number, and the planned intervention is administered, with regular follow ups.

Limitations:

✓ The study area was limited to the age group of 18-19 yrs. Thus the results of the study are applicable only to similar kind of age group.

✓ The study is restricted to only arts and Science College, so the results are applicable only to particular discipline.

✓ The study is limited to a period less than one month. So the result may not be statistically significant and valid for over a longer period of time.

✓ The result drawn from this study was restricted to a limited number of samples. So the process of generalization is impossible.

Implications of the Study:

The study will help us to know the present status of substance abuse among late adolescents and help us to plan and implement the preventive measures to minimize the level of substance abuse.

Conclusion:

The above statistics makes the clear fact that the use of alcohol among the adolescents is at the level risk between the age group 18-19 years. Hence it is important to highlight the need for preventive measures for substance use among the motivated adolescent substance users. Intervention strategies focusing psychological aspects of counseling should be planned and implemented for adolescents. Since there is limited evidence on the treatment and preventive strategies of drug abuse in adolescents, it is very important for early screening and intervening in adolescents in a large scale of population.

References:

1. Global status report on alcohol. Geneva: World Health Organization; 2004.
2. Resource Centre for Adolesent Pregnancy Prevention. An Overview of Adolescent Development Education, Training and Research Associates. 2003. [Last accessed on 2015 Jan 06]. Available from: http://www.etro.rg/recapp/theories/adolescent development/overview.htm .
3. Grant, B.F. The impact of a family history of alcoholism on the relationship between age at onset of alcohol use and DSM–IV alcohol dependence: Results of the National Longitudinal Alcohol Epidemiologic Survey. Alcohol Health & Research World 22:144–147, 1998.
4. Mahanta, B., Mohapatra, P. K., Phukan, N., & Mahanta, J. (2016). Alcohol use among school-going adolescent boys and girls in an industrial town of Assam, India. Indian Journal of Psychiatry, 58(2), 157–163. http://doi.org/10.4103/0019-5545.183784
5. Thakur S, Singh H, Sachdeva A, Barwal V; Prevalence and correlates of alcohol abuse among school going adolescents in a hilly district of Himalayan region in India. J Adv Med Dent Scie Res 2017;5(9):5- 10
6. Larson, R., and Richards, M.H. Divergent Realities: The Emotional Lives of Mothers, Fathers, and Adolescents. New York: Basic Books, 1994.
7. Buchanan, C.M.; Eccles, J.S.; and Becker, J.B. Are adolescents the victims of raging hormones? Evidence for activational effects of hormones on moods and behavior at adolescence. Psychological Bulletin 111:62–107, 1992.
8. Pohorecky, L.A. Stress and alcohol interaction: An update of human research. Alcoholism: Clinical and Experimental Research 15:438–459, 1991.

9. Wagner, B.M., and Compas, B.E. Gender, instrumentality, and expressivity: Moderators of the relation between stress and psychological symptoms during adolescence. American Journal of Community Psychology 18:383–406, 1990.
10. WHO: Global Status report on alcohol and health (2014),substance abuse: http://www.who.int/substance_ abuse/publications/global_alcohol_report/en/
11. https://www.lawfarm.in/blogs/alcohol-laws-in-india
12. https://www.niaaa.nih.gov/alcohol-health/special-populations-co-occurring-disorders/underage-drinking
13. Sharma Priyanka etal: A study on Adolescent Drug Abuse in India; American International Journal of Research in Humanities, Arts and Social Sciences; Available: online: https://pdfs.semanticscholar.org/604a/3d0e3cfbeb7d03fe0003cf2d3473aaf9c987.pdf