

Pregaming on Alcohol Products among Male College Students in Puducherry-Mixed-Methods Study

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Abstract

Background: There are some risky practices such as preloading or pregaming which exist among college students. When students pregame, compared with drinking episodes when they do not, they consume a greater number of drinks and have higher blood alcohol concentrations. **Objectives:** (1) To explore the perceptions about pregaming among male college students in Puducherry. (2) To study the prevalence of pregaming among current alcohol users. **Materials and Methods:** A sequential exploratory mixed-method study (Qualitative-Focus Group Discussion [FGD] to explore pregaming followed by Quantitative-self-administered questionnaire [survey]) was conducted among 450 male engineering college students by simple random sampling. **Results:** The prevalence of pregaming among current alcohol users was 66.7%. Among all occasions, the students were involved in pregaming mostly on birthdays 92.5% and marriages 92.5% followed by college cultural events 90%. All of the students 100% wanted to pregame for anticipated alcohol cost problems, 100% pregame for fun and 87.5% easy conversations with the opposite sex and majority 66.6% had the intention to quit pregaming among current users. **Conclusion:** The prevalence of pregaming is high among current users however, the majority of them had the intention to quit this behavior. Counselors and health care professionals working in alcohol de-addiction centers should specifically question pregaming and its associated symptoms. Tailor-made interventions should be promoted to target the concept of pregaming-related consequences of alcohol addiction.

Keywords: Alcohol-use, college students, pregaming

INTRODUCTION

Alcohol consumption has been a part of human culture since the beginning of documented history. The effects of alcohol consumption on health are detrimental, with an estimated 3.8% of all global deaths and 4.6% of global disability-adjusted life-years attributable to alcohol. The prevalence of alcohol use remains low in India as compared to other countries. However, recent data from India (National Family Health Survey III and IV) suggest increasing consumption of alcohol and the harmful effects across Indian society. These effects have been more pronounced among youth.^[1]

There are some risky practices, which exist among college students that lead to binge drinking. Those risky practices are called “pre-loading,” “front-loading,” or “pre-gaming.” Though there is no exact definition of pregaming in the literature, the common entity that exists in the definition is consuming alcohol in large amounts before attending a social event, where additional alcohol may or might not be

available and/or consumed. When students pregame, compared with drinking episodes when they do not, they consume a greater number of drinks and have higher blood alcohol concentrations. Individuals pregame for various reasons like waiting for an event to start, a desire for rapid intoxication, anticipated alcohol access issues (e.g., due to cost reasons or limited availability), and/or safety reasons (e.g., greater awareness of the contents of one’s drink).^[2,3] Pregaming has been linked to many general and specific alcohol-related consequences such as neglecting responsibilities, feeling sick, and passing out. They also experience blackouts and temporary loss of memory while drinking.^[4]

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Although there has been extensive research on pre-gaming in western countries, no study on pre-gaming among students in India has been done so far. This study will help the health professionals working with these student populations not only to assess the overall quantity and frequency of alcohol consumption but also their pre-gaming conditions. Hence, the present study was undertaken with the following objective to explore the perceptions about pre-gaming among male college students in Puducherry and to study the prevalence of pre-gaming among current alcohol users and the factors influencing their intention to quit this behavior.

METHODS

Study setting

Puducherry is famous for the partying culture that attracts tourists from all over Tamil Nadu. The economy of the state highly depends on the market of alcohol.^[5] Many colleges are located near the Pondicherry border, having numerous liquor shops on the highway. Hence the study was conducted in a private engineering college in Kalitheerthalkuppam Puducherry where access to alcohol products is easier. A total of 1653 undergraduate students were studying in the college, of which 1042 were male and 662 were female.

Study participants

Inclusion criteria

Only male college students aged 18–21 years who gave consent were included, as male students are more prone to consume alcohol in our culture and also the minimum legal age for drinking in Puducherry is from 18.^[6]

Exclusion criteria

Female students and male students less than 18 years.

Study type

It is a sequential Exploratory Mixed-Method study^[7] design where equal weightage was given to both study designs. **Qualitative:** Focus Group Discussion (FDG) was done using grounded theory to explore the topic of pre-gaming and to frame the questionnaire. **Quantitative:** A descriptive cross-sectional study, where self-administered pre-tested questionnaire was used.

Sample size

Based on a previous study done in America, by Haas *et al.*,^[8] the prevalence of pre-gaming was found to be 68%. Considering an alpha error of 5%, 7% relative precision and a 5% nonresponse rate the sample size was calculated to be 445. About 490 students were included in the study.

Qualitative study tool

Two FGDs were conducted, separately among ten 1st year and ten final-year students. Students who participated were purposively selected as they were vocal and willing to participate.

Written informed consent was obtained from each participant and the FGDs were conducted by a trained facilitator.^[9] The

discussions were audio-recorded and noted simultaneously by a note-taker who was also trained in qualitative research methods and manual content analysis of the data was done by two investigators. Codes were derived from the transcripts to form a logic to produce a universal claim from observed instances. Later, similar codes were merged together to establish the categories. Any incongruity between the two investigators was resolved by mutual discussion. The findings were used in developing a tailored questionnaire that was administered to the students.

We achieved data saturation after the second FGD as pre-gaming codes were getting repeated.

Quantitative study tool

The questionnaire was framed after reviewing literature and including the components of the FGD and pilot tested to 40 male students (10% of the sample size approximately) in a neighboring engineering college followed by a group discussion where consensus regarding terminologies was met by a group of experts.

The following operational definitions were used for the present study.

Pregaming is defined as consuming any form of alcohol (>3 pegs) at a time before attending a social event, where additional alcohol may or may not be available and/or consumed. Every user of alcohol is defined as a student who had used any form of alcohol at least once in their lifetime. Current user of alcohol is defined as a student who had used any form of alcohol at least once in the past 30 days.

Intention to quit pre-gaming

Any student who has contemplated quitting pre-gaming of alcohol products for the past 30 days.

A list of courses in the engineering college was obtained from the college authorities. Out of five branches, two branches (Mechanical and IT) were selected by lottery method. As there were only male students in the Mechanical branch, we completely enumerated the male students from another branch as well. Of the 490 students in those branches, 19 students were not present at the time of the survey and 21 students did not fill the forms, which came down to 450 students. The data were entered and analyzed in SPSS 24 software (SPSS Inc., Chicago, Illinois, USA) package. Descriptive statistics such as frequency, means, and percentages were used to describe the data.

Ethics

Ethical clearance was obtained from the Institutional Ethics committee. Written informed consent was obtained from the participants before the survey. Assurance was given about the anonymous nature of the study.

RESULTS

The mean age of 450 male students who participated in the study was 19.23 ± 1.34 years (Mean \pm SD). Out of 450 students, 183 (40.7%) of them belong to the 1st year. About 425 (95.4%) of the students were day scholars. Most of the participant's father

53.1% and mother 57.8% were educated up to the secondary level. Based on Modified B. G. Prasad's classification (2016), 43.2% and 41.8% of students belonged to class I and class II socio-economic status, respectively. The prevalence of ever and current alcohol usage among students were 85 (18.4%) and 60 (13.3%) respectively.^[10] The prevalence of pregaming among current users was 40 (66.7%) [Table 1] shows that among 85 ever users, the common form of alcoholic beverage used were breezer 51 (60.0%), followed by beer 48 (56.5%). The most common form of alcohol among current users was beer 29 (48.3%), followed by breezer 28 (46.7%). Among all occasions, the students were involved in pregaming mostly on birthdays 37 (92.5%) and marriages 37 (92.5%) followed by college cultural 36 (90.0%), night outs (27.5%), tours (20%), house parties (17.5%) and pubs (5%). Table 2 shows that all the students wanted to pregame for anticipated alcohol cost problems and fun 35 (87.5%) of them pregame for easy conversations with the opposite sex. The majority 40 (66.6%) had the intention to quit pregaming among current users. Advice by close ones 16 (40%) and self-realisation 10 (25%) were the major factors influencing their intention to quit their behaviour [Table 3].

Category-1: Birthdays

"Birthdays are the time to have a ball! Irrespective of whose" (Male, 20 years). Sometimes when they get 'high' they also go out of their rooms and indulge in fights (assaults and verbal abuses) with their neighbors.

Category-2: Marriages

"We get so many varieties of drinks for free and there is no compulsion to go home" (Male, 19 years). The irony is that sometimes they do not even wake up to enjoy the marriage rituals.

Category-3: Bachelor parties are perceived as the last gateway to freedom. "We have substances like magic mushrooms" (Male, 19 years). These are usually available in hill stations like Kodaikanal. Usually, we consume it along with alcohol while pregaming."

Category-4: Tours and excursions

"The backseat is always loud and fun" (Male, 20 years) When the vehicle is constantly moving, the feeling of getting high escalates very fast with the rise in the number of drinks. The main risk involved during this process is some of them demand to drive the car which can cause accidents and injuries.

Category-5: Night outs and pubs

"When parents are away the house turns into a party room." (Male, 21 years) "Getting drunk fully and entering a pub is a fashion these days." The pub's parties involve money, as the drinks served, are very costly and due to less pocket money, they get drunk fully outside and go so that they can bear the relatively cheaper entry ticket.

Category-6: After exam parties

"After exams students unwind from stress by binge drinking." (Male, 21 years). The most common complications stated was blackouts, vomiting, gastritis, physical assaults, and high-risk

sexual behavior. Many of them purposefully pregame to behave in an uncontrolled manner to vent out their feelings.

DISCUSSION

The prevalence of pregaming among current users is 66.6% in our study. The students involved in pregaming mostly on birthdays (92.5%) and college cultural (90.0%) followed by marriages (92.5%). The occasions in which student's pregame in the west are waiting for a football match to start, sorority parties, before attending a musical concert. And in private residences before going to parties and bars.^[2,3] Though the occasions in which students pregame differs from the west, this confirms the existence of pregaming culture in India as well. The occasions differ as the system of education, the exposure and cultural differences exist between the countries. This is very context-specific as the students living in the developed countries have the habit of partying more. Reasons for pregaming included anticipated cost issues as they get very little pocket money, to have an easy conversation with the opposite sex, intention to get high and social anxiety which were consistent with the findings from the west.^[2,3]

Table 1: Alcohol products used by college students (multiple responses)

Alcohol products used by college students	Ever user (n=85), n (%)	Current user (n=60), n (%)
Beer	48 (56.5)	29 (48.3)
Breezer	51 (60.0)	28 (46.7)
<i>Kallu, padhani</i> ^[10] /any other local form	10 (11.8)	5 (8.3)
Spirits (vodka, rum, gin)	10 (11.8)	4 (6.7)
Wine	22 (25.9)	15 (25)
Brandy/whisky	6 (7.1)	3 (5.0)

Words in italics are in Tamil language^[10]

Table 2 Reasons for pregaming among current users (n=40) (multiple response)

Reasons	Frequency, n (%)
Intention to get high	30 (75)
Desired alcohol expectancies	20 (50)
Fun seeking behavior	40 (100)
Anticipated alcohol cost issues	40 (100)
Social anxiety	30 (75)
Easy conversations with the opposite sex	35 (87.5)

Table 3: Factors influencing intention to quit pregaming among current alcohol users (multiple responses)

Reason for intention to quit (n=40)	Frequency, n (%)
Advice by closed ones	16 (40)
Pressure by girl friend	2 (5)
Self-realization	10 (25)
Negative social implications of alcohol use	11 (27.5)
Economic factors	1 (2.5)

The students who consume alcohol both (ever and current) were (18.8%) and (13.3%) respectively. Mini SS *et al.* from Kerala, Mahanta *et al.* from Assam reported the alcohol prevalence to be 36% and thirty-eight percentage respectively.^[11,12] These studies also included the home-based alcohol drinks which they consume as a part of their culture. This may be the reason for the escalated prevalence.

There is no research done on pregaming yet in India. Officially Indians are still among the world's lowest consumers of alcohol as per government statistics. The percentage of the drinking population aged under 21 years has increased from 2% to >14% in the past 15 years, according to studies in the southern state of Kerala by Alcohol and Drugs Information Centre India.^[13] There are very few studies that clearly state the prevalence of heavy drinking. Only when there are researches that explore heavy drinking will they discover a phenomenon called pregaming, as the no of people who drink heavily are more likely to pregame.^[14] Secondly the definition of pregaming is not so forthright and common. The occasions in which the student's pregame drastically vary from the west and hence was less thought of as a problem in India. Most importantly the price factor also plays an important role. The country-specific price ratio between procuring drinks on-premise compared with off-premise, the greater the percentage of predrinkers.^[13,14] These are the probable reasons why pregaming is under-researched in India.

Pregaming may increase the overall level of alcohol consumption among young people. They are found to have higher blood alcohol concentrations on predrinking days compared with non-predrinking days.^[13,14] Another potential problem with predrinking is that it may facilitate the use of recreational drugs like cannabis, cocaine, or magic mushrooms. The complications related to pregaming reported in our study in the FGDs were blackouts, vomiting, high-risk sexual behavior, and physical assaults. They reported that pregaming is not only risky in the short-and immediate-term, but such behavior can influence one's permissive attitudes toward drinking and future heavier drinking patterns.

The strength of the present study is that it is a mixed-method study which provides a more complete understanding of the research problem. Students from only one college were included, hence we cannot generalize this finding. The pregaming component required more depth as the number of pegs consumed per pregaming episode was not quantified. The complications related to pregaming could have been explored and quantified in detail.

CONCLUSION

The prevalence of pregaming is high among current users. The

majority of them wanted to quit this behavior. Counselors and professionals working in alcohol de-addiction centers with this population should explicitly question pregaming and its associated symptoms. Tailor-made interventions should be promoted to target the concept of pregaming-related consequences of alcohol addiction.

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Conflicts of interest

There are no conflicts of interest.

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