

Screening of Physical & Mental Health Status & Assessment of Awareness of Alcohol & Drugs among Second Year M.B.B.S Students in Kurnool Medical College

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Abstract: Background: Use of Illicit drugs or substances among medical students was a phenomenon which has been widely studied, but remains of interest due to its' high prevalence and the potential consequences like physical and psychosocial health problems. Students of this age group are more vulnerable due to increased academic pressure, influence from the seniors and increased popularity and availability of substances. By Understanding the pattern and circumstances which lead to alcohol or drugs abuse would help in initiating appropriate interventions to protect the young adults from substance abuse.

Aim of the Study: To Screen the Second Year M.B.B.S Students to assess their physical and mental health status; to assess the awareness of alcohol and drugs and consequences of using them, among second year M.B.B.S students.

Materials and Methods: After approval from institutional ethics committee pre-validated questionnaire was distributed among 100 M.B.B.S students. Analysis of SF-36 item questionnaire was done according to SF-36 Instructions from RAND corporation. Scoring was given from 0 to 100. Scores towards 100 means better health and towards 0 represent poor health. Questions related to alcohol and drugs were assessed based on 3-point likert scale (Disagree, Neutral, Agree). Scores were entered in Microsoft excel

Observations and results:

Scores were entered into Microsoft Excel 2016 and statistical analysis was done by SPSS (Statistical Package for Social Sciences) version 23. Mean, Standard Deviation and Alpha Value were calculated.

Mean = Sum of individual values / Number of individual items. Standard Deviation, $(S^2)^{1/2} = [(Sd)^2 / (N-1)]^{1/2}$

Alpha value signifies reliability. Alpha value > 0.7 is significant. In this study reliability ranges from 0.05-0.85. 96% agree alcoholism damages health, 94% agree it damages wealth, 93% agree alcoholics get injured, 86% agree alcoholics get arrested.

Conclusions: Screening should be done yearly once and proper measures have to be taken to improve the physical and mental health status of students. Health education programmes have to be conducted to improve their awareness about the consequences of alcohol and drug abuse.

Key Words: Physical and mental health, SF-36, Alcohol, drugs.

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I. Introduction:

Illicit drugs abuse usually refers to Alcohol and psychoactive Substances that are used by youngsters and its related harmful and hazardous side effects. Especially Psychoactive substances used by these youngsters leads to "dependence syndrome" which is defined as a group of behavioural, cognitive, and physiological changes that occur or develop in the individuals after repeated substance use (1). It characteristically includes a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful consequences. There is an increasing trend in the youth of India nowadays of using psychoactive substances (2). Drugs abuse has a great impact on social, cultural, economical and health status of individual and community. Students are more vulnerable due to increased academic pressure, influence by the senior group and increased popularity and availability of substances like alcohol, tobacco etc (3). Alcohol and Drugs abuse is an ongoing public health concern worldwide. An estimated 167 to 315 million people between the ages of 15 to 64 use illicit substances (4). Many factors such as age, gender, family history, and the presence of co-occurring psychiatric disorders play an important role in the excessive use of alcohol and drugs. While drugs are abused by persons of all ages, young persons aged 16 to 35 uses the largest proportion of drugs of any age group (5). Additional factors such as race, geographic location, arrest history, and age at first use of drugs predispose individuals to drug abuse (6). Looking at certain risk factors for substance use for clinicians and medical

students are similar to that of the general population but clinicians and medical students each have distinct stressors and predispositions for drug abuse (7). WHO estimate shows prevalence of drugs abuse to the tune of around 2 billion alcohol users, 1.3 billion smokers and 185 million drug users (8). Tobacco, alcohol, cannabis and various allopathic drugs have been widely abused by students for various reasons despite their known ill effects (9). Studies conducted worldwide (10, 11) including India (12, 13 and 14) have estimated a prevalence rate of substance abuse to be around 20-40 per cent among students from various streams including the medical field. In this context the present study was undertaken to Screen the Second Year M.B.B.S Students to assess their physical and mental health status; to assess the awareness of alcohol and drugs and consequences of using them, among second year M.B.B.S students of Kurnool Medical College, Kurnool, Andhra Pradesh, India.

II. Materials And Methods

An Institutional Ethics Committee approval for the study was obtained and the committee approved questionnaire was distributed among 100 second year

M.B.B.S students. The questionnaire included Short-Form-36 Health Survey (SF-36), (15). It contained a 36-item self-report questionnaire and questions related to alcohol and drugs. SF-36 was used because there existed a multitude of reliability and validity evidence for the SF-36 including factor structure, associations with severity/type of health conditions, as well as convergent and discriminant validity evidence. **Inclusion Criteria:** 1. Students belonging to second year M.B.B.S. 2. All the students irrespective of their age were included. **Exclusion Criteria:** Students who were not willing to join the study were excluded. Short-Form-36 Health Survey (SF-36) included questions related to **physical functioning, physical function limitations, emotional well-being, emotional – role limitations, energy/fatigue, social functioning, pain and general health**. The SF-36 form approved by the ethical committee is annexed with this scientific paper. All the data collected was analysed using standard statistical methods.

III. Observations And Results

Out of 100 students 60 were male and 40 were female; 64 were hostelers and 36 were day-scholars; 33 belonged to low socio economic status and 67 belonged to moderate socio economic status. There were 17 students who had a family member with the habit of intake of alcohol or drug usage. 39 belonged to rural area and 61 belonged to urban area. Reliability of subscales was 0.05 -0.85.

	Item	Alpha	Mean	SD
Physical functioning	10	0.85	78.82	21.13
Role functioning – Physical	4	0.68	70.75	32.57
Role functioning – Emotional	3	0.64	70	34.97
Energy/Fatigue	4	0.05	52.77	14.31
Emotional well being	5	0.6	66.8	17.5
Social functioning	2	0.37	74.05	19.94
Pain	2	0.78	73.85	25.83
General health	5	0.65	64.2	17.47
Health Change			55.75	

Table 1: Showing Physical and Mental Health Status of students

Awareness of :	Percentage (agree)
Alcohol content in--- Whisky 40%	35%
Vodka 35 – 50%	34%
Beer 4 – 6%	35%
Disulfiram as supportive therapy in alcohol de-addiction	98%
Health education : effective preventive measure for alcoholism and drug abuse	80%
Anabolic steroids used as drugs of abuse	60%
Naltrexone : adjuvant on comprehensive treatment program for alcohol rehabilitation	55%

Table 2: Showing Knowledge of students about alcohol and drugs

Chart Title

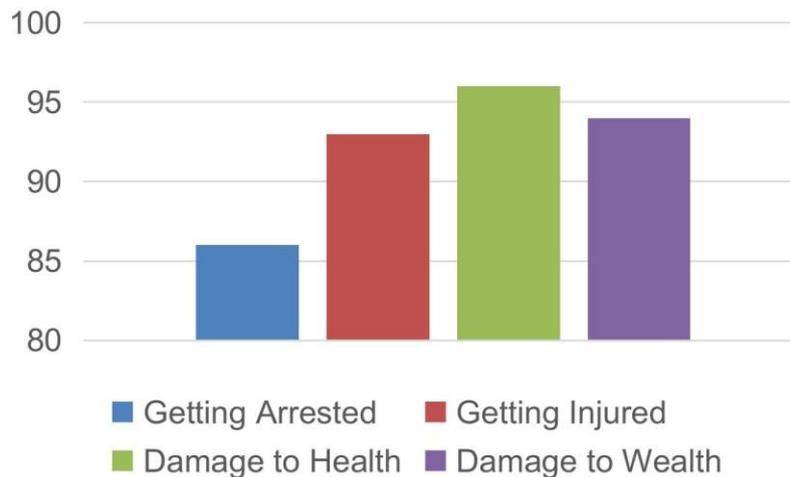


Table 3: Showing knowledge of students about consequences of alcohol

IV. Discussion:

In my study reliability is 0.05 to 0.85 which correlates with a study conducted by Heckman CJ Dykstra JL, Collins BN in article “Substance-Related Knowledge, Attitude, and Behavior among College Students: Opportunities for Health Education”³. Alpha value of energy/fatigue and social functioning are low. They are inter-related and proper measures have to be taken to improve them. Physical and Mental Health Status of students have to be maintained to prevent depression and illicit use of drugs and alcoholism. Knowledge of students about alcohol and drugs has to be improved so that they stay away from alcohol and illicit drugs. In this competitive world studies are important, students should be aware that health is also important because, “Health is precious than wealth.” Social life is also equally important so students should spend some time with family, friends and relatives. They have to discuss their difficulties they are facing in education, if they have any problem with friends, if any decision they are taking to improve them either with parents or teachers so that they will guide them to take proper decision. Students should be emotionally stable so that they can take proper decisions in life.

V. Conclusions:

Screening should be done yearly once and proper measures have to be taken to improve the physical and mental health status of students. Health education programmes have to be conducted to improve their awareness about the consequences of alcohol and drug abuse. Medical students should be healthy and study well to make a better society in future. Medical students are future doctors who reduce the pain of the patients and give a better life to ill people in the society so physical and mental health of the students is very important.

References:

- [1]. Kumar P., Basu D. — Substance abuse by medical students and doctors. *Journal of Indian Medical Association*; 98:447-452, 2000.
- [2]. Mohan D. — *Drug Problems in Socio-Cultural context*, WHO, Geneva; pp- 42-47, 1980.
- [3]. Naskar N.N., Bhattacharya SK, A study on drug abuse among the undergraduate medical students in Calcutta. *Journal of Indian Medical Association*. 97 : 20-21, 1999.
- [4]. CDC (2011). *Policy impact: prescription painkiller overdoses*. Atlanta, GA: U.S. Department of Health and Human Services, CDC.
- [5]. *Results from the 2011 National Survey on Drug Use and Health: Summary of National Findings*. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2012. HHS Publication No. (SMA) 12-4713.
- [6]. Dyrbye LN, Thomas MR, Massie FS, Power DV, Eacker A, Harper W, et al. Burnout and suicidal ideation among U.S. medical students. *Ann Intern Med* 2008; 149(5): 33441.
- [7]. Catalina, Dumitrascu, Philip Z. Mannes, Lena J. Gamble, Jeffrey A and Selzer. Substance Use among Physicians and Medical Students; *Medical Student Research Journal*. 2014; (03), 14: 24- 35.
- [8]. The global burden of substance abuse. Available from: http://www.who.int/substance-abuse/fads/global_burden/en/ accessed on January 11, 2014.
- [9]. Chen C-Y, Lin K-M. Health consequences of illegal drug use. *Curr Opin Psychiatry* 2009;22:287-92.
- [10]. Meressa K, Mossie A, Gelaw Y. Effect of substance abuse on academic achievement of health officer and medical students of Jimma University. Southwest Ethiopia. *Ethip J Health Sci*, 2009;19: 155-63.
- [11]. *Epidemiologic trends in drug abuse*. Proceedings of the Community Epidemiology working Group. National Institute on Drug Abuse. Available from: http://www.drugabuse.gov/sites/default/files/cewgjune09vol1_web508.pdf accessed on January 11- 2014.
- [12]. Jagnany VK, Murarka S, Haider S, Kashyap V, Jagnany AK, Singh SB, et al. Pattern of substance abuse among the undergraduate medical students in a medical college hostel. *Health Popul Perspect Issues*, 2008: 31: 212-9.
- [13]. Kumari R, Nath B. Study on the use of tobacco among medical students in Lucknow, India. *Indian J Community Med*,

- 2008;33: 100-3.
- [14]. Ramakrishna GS, Sankara Sharma P, Thankappan KR. Tobacco use among medical student5s in Orissa. *Natl Med J India*, 2005; 18: 285-9.
- [15]. Ware JE, Jr, Sherbourne CD. The MOS 36-item short-form health survey (SF-36). I. Conceptual framework and item selection. *Medical Care*. 1992;30:473–483.

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