

Final Research-Project Report.

Research Title: *Incidence and prevalence of Alcohol and Tobacco use on an Appalachian University Campus: an Epidemiologic Approach.*

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Abstract: This Appalachian Alcohol and Tobacco study with an epidemiologic focus was approved and funded by the MSU Office of Research and Creative Production Committee during the 1997/98 funding season. Nine hundred-ninety five (995, 12% of MSU total student population) formed the random sample, systematically obtained for this study. The design was quantitative and a 35-item reliability and validity tested Student Risk Behavior Instrument was used for data collection. The SPSS (Statistical Package for the Social Sciences) 8.0 version was used to generate frequencies and descriptive statistics for this study.

This study revealed an alcohol, tobacco and other drugs problem on the this rural campus. Findings did not indicate significant variation in the raw data based on comparisons from current nationwide college students' health risk behavior survey published by the US Centers for Disease Control (CDC). However from an epidemiologic standpoint, there were significant differences in the prevalence of health risk behaviors including tobacco smoking, and the use of harder drugs like cocaine and LSD among the sampled subjects. The use of smokeless (chewing) tobacco was both higher in incidence and prevalence among the study sample. Alcohol consumption was comparable to national levels among college students, but students from this rural campus, drink "to get high", than the national average. This pattern of drinking behavior is associated with poor academic performance, skipping classes, quitting college and also leads to anti-social behaviors, risky sexual behaviors and even death.

Recommendation based on this findings include: (1) Ongoing alcohol, drugs and tobacco resistance education particularly to the fifty percent of students who live in residence halls. (2) Create a MSU web site specifically for alcohol, drugs and smoking cessation program as a resource-base for students desiring information, but unwilling to participate in traditional counseling-type program. (3) Collaborative work with the MSU Wellness center to provide health risk reduction services to desiring students.

Preliminary findings have been submitted to a local news paper (The Morehead News) for publication, and plans are on the way for presentation of findings to local, national conferences and for publication to professional journals, including the American Journal of College Health, Journal of Drug Education and the Journal of Health Education.

Researcher Youmasu J. Siewe, assistant professor of HPER received a \$3,020.00 grant for a study titled: *Incidence and prevalence of Alcohol and Tobacco use on an Appalachian University Campus: an Epidemiologic Approach*, from Morehead State University Office of Research and Creative Production in December 1997. Following a careful review of the research instrument by the Institutional Review Board (IRB) and approval of the instrument for non-violation of would-be participants rights, the study was set to begin.

A pilot study was conducted to determine the questionnaire completion time, readability of items and to rule out or correct poorly items of the instrument. The pilot study was by the collection of data from a probability sample by a systematic approach from sections of courses offered at Morehead State University in the Spring of 1998. Data collection of this cross-sectional study began in April, and ended a month later (May, 1998) with data haven been collected from nine hundred and ninety-five students, (12% of the MSU population) to attain the following objectives:

The objectives of the study were:

- 1 Identify the extent of alcohol and tobacco use on an Appalachian University campus,
- 2 Begin preliminary work on alcohol and tobacco-related research and subsequently apply for external grant on.
- 3 Determine types and extent of alcohol/tobacco related problems on an Appalachian college campus.
4. Apply for Federal, state or local grants for alcohol/tobacco research
5. Determine if tobacco/alcohol users and nonuser could use campus preventive counseling and treatment and
6. Develop a campus-wide data-base on alcohol and tobacco research
7. Initiate/reinforce campus and community-wide alcohol/tobacco prevention/cessation programs.

Five of the above objectives for which this study was undertaken were achieved This study identified the extent of alcohol use on campus objective # 1, the researcher successfully initiated primary work on alcohol, objective # 2, types and extent of alcohol/tobacco-related problems were identified objective # 3, researcher received a federal funding for a collaborative alcohol-HIV study with the University of Kentucky, # 4. The study has also provided evidence that users and non-users are less likely to participate in counseling in a traditional setting.

Objectives # 6 & 7 which included developing a campus-wide data base and alcohol prevention/tobacco cessation program have not been achieved and will be the focus of the next research.

Overview and Rationale for the Study:

The Young Adult in College:

According to the National Centers for Educational Statistics, more than 12 million students are currently enrolled in the nation's 3,600 colleges and universities. About 7.1 million (57%) of these students are aged 18-24. Nationally one fourth of the 18-24 age group, one fourth are either full or part-time college students. Thus colleges and universities are important settings for reducing important health risk behaviors such as alcohol consumption and cigarette smoking.

Cigarette smoking has been described as the nation's *Public Health Enemy Number 1*. While individuals, communities and the nation obviously benefit from cash revenue derived from the sales of tobacco and tobacco products, the addictive grip of Nicotine which compels all users to continue to use these products, accounts for the most preventable illnesses and death in the country.

Alcohol and tobacco have been identified as contributing significantly to premature loss of life, anti-social behaviors and economic burden to society. Alcohol and tobacco are not the only addictive substances used on college campuses, they are however the ones that can be legally purchased without a prescription, and thus more likely to be used or abused than other drugs.

Health Risk Behavior in College.

Young adulthood (18-25) is defined as a time when some young people find themselves on college campuses after leaving the comfort of home and parental supervision the first time in their lives. It is also identified as a period of emotional, educational, vocational, economic and social transition. During this transition, adult roles and responsibilities are assumed. The young adult acquires legal right to work, vote, marry, serve in the army but at the same time denied the legal rights to consume alcohol until the age of twenty-one. The opportunity of being away, can mean the realization of a long term dream of being free from parental supervision to a world of unlimited freedom. While in college, the young adult soon realizes that social as well as academic expectations have to be balanced. For some, this "balancing" can be extremely stressful and contribute to experimentation or intensification of the use of readily available addictive substances including alcohol and tobacco products.

Significance. Kentucky's Appalachian is predominantly white. Nationally, smoking among whites, ranges from 28-40%. 5.3 million young Americans are likely to die prematurely from smoking-related diseases. Alcohol accounts for up to 29% of academic failures. Cigarette smokers are more likely to abuse alcohol. Alcohol and tobacco are the most addictive gateway drugs to the use of "harder" drugs. College students are more likely to be victims of experimentation with these substances while away from parental supervision. Exploring the impact of these potentially harmful substances on campus can lead to program development, improved health, student retention and academic success; a worthy investment for a better return.

Study Result Summary.

Design	Quantitative
Sample	Probability (Systematic Random)
Sample Size	995 students

Sample Characteristics

Random Sample Size:	995
Population	Morehead State University

College level		Gender	
Freshmen	23.8%	Male	36.8%
Sophomore	22.4%	Female	63.2%
Juniors	25.2%		
Seniors	27.3%		
Graduate	1.0%		

Racial Identity		College Representation	
Asian/Asian American	.7%	Education	39.0%
Caucasian/White-Non Hispanic	94.0%	Humanities	11.1%
African-American/Black	4.5%	Science & Tech	28.2%
Latino	.1%	Business	11.2
Native American/Islander	.1%	Unknown	10.6
Others	.6%		

Marital Status		Place of Residence	
Separated/Divorced	3.6%	Off campus with parents	10.4%
Married	15.8%	Of campus, not with parents	31.8%
Engaged	10.3%	Frat/Sorority	1.0%
Single/Never Married	68.4%	Campus-Res Hall	48.3%
Widow/Widower	0.4%	Campus Apt.	5.1%
		Others	3.3%

Results

	MSU	Nationwide College Health Risk Behavior(CDC, 1995) in MMWR, 11/97
	%	%
Variable: Alcohol		
Had drink in lifetime - non-religious reasons	89.0	89.9
Had a drink in last 30 days	62.8	68.2
Drink enough to feel high	53.5	34.5
Missed school or work due to alcohol	23.7	N/A
Thought of quitting school	2.3	N/A
Had alcohol-related/unplanned sexual intercourse	27.8	16.6
Drinking increased in college	52.2	N/A
Drinking decreased in college	22.9	N/A
Drinking unchanged in college	24.9	N/A
Plan to quit drinking	18.7	N/A
Will Participate in alcohol counseling	5.2	N/A
Variable: Cigarette Smoking		
Smoked cigarettes in lifetime	72.8	74.8
Smoke at least one cig. in last 30 days	62.8	31.4
Smoke ½ pack or packs in last 30 days	39.5	32.4
Smoking level increased in college	52.2	N/A
Smoking level increased in college	22.9	N/A
Smoking level unchanged in college	24.9	N/A
Aware of health risk	96.8	N/A
Plan to quit smoking	61.9	N/A
Aware of risk to others	95.7	N/A
Will participate in cessation prog.	30.7	N/A
Variable: Chewing (Smokeless) Tobacco Use		
Lifetime use	64.9	N/A
Use in last 7 days	46.5	5.4 (last 30 days)
Variable: Marijuana (Pot) Use		
Ever smoked Pot	46.7	48.7
Smoked Pot in last 30 days	34.1	14.0

Results cont.

	MSU	Nationwide College Health Risk Behavior(CDC, 1995) in MMWR, 11/97
Variable: LSD	%	%
Ever Used LSD	10.5	20.5
Times used in last 30 days	8.4	2.4

Variable: Cocaine, Rock or Crack

Ever used	11.5	0.1
Times used in last 30 days	6.7	N/A

Conclusions/Discussion:

This study reveals that Alcohol, tobacco and harder drug experimentation and continued use are behaviors that do not have geographic or socioeconomic boundaries on college campuses. While experimentation (incidence) with harder drugs and tobacco use might be a national phenomena, continued use (prevalence) was higher on this rural campus sample than national comparison.

Though findings do not demonstrate significant differences from nationwide comparison, findings from this study warrant urgent intervention. Smoking, use of smokeless tobacco and other harder drugs like cocaine and LSD on our campus exceed nationwide college comparisons. Alcohol consumption on the MSU campus is comparable to national levels. However MSU students drink, to drink, to "get high" than the national average. This pattern of drinking behavior compromises academic performance, leads to anti-social behaviors, risky sexual behaviors and even death.

Rationale for Recommendations:

The good old days have come and gone when universities and colleges could only be concerned with the teaching of academic subjects and preparing students for careers. College administrators and teachers are now called upon to assume more responsibilities on students' health behaviors or risk losing them to other campuses that show interest in this domain. The National Centers for Educational Statistics emphasizes that colleges and university campuses can be excellent settings for reducing important health risk behaviors such as alcohol consumption and cigarette smoking for the over 7.1 million students enrolled in these campuses. When students adopt healthy behaviors or abandon unhealthy behaviors while in college, the student as well as the institution benefits through overall improved health, academic performance, and better student retention.

Specific Recommendations:

1. Ongoing alcohol, drugs and tobacco resistance behavior education to our almost 50 percent students who live in or residence halls.
2. Develop a MSU web site specifically for alcohol, other drugs and smoking cessation program information and resources for those who need information but not in group counseling settings.
3. Collaborative work with the Student Wellness center to evaluate and reinforce existing programs as need be.