ORIGINAL RESEARCH ARTICLE

KNOWLEDGE ON DRUG ABUSE AMONG MBBS FIRST YEAR STUDENTS OF CHITWAN MEDICAL COLLEGE

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ABSTRACT

Background: Currently, drug abuse is booming in developing countries including Nepal, which may directly affect personal as well as socioeconomic condition of individual and community. Teenage, being the most crucial stage of life, is the age when teenagers want to explore a lot of things and is curious about new experiments. So, they think that, drugs assist them to overcome all the problems they face in day to day life. Therefore, the aim of this study was to assess the knowledge regarding drug abuse among MBBS first year students of Chitwan Medical College.

Methods: A cross-sectional study was carried out to determine the knowledge regarding drug abuse among MBBS first year students of CMC. A self-administered questionnaire was used to collect information, which was adopted from previous studies. Study participants were briefed about the nature of the study and the procedure of completing the questionnaire was explained. After completion of the questionnaire, data was collected, reviewed, organized and expressed as counts/percentages and statically analyzed using SPSS version 20.

Results: The current study showed that, majority 81.3% of the participants had satisfactory whereas 18.8% of the participants had unsatisfactory level of knowledge about drug abuse.

Conclusions: Majority of the MBBS first year students had satisfactory knowledge regarding drug abuse and only few had unsatisfactory knowledge. So, for them it is deemed necessary to update their knowledge regarding drug abuse, as it is one of the crucial matters of concern these days.

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INTRODUCTION

"Drug abuse" is defined as any use of drugs for non-medical purposes most of the time for altering consciousness. Drug abuse denotes substances that change the mental or physical state of a person and that may be used repeatedly for that effect leading to abnormality.[1] Drug abuse is one of the most important issues in most of the countries including Nepal which has become a matter of concern for all.[2,3] Drug abuse may lead to various hazards, individual may suffer from physical, mental, psychological problems which may negatively hamper the quality of life of people.[4] Many studies have revealed excessive proportion of substance abused by students of high school and higher educational institutions.[1] Studies have affirmed that the most revered period, for the commencement of different types of drug abuse is 16-18 years of age.[5] This indicate that adolescence is a crucial period, when the commencement of drug abuse takes place. Among the youth, students are more endangered due to increased academic pressure, peer group influence, increased popularity and easy availability of substances like alcohol, tobacco etc.[6] Thus, it is utmost necessary to have knowledge regarding drug

abuse among adolescent.

Therefore, the aim of the study was to assess the knowledge regarding drug abuse among MBBS first year students because of the high prevalence of drug abuse issue among young adults. Therefore, this research may have direct implications for change in the current knowledge of adolescents regarding drug abuse.

METHODS

A cross-sectional study was conducted from 15th January 2021 to 15th February 2021 using self-administered technique. The study was carried out among MBBS first year students enrolled in 2020-2021 A.D. of Chitwan Medical College Teaching Hospital, Chitwan. Prior to data collection, the study was approved by Institutional Review Committee of Chitwan Medical College (Ref No. CMC-IRC/077/078-050). There were all together 100 students in MBBS first year student which was our study population. Complete enumeration method was used to collect the necessary information. There were 96 students who gave the information, however 4 students denied to

participate, bringing the response rate to 96%. A self-designed semi-structured questionnaire based on different literatures[7,8] was used to obtain the socio-demographic characteristics and knowledge regarding drug abuse among study population. In order to assess the level of knowledge regarding drug abuse, there were 14 multiple choice questions related to meaning, cause and side effects of drug abuse. Participant's right response was marked as 1 while wrong response was marked as 0, and the total score obtained by participant ranged from 0 to 14. After the scoring Normality test was done by using Shapiro wilk test, but since the data do not support normality, median was taken as cutoff point. Those participants whose score was less than median (11) was considered as having unsatisfactory level of knowledge and those participants whose score was 11 or greater than median was considered as having satisfactory level of knowledge regarding drug abuse. Pre-testing for this study was done in BPH first year students (n=15) of same college. The reliability of this research was tested by conducting a pilot test, by taking 10% of the sample and testing it by using Cronbach alpha in IBM SPSS 20. As the value of Cronbach alpha was greater than 0.8, we concluded that the research tool (questionnaire) was reliable.

Collected data were manually checked and entered into Microsoft excel 2008 and exported to IBM SPSS 20.0 version software for further analysis. The association between level of knowledge regarding drug abuse and independent variables were identified using Pearson Chi-square test or fisher exact test at 5% level of significance

RESULTS

Out of total 96 MBBS first year students, 63 (65.6%) males and 33 (34.4%) females participated in the study and completed the questionnaire. Socio-demographic characteristics of these participants are presented in Table 1. Majority of the respondents were, above teenage age group 56 (58.3%), were Hindu 94 (97.9%), belonged to nuclear family 72 (75%), had literate father 89 (92.7%) and literate mother 76 (79.2%), stayed in flat 44 (45.8%), had very good relation between and with parents 89 (92.7%) and had below Npr. 5000 monthly pocket money 59 (61.5%).

Table 1: Socio-demographic information (n=96)

Variables	Category	Frequency (%)
Age group		
	Teenage (≤19)	40(41.6%)
	Above teenage (>19)	56(58.3%)
Median (IQR) = 20 (2)	Min/Max = 18/23	
Sex		
	Male	63(65.6%)
	Female	33(34.4%)
Religion		
	Hindu	94(97.9%)
	Muslim	2(2.1%)
Type of family		

	Nuclear	72(75%)
	Joint	23(24%)
	Single parent family	1(1%)
Father education		
	Literate	89(92.7%)
	Illiterate	7(7.3%)
Mother education		
	Literate	76(79.2%)
	Illiterate	20(20.8%)
Place of stay		
	Home	17(17.7%)
	Hostel	35(36.5%)
	Flat	44(45.8%)
Relation between parents		
	Very good	89(92.7%)
	Good	6(6.3%)
	separated	1(1%)
Relation with parents		
	Very good	89(92.7%)
	Good	7(7.3%)
Monthly pocket money (Npr.)		
	Below 5000	59(61.5%)
	5000-10000	29(30.2%)
	Above 10000	8(8.3%)

As per Figure 1, the main source of information about drug abuse was from mass media (89%), followed by friends (77%), teachers (74%) and family (56%).
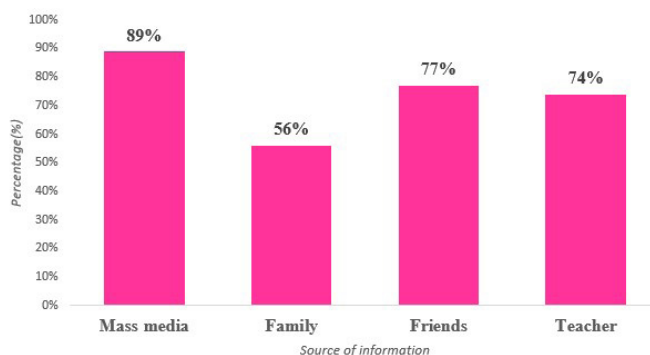

Figure 1: Source of information (multiple responses) about drug abuse (n= 96)

Table 2 depicts that most of the respondents knew the meaning of drug abuse (91.7%) and its bad health perspectives (100%). Out of the total participants, 89.6% were aware about the fact that Gaja, Chares, Marijuana, Cannabis and Heroine were the commonly available drugs for abuse. Majority of the participants were familiar about the main cause (96.9%), sign and symptoms (93.8%), effect of drug abuse on teenagers (90.6%), physical effect (92.7%), social effect (95.8%), economic effect (96.9%), short term complication (87.5%) and long term complication (91.7%) of drug abuse. More than 90% of the participants were acquainted with the ways to prevent and treat drug abuse.

Table 2: Knowledge regarding drug abuse (n=96)

Statements	Correct response (%)
Inconsistence use of drug is the main meaning of drug abuse.	88(91.7)
Health perspective of Drug abuse is bad for health.	96(100)
Gaja, Chares, Marijuana, Cannabis and Heroine are the commonly available drug for abuse.	86(89.6)
Teenage curiosity /peer pressure is main cause of drugs abuse in student.	93(96.9)
Poor decision making, Poor self-control, Increase interest in work, Poor communication skill, increase irritability and aggressiveness are the main sign and symptom of drug abuse.	90(93.8)
In teenagers Physical, Psychological, Social, Economic may be affected by drug abuse.	87(90.6)
High chance of getting HIV is the main physical effect of drug abuse.	89(92.7)
Quarrel and fights is the main social effect of drug abuse.	92(95.8)
Financial burden is the main economic effect of drug abuse.	93(96.9)
Supportive therapy, Awareness program, involve in peer to peer and prevention program and counselling are ways to prevent from drug abuse.	88(91.7)
Rehabilitation is the ways to treat drug abuse.	87(90.6)
Affect in person decision making is short term complication of drug abuse.	84(87.5)
Dependence to drug is long term complication of drug abuse.	88(91.7)

Table 3 reveals that 78 (81.3%) of participants had satisfactory level of knowledge whereas 18 (18.8%) had unsatisfactory level of knowledge about drug abuse. Among 96 participants median score was 11 with minimum score 9 and maximum score 12.

Table 3: Level of knowledge regarding drug abuse (n=96)

Variables	Category	Frequency (%)
Level of knowledge	Unsatisfactory (<11)	18(18.8)
	Satisfactory (≥11)	78(81.3)

Median (IQR) = 11/1 , Min/Max=9/12.

Table 4: Bivariate analysis between level of knowledge regarding drug abuse and some independent variables among students (n= 96)

Variables	Level of knowledge		p-value (χ^2-test)
	Unsatisfactory (%)	Satisfactory (%)	
Age group			
Teenage	10(25%)	30(75%)	0.185
Above teenage	8(14.3%)	48(85.7%)	
Gender			
Male	11(17.5%)	52(82.5%)	0.655
Female	7(21.2%)	26(78.8%)	
Type of family			
Nuclear	15(20.5%)	58(79.5%)	0.548##
Joint	3(13%)	20(87%)	
Father education			
Literate	17(19.1%)	72(80.9%)	1##
Illiterate	1(14.3%)	6(85.7%)	
Mother education			
Literate	16(21.1%)	60(78.9%)	0.347##
Illiterate	2(10%)	18(90%)	
Monthly pocket Money			
Below 5000	11(18.6%)	48(81.4%)	0.973
5000 and above	7(18.9%)	30(81.1%)	

denotes fisher exact test p-value

As illustrated in Table 4, the variables like age group, gender, type of family, father education, mother education and monthly pocket money do not show any significant association with the level of knowledge regarding drug abuse

DISCUSSION

This study findings showed that 78 (81.3%) has satisfactory level of knowledge and 18 (18.8%) has unsatisfactory level of knowledge regarding drug abuse. It is similar to the study done

by Bhattarai et al.[7] which supports the above findings. Another study conducted by Haddad et al.[8] also revealed similar findings. However, these findings contrasted with the study done by Billalli et al. among college students who found majority of the respondents had inadequate knowledge regarding drug abuse.[9] The possible explanation for this discrepancy might be because, college students might have limited knowledge about drug abuse as well as lack of educational programs on such topic as compared to older adolescents (MBBS students) who had better awareness and were more socially active than college students.

In the present study, mass media was the main source of information regarding drug abuse for majority of the participants (89%). This was in line with the study conducted by Sinha et al.[10] whereas, another study done by Bhattarai et al. stated, friends as the most frequent source of information.[7] This designate the impact of peer group in the adolescent stage.

About 91.7% of the participants in our study, indicated the meaning of drug abuse as inconsistence use of unnecessary drug which is in accordance to the study done in Nigeria by Adebowale et al.[11]

Present study finding showed that, 96.9% of the participants indicated teenage curiosity/peer pressure as the main cause of drug abuse, and this result matches with the study done by Tulu et al.[12] which reported that peer pressure, curiosity and lack of awareness were the main reasons for youth getting involved in drug use.

According to the result of our study, maximum participants (89.6%) said cannabis, gaja, marijuana were the commonly available drug for abuse which was in conference with the study done by Elkazh et al.[13] but, the result was in contrast to the study done in Ethiopia where, chat was most commonly available.[14] The reason may be because in Ethiopia, availability of drugs may be restricted due to extreme social restrictions on illicit drug use.

The findings of this study suggests that majority of the participants (93.8%) knew about the sign and symptoms of drug abuse, and 90.6% had knowledge about its effect. This corresponds with the study done by Haddad et al.[8] which showed the participants had good knowledge about all the effects of drug abuse.

As per the results perceived in this study, 91.7% participants believed that awareness program, counselling and rehabilitation were the ways to prevent and treat drug abuse. The finding of this study matches with the findings of other study done by Bhattarai et al.[7] where similar results were mentioned.

The result of our study indicate that all the variables, like age group, gender, type of family, father education, mother education and monthly pocket money do not have any significant association with the level of knowledge regarding drug abuse. On the contrary, other study conducted by Bhattarai et al.[7] has shown a significant association between these variables. This contradiction may be due to different study population and setting.

This study is, however, not devoid of limitation. First of all, the smallest sample size is the biggest limitation. Secondly this study only focused on first year students of CMC so it cannot be generalized to all the population of Nepal.

CONCLUSION

It was concluded that majority of the MBBS First year students had satisfactory level of knowledge regarding drug abuse. The adolescent period is very delicate period when hormonal, physical and behavioural changes occur, thus adolescent population are high-risk group who are more likely to be engaged in drug abuse. But, this study showed that most of the MBBS students are well aware about drug abuse, but additional comprehensive inservice training would be very helpful.

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