

Background

- Tobacco is the leading cause of preventable deaths and diseases in the U.S. today.
- In addition to addictive nicotine, tobacco also contains a number of other carcinogens, especially tobacco specific nitrosamines.
- Smokeless tobacco is either chewed or held in place, allowing the nicotine to be absorbed through the lining of the mouth.
- Smokeless tobacco can lead to negative health effects such as oral, throat, and other cancers, mouth sores, gum and tooth decay, high blood pressure, heart attack, and even stroke.
- Males ages 18-24 are the most common users of smokeless tobacco and at an increased risk of developing other poor health habits due to new stressors and social relationships that come along with this transitional period in life.
- Research suggests that male college athletes are an even higher risk for smokeless tobacco use due to the added pressure of performing well in their sport as well as in school and society.

Research Aims

(1) Determine the extent to which male college athletes in three sports are using smokeless tobacco.

(2) Document levels of knowledge and awareness about nicotine and smokeless tobacco-related health risks among current and never users of smokeless tobacco.

(3) Determine perceived susceptibility of the adverse health events related to smokeless tobacco use among current and never users.

(4) Determine if social norms are influencing smokeless tobacco use and how its use fits into the athlete's culture.

•Hypothesis: smokeless tobacco users would have a significantly lower level of knowledge and perceived risk, and a higher level of social influences compared to nonusers.

Methods

- Participants: Ursinus College men's lacrosse, baseball, and track & field student athletes, all class years, age 18-23 years, n=51.
- Participants completed a brief survey by paper and pencil.
- Survey questions were related to use of smokeless tobacco, knowledge about the health risks of smokeless tobacco, the individual's risk perception of the adverse health events related to smokeless tobacco use, and social influences and norms surrounding smokeless tobacco use and exposure.
- Questions were formatted in yes or no and multiple-choice answers.
- Descriptive statistics and two-sample t-tests were used to analyze the data in SPSS

Results

- Of the 51 participants, 6 reported using tobacco (11.8%).
- Three users were lacrosse players (50%) and three users were baseball players (50%).
- The average knowledge score among users was 3.67 compared to 4.56 among nonusers (overall average of 4.45, max score of 5) (P=.002).
- The average level of perceived risk among users was 10.50 compared to 11.24 among nonusers (overall average of 11.16, max score of 16) (P=.640).
- The average level of social influences among users was 3.33 compared to 2.36 among nonusers (overall average of 2.49, max of 6) (P=.525).

Distribution of Participants by Smokeless Tobacco Use				
	Frequency	Percent	Valid Percent	Cumulative Percent
Non Users	45	88.2	88.2	88.2
Users	6	11.8	11.8	100.0
Total	51	100.0	100.0	

Average Scores of Knowledge, Perceived Risk, and Social Influences					
	N	Minimum	Maximum	Mean	Std. Deviation
Knowledge	51	1	5	4.45	.945
Risk	51	2	16	11.16	3.101
Social influences	51	0	6	2.49	1.271
Valid N (listwise)	51				

Levels of Knowledge, Perceived Risk, and Social Influences between Users and Nonusers					
	Use	N	Mean	Std. Deviation	Std. Error Mean
Knowledge	Nonusers	45	4.56	.813	.121
	Users	6	3.76	1.506	.615
Risk	Nonusers	45	11.24	3.149	.469
	Users	6	10.50	2.881	1.176
Social	Nonusers	45	2.38	1.211	.181
	Users	6	3.33	1.506	6.15



Discussion

- There was a significant difference in levels of knowledge between users and nonusers, but not a significant difference in levels of perceived risk or social influences.
- The insignificant difference in social influences between groups could be due to the small size of Ursinus and the overlap of social circles and interactions.
- It was surprising how close the levels of perceived risk were between users and nonusers.
- A higher than expected perceived risk score among users could indicate that some individuals may be interested in quitting but could lack the knowledge and resources to do so.

Conclusions

- This research gave a better understanding of why some student athletes at Ursinus use smokeless tobacco products.
- Public health implication: smokeless tobacco use is still a prominent issue among young adults and programs/projects focusing on each of these three topics are needed in order to decrease the rate of use in this population.
- This research contributes to science by looking at multiple factors coming together to contribute to a person's decision to use smokeless tobacco.
- Limitations include: small sample size, one school surveyed, survey administered on a Sunday evening when students may be visiting home or having dinner off campus, survey was voluntary and self-reported.

Next Steps/Future Research

- Distribute this survey to teams at different schools in the state/area.
- May focus on smokeless tobacco use in a specific sport if given to a large number of schools.
- Administering this survey during practice time when attendance is required.
- Develop an educational program/training about smokeless tobacco health facts and risks for teams to review each season.
- Have teams take the survey again to see if scores and behaviors have changed.

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