The Nature, Causes, and Practice of Risk Behaviors among Undergraduate Students in Dilla and Hawassa Universities

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Abstract

The main objective of the study was to investigate the nature, causes, and practice of risk behaviors among undergraduate students in Dilla and Hawassa universities, Ethiopia. A total of 210 regular students were selected using a multi-stage random sampling technique from both Universities. The data were analyzed using both descriptive and inferential statistics using SPSS Version 20. The results showed that about 39.7% of participants were practicing risky behaviors ranging from mild to high levels. An independent samples t-test revealed that Hawassa University student's level of risk behavior (M=18.53, SD=16.63), peer pressure (M=13.93, SD=8.48) and self esteem (M=30.79, SD=4.05) were significantly higher than those of Dilla university student's level of risk behavior (M=12.62, SD=14.39), peer pressure (M=10.14, SD=6.57) and self-esteem (M=28.80, SD=4.02) at [t (1,182)2.986, p<.05], [t (1,182)= 3.967, p<.05] and [t (1,182)=.00, p<.05] respectively. Moreover, moderate to high levels of peer pressure and stress was experienced by participants about 38.6% and 42.9% of the participants respectively. About 48.4% of the participants have been found to have moderate to low levels of self-esteem. Risk behaviors were positively and significantly correlated to age (r=.146, p<.05, peer pressure(r=.616, p<.01), and stress levels(r=.148, p<.05. Multiple regression analysis also showed that students' self-esteem, stress, peer pressure, and background variables account for 41% of the variance in the practice of risk-taking behavior [R2=.419, Adjusted R2 =.387, F (7,126)=13.002,p<.05]. Besides, the one-way ANOVA revealed that the level of self-esteem of first-year students was significantly higher than those of second year and third-year students. Thus, personal factors play important role in influencing the practice of risky behavior among undergraduate students.

Introduction

Adolescent risk behaviors are becoming a serious social and health problem. A host of potentially risky behaviors in which adolescent engage can harm their wellbeing as youth and their life prospects if they are not dealt with wisely. Activities such as smoking, drinking, sex, and drugs are generally the most frequently exercised risky behaviors. Many of such risky behavior are often initiated and practiced among adolescence. Engaging in risky behaviors have been associated with many health problems among adolescents. Moreover, using of substances such as alcohol, Khat leaves and tobacco have been identified as a leading factors of health and socio economic problems worldwide. Practicing such risky behaviors have also been dramatically increased in developing countries. The situation in Ethiopia is also not different where adolescents' engagement in risky behavior have been considerably rising Similarly, using substances such as alcohol, khat, and tobacco was aslo very common during adolescence period (18 years and 25 years of age.). The college years related with initiation and increment of risk taking behavior [1]. Adolescents attending college have been identified as vulnerable segment of population to engage in risk taking behaviors. The prevalence of risk taking behaviors among college students has also increased. Studies are also showed high practice of risky behavior among students attending college compared to young adults who do not attend college. Adolescents risky behaviors such as the use of alcohol, tobacco and other substances among adolescents attending college have been associated with physical and/or mental health complications. College years are a major developmental transition as students will be making more decisions independent of parental guidance. During this time, college students encounter various challenges such as stress due to separation from family, the formation of new social groups, intense academic pressures and the balancing of social engagements with academic activity. Just as the college environment can foster healthy decisions, poor decisions made during a freshman's first six weeks may have far reaching consequence on their college years and future life. In addition, the experiences and habits established during the college years can set a ground for the establishment of one's future direction. For example, substance use among college students have been related to decreased academic performance, increased risk of contracting HIV, absenteeism, violent crime, theft and hopelessness Adolescents' engagements in risky behavior are attributed to different individual and contextual factors. For example, having family members who use substance, having friends who use Substance, lower educational level of parents, monthly pocket money, urban setting, social acceptance, personal pleasure were highly associated with adolescents' Substance use. Studies also associated adolescent substance use with availability of substances, poverty and norms favorable to drug use, and peer influence. Similarly, recreational desires; such as to have fun, social conformity, mood enhancement and coping with stress were also related to adolescent substance misuse. Despite high practice of different risky behaviors among college students in Ethiopia, few studies have investigated the prevalence, nature and factors of risky behaviors among college adolescent students in Ethiopia. In addition, to the best of the researchers' knowledge, there is no study conducted in Ethiopia that deals with the nature, Causes, and Practice of risky behaviors among undergraduate students particularly to the universities of southern region [2]. Therefore, the objective of this study was to assess the nature, causes, and practice of risky behaviors among undergraduate students particularly in Dilla and Hawasa Universities. The study is crucial for initiating and strengthening proper educational and interventional programs on risk taking behaviors among university students. Because knowledge about potential negative consequences of such behaviors often does not deter young people from taking risks.

Statement of the problem

Universities are part of governmental and nongovernmental institutions which established in order to produce competent graduates in various specializations through provision of quality education. However, studies demonstrate that existence of broadened limiting factors in attaining their ultimate goals. Among the top determinant factor, the researchers emphasized the interplay of environmental, behavioral and personal factors which are believed to influence the practice of risky behaviors among college students. The prevalence of many health risk behaviors on college campuses has increased over the past decade, posing a significant public health problem.

Besides, there are certain fragile information that researchers read from local Medias, lecturers, and students themselves that witness regarding the practice of health risk behaviors. But, there are no organized researches conducted on the area in our contexts particularly in higher institutions. This attracts our attention towards examining the existing practice of risk behaviors among undergraduate students in Ethiopia particularly in the nearby Dilla and Hawassa universities. This was because those universities are located in the cash crop areas where highest commercial exchanges occur in the country which may has its contribution for the practice of those risk behaviors in combination with several factors.

Therefore, with this understanding in mind, this study was examined the Nature, Causes, and Practice of risk behaviors in their stay at university. Accordingly, the study was designed to answer the following basic research questions:

- What are types of risk behaviors practiced among participants?

- Which risk behaviors are frequently practiced by participants?

- Do peer pressure, self-esteem and stress contribute for practice of risky behaviors among participants?

- Is there any interrelationship between peer pressure, self esteem, stress and risk behavior?

Objectives of the study

The main objective of the study was investigating the nature, causes, and practice of risk behaviors among undergraduate students in Dilla and Hawassa Universities. The specific objectives of the study were:

- Describing the types of risk behaviors practiced among participants in the study areas.

- Examining frequently practiced risk behaviors among undergraduate students.

- Explaining the contribution of personal factors (peer pressure, self-esteem and stress) contribute for practice of risky behaviors among participants.

- Examining the interrelationship between personal factors mainly peer pressure, self-esteem, stress with risk behavior.

Methods

This chapter presents the methods in which the study was conducted such as research design, target population, sample size and sampling technique, research instruments, procedure and data analysis.

Research design

The study also employed the quantitative approach because it found to be relevant to investigate variations between variables that are going to be measured using numbers and analyzed with statistical procedures. Particularly, the study was conducted using cross-sectional descriptive study design because it was investigated the causal factors, prevalence, nature and variables in relation to practice of risk behaviors among undergraduate students in Dilla and Hawassa Universities.

Sample size and sampling technique

A total of 210 (105 students from each institution) undergraduate regular students were randomly selected from the target population in both Dilla and Hawassa universities using multi stage sampling. Moreover, stratified sampling was employed in order to select the participants from different fields of studies in the universities proportionally. A total of five departments were randomly selected from natural and social sciences and then 21 participants were selected through lottery method from each department of both universities. Simple random sampling was used in order to avoid sampling bias as there seem no extra variable that may arise a need for non-probabilistic sampling. According to Amin (2005) randomization is effective in creating equivalent representative groups that are essentially the same on all relevant variables thought of by the researcher.

Data gathering instruments

The researchers used questionnaires because participants were literate and also large in number. Accordingly, the researchers were administered closed-ended and open-ended questions to the participants. Five types of questionnaires were designed. Demographic background consists of 11 items, peer pressure has 13 items, selfesteem consists of 10 items, stress contains 12 items and risk behavior assessment questionnaire consists of 21 items. Finally, 210 questionnaires were distributed for the selected samples across all departments included in the study. The questionnaires which were returned back and properly filled were 184 (88%).

Procedures of data collection: To conduct the study within the selected areas, first, letters of request was secured from both Dilla and Hawassa University. Then these letters were delivered to each of the university. After permission was secured from those institutions, the questionnaire was administered by the research assistants under the close guidance of the researchers. Written instructions and information about the aim of the study, and important points in filling out the scales were attached at the beginning of the instruments. Participants were requested to give an informed consent and were told not to write their names/address. The participants were also assured that their responses would be kept confidential and it would be used only for academic purpose. The questionnaires were distributed as hard copy to the participants who were volunteers to participate in the study.

Validity and reliability of instruments

The questionnaires were adapted and piloted before it used for the main study. Three expert reviews were made to judge the appropriateness as well as content representativeness of the given items. Then using the information obtained from the expert review content validity of items was assessed using Lawshes (1975) content validity ratio formula. This was help to assess whether the survey questions were seem relevant to the subject it was aimed to measure, if it was a reasonable way to gain the needed information, and if it was well-designed. Reliability of the instruments was also tested through the pilot study conducted on 30 students. The items' reliability was tested using Cronbach Alpha coefficients. Those items with reliability coefficients less than 0.7 were modified and others were rejected, since it is the acceptable reliability coefficient [3].

Ethical considerations

Ethical issues were addressed both during pilot study and the final study. Ethical principles were respected through getting informed consents and reminding participants of their rights to withdraw at any point of the study phase if they felt so, and their freedom to withhold any aspect of information they felt uncomfortable. The data collected from participants were kept confidential.

Method of data analysis

Data gathered using questionnaire were analyzed using both descriptive and inferential statistics using a computerized data analysis package known as Statistical Package for Social Science (SPSS) version 20. Means, percentages, standard deviations, Pearson product-moment correlation coefficient (r) and regression analysis were used to analyze the data. The researchers also employed independent sample t-test to find out differences on the practice of risk behaviors between male and female students [4].

Results

This section consists of data organization, description and interpretation. It begins with demographic characteristics of respondents, common risk behaviors and predicting power of independent variables on the dependent variables.

Demographic characteristics of participants

One hundred and eighty four students from both Dilla and Hawassa Universities were participated in this study.

As can be seen from Table 1, a total of 184 undergraduate students participated. The majority of the participants were males (n=139; 75.5%), from Dilla university (n=105; 57%) and third-year student (n=85; 46.2%). The mean ages of the participants were 21.47 years. On the other hand, the majority of the participants were scored from 2.00 CGPA-2.5 CGPA (n=76; 41.3%).

As indicated in Table 2, the majority of the participants were reported

Table 1. Demographic Characteristics of the participants.

Category		
Number of participants	Gender	
	Mean Age (Range)	
Vaccination history	Vaccinated*	
	Not vaccinated	
	Unspecified #	
HBV Profile	HBsAg	Positive
		Negative
	HBsAb	Positive

Table 2. Participant's perception towards their income.

Items	n	%
Student's perception of their family's average monthly income		
Sufficient	78	42.4
fairly sufficient	53	28.8
Insufficient	40	21.7
extremely insufficient	9	4.9
Average monthly income of the students		
below 150 birr	32	17.4
151 birr-300 birr	66	35.9
301 birr-500 birr	57	31.0
above 500 birr	27	14.7

as their family income was sufficient (*n*=78; 42.2%). Moreover, the majority of the participants were reported that their average monthly income was ranges between 151 birr up to 300 birr (n=66;35.9%).

As can be seen from Table 3, the majority of the participants were reported that there were no family members engaged risk taking behaviors (n=142; 77%). The rest of the participants were reported that some members of their family have a history of risk taking behaviors (n=41; 22%). With regard to relationship with their parents, the majority of the participants were reported that they have a close relationship with their parents (n=164; 89%). Whereas, the remaining participants were reported that they have no close relationship with their parents (n=20; 11%).Regarding previous conflict with parents, the majority 144(78%) of participants were reported that there were no conflict with their parents (n =144; 78%). However, about 37(20%) of the participants were reported that they were frequently in conflict with members of their families.

The Nature, mean and magnitude of practice of risk behaviors

As indicated on the above Table 4, the entire sample scores on self esteem scale ranges from 12 to 40 with a mean values of 26.5543 (SD= 3.78482). This shows that 48.4% of the participants who were scored below the mean value have been found to have moderate to low level of self esteem. On the other hand, the sample scores on risky behavior scale, ranges from 00 to 64 with a mean values of 15.1630 (S.D=15.62594). This shows that about 39.7% of the participants scored above the mean value which indicates the practice of risky behavior which range from mild to high level. With regard to participants' level of stress, the whole sample scores range from 00 to 29 with a mean values of 18.7337 (S.D=4.83269). This also reveals that 42.9% of the participants who have scored below the mean have been found to have experienced moderate to high level of stress. In addition, participants level of peer pressure scores range from 00 to 38 with a mean value of 11.7717 (SD=7.66812). This implies that about 38.6% of the participants have scored above the mean have been found to have experienced moderate to high level of peer pressure [5].

As indicated on the above Table 5, the majority of the participants were reported that they use stimulants during their college time (n=65; 35.3%). Whereas, smoking cigarettes was least used substance by the participants during their college time (n=23; 12.5%).

Correlational Analysis of personal factors and risk behaviors

Mean scores, standard deviations and correlations were calculated for risk behavior, self-esteem, peer pressure, stress and age. As indicated in Table 6, risk behavior was positively and significantly correlated to age(r= .146, p<.05), peer pressure(r=.616, p<.01), and stress level(r=.148, p<.05). This shows that the practices of risk behaviors are higher among older participants with high peer pressure and stress level (Table 6). On the other hand, self-esteem that were dealt with in this study had no significant relations with risk behavior(r=.002, p>.05).

Group mean difference

An independent-samples t-test was conducted to compare the mean difference on risk behavior, peer pressure, stress level and self-esteem for between Dilla University and Hawassa University. As indicated in Table 7, an independent samples t test revealed that Hawassa University student's level of risk behavior (M=18.53, SD=16.63), level of peer pressure (M=13.93, SD=8.48) and self-esteem (M=30.79, SD=4.05) were significantly higher than those of Dilla university student's level of risk

Table 3. Family member engaged in participating risk behaviors.

Items	n	%
Any family members engaged in practicing risk behaviors		
No	142	77.2
Yes	41	22.3
Close relationship with parents		
No	20	10.9
Yes	164	89.1
Frequent conflict with parents before joining the university		
No	144	78.3
Yes	37	20.1

Table 4. Means, Standard Deviations, maximum score and minimum scores of participants on self esteem, peer pressure, stress and risk behavior scale (n=184).

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Self esteem	184	12.00	40.00	26.5543	3.78482
Stress	184	.00	29.00	18.7337	4.83269
Risk behavior	184	.00	64.00	15.1630	15.62594
Peer pressure	184	.00	38.00	11.7717	7.66812

Table 5. Commonly practiced behaviors.

Items	n	%
unprotected sexual intercourse	55	29.9
Stimulants	65	35.3
Alcohol	25	13.6
smoking cigarettes	23	12.5

Table 6. Interrelationship between personal factors and risk behaviors (n=184).

Variables	1	2	3	4	5
Age	–				
Risk behaviors	.146(*)	–			
Peer pressure	.125	.616(**)	–		
Self esteem	.043	.002	-.014	–	
Stress	.038	.148(*)	-.089	.342(**)	–

Table 7. Risk behavior predicted by self-esteem, peer pressure, stress and background variables.

Variables	Unstandardized Coefficients		Standardized Coefficients	t-value	p-value
	B	Std. Error	Beta		
(Constant)	-24.873	12.088		-2.058	.042
sex	2.786	2.301	.087	1.211	.228
Age	1.125	.440	.183	2.559	.012
Average monthly income	.215	1.087	.014	.198	.843
Perception of parental income	1.561	1.085	.102	1.439	.153
Self esteem	-.226	.261	-.060	-.865	.388
stressful experiences	.137	.196	.048	.700	.485
peer pressure	.987	.127	.552	7.755	.000
R=.648, R²=.419, Adjusted R²=.387, F (7,126) = 13.002, p<.05.					

behavior (M=12.62, SD=14.39), level of peer pressure (M=10.14, SD =6.57) and self-esteem(M=28.80, SD=4.02) at [t (1,182)=2.986, p<.05], [t (1,182)=3.967, p<.05] and [t (1,182)=.00, p<.05] respectively. This shows that, although they scored higher self-esteem than Dilla university student, Hawassa University students reported higher level of risk behaviors and peer pressure compared to Dilla university students. Whereas, the mean differences between Dilla university and Hawassa university students was not statistically significant for stress [6].

Standard multiple regressions were used to test the joint and independent contributions of background and measured variables to the variance in risk behavior practice your risk increases (Table 7). A 2016 study by Trusted Source showed that African Americans, Native Americans [7].

Discussion

Results from previous studies indicated that risk taking behavior was

one of the problems of universities of in Ethiopia. The results of this study were also consistent with these findings. It was found that engaging in risky behavior was a problem in both universities. About 39.7% of the participants reported practice of risk behavior which range from mild to high level. The majority 65 (35.3%) of these participants were mainly used stimulants. This may be due to the students' desire to enhance their mood and cope up with stressful situation of their campus. On the other hand, the results presented in this study showed that the majority 142 (77%) of the participant reported that their family do not have the history of risky behaviors. These finding is inconsistent with some of the findings of previous researchers which showed the influence of history of family substance use with adolescent risk taking behaviors. This might be due to fact that during college year families' influence is insignificant [8].

Moreover, the result of this study showed that about 48.4% of the participants have been found to have moderate to low level of self-esteem. This may due to different factors such as low socio economic status, developmental factors. Beside, the result of this study showed about 42.9% of the participants experienced moderate to high level of stress. This result is consistent with the findings of other research which showed associated stress among college students due to separation from family, the formation of new social groups, intense academic pressures and the balancing of social engagements with academic activity. On the other hand, about 38.6% of this study participant experienced moderate to high level of peer pressure [9]. Consistent with this finding, Janse Van Rensburg et al. (2011) also indicates that university students experience greater social pressure during their university studies compared with their high school years [6]. The correlational analyses also revealed important results. The findings of this study showed positive and significant correlation between age and risk behavior. Consistent to this research finding, previous study was positively associated age with risk behavior. On the other hand, the analyses of this study indicated that peer pressure was positively and significantly correlated with risk behaviors. The result of positive relationship in this study was consistent with the findings of other research findings Correlation analysis also showed positive and significant association between stress and risk behaviors. Consistent with this finding, stress has been positively associated with risk behavior. On the other hand, self-esteem that was dealt with in this study had no significant relations with risk behavior. Consistent to this finding, previous study showed no relationship between self-esteem and risk behavior Another objective of this study was to determine, the extent to which the study variables predict risk behaviors. The variables jointly explained 41% of the variance in risk taking behavior (R^2=.419, Adjusted R^2=.387, $F_{(7,126)}$=13.002,$p<.05$). Peer pressure and age are the significant predictors in the model, with peer pressure scoring the higher beta value (β=.552, $p <0.05$) than age (β=.183, $p<0.05$). Consistent to the finding of this study, previous studies also found that peer influence as an important predictor of participation in risk behavior. The results of this study also indicated that higher level of risk behavior peer pressure and self esteem among Hawassa university students than Dilla university students. This high level of risk behavior and peer pressure among Hawassa University students may be attributed to Hawassa University's proximity to the town and the political and economical position of the Hawassa town itself. On the other hand, the result of this study also revealed higher level of self esteem among first year students higher than second year and third year

students [10]. This may due to the fact that as the students college year increase their exposure to different challenge increases which in turn reduces the self esteem of students who do not able to cope up with those challenges [11].

Conclusion

Practice of risk behavior among college and university students in Ethiopia is a major public health and social concern. The practices of risk behaviors were high among students both in Dilla University and Hawassa University. Risk behavior such as drinking alcohol, unsafe sex, smoking and using stimulants were commonly practiced by undergraduate students in the university. Practice of these risky behaviors were mainly associated with personal factors mainly age, stress and peer pressure. Compared to others, the majority of the participants were use stimulants. Practice of risk behaviors were higher among Hawassa university students compared to Dilla university students. Students from Hawassa university were also experience higher peer pressure than Dilla university students. Peer pressure and age were the dominant predictors of risk behaviors in the study. Provision of various psychosocial services by practitioners and concerned stakeholders is recommended.

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