

Title of Intervention: A Smokeless Tobacco Intervention for High School Athletes

Intervention Strategies: Group Education, Individual Education, Supportive Relationships

Purpose of the Intervention: To promote spit tobacco cessation and discourage spit tobacco initiation among male high school baseball athletes

Population: High school baseball players

Setting: Public high schools in rural California; school-based

Partners: School districts

Intervention Description:

- **Group Education:** At the school, peers led an interactive, educational team meeting that consisted of three segments: 1) a videotape presentation and discussion, 2) a slideshow presentation and 3) a small group discussion on tobacco industry advertising. Peer leaders explained that the coach had asked them to provide information about the negative side of smokeless tobacco use in order to counterbalance the tobacco industry's advertisements targeting young athletes. Peer leaders stated that deciding to use smokeless tobacco was a personal decision, but the purpose of the meeting was to help everyone make an informed personal choice. Peer leaders then showed a videotape tailored to baseball athletes, entitled "A Dangerous Game" (NIH Publication No. 95-3880). After the video the peer leaders asked questions to stimulate a discussion. Next, the peer-leaders presented a slideshow about mortality related to tobacco use, harmful ingredients in smokeless tobacco, nicotine addiction, smokeless tobacco-related changes in the mouths of others of similar age and facial disfigurement associated with oral cancer and its surgical treatment. They ended each presentation by offering arrangements for a dental professional to do oral exams for any signs of oral cancer. They also offered tips for anyone who was interested in trying to stop using smokeless tobacco. Teams were then divided into small groups. In each small group, a peer leader showed smokeless tobacco advertisements taken from magazines that targeted young athletic males. The group was asked questions to stimulate discussion. Peer leaders wore a t-shirt with an anti-smokeless tobacco logo and distributed similar t-shirts to the entire team at the conclusion of the peer-led session.
- **Individual Education:** An oral screening exam was provided for each member of the baseball team by a dentist or dental hygienist. The examiners encouraged smokeless tobacco non-users to remain tobacco free and advised users to stop all forms of tobacco use. For users, examiners pointed out any problems associated with smokeless tobacco use in the player's own mouth. They provided a self-help guide for quitting that was tailored to baseball athletes.
- **Supportive Relationships:** Users were offered one same-day, small-group tobacco cessation counseling session. This brief counseling was provided by a specially trained dental hygienist and focused on reviewing the addictive nature of smokeless tobacco, setting a quit date, developing a plan and training in action and thinking skills to get ready to quit and to prevent relapse. On each user's selected quit date, the dental hygienist made a follow-up telephone call to answer questions, express concerns and support the quitting process.

Theory: Cognitive Social Learning Theory, Diffusion of Innovations Theory

Resources Required:

- **Staff/Volunteers:** Peer leaders, oral health practitioners
- **Training:** Training sessions for peer leaders
- **Technology:** Videotape, slideshow, telephone
- **Space:** Place for team education sessions and oral examinations
- **Budget:** Not mentioned
- **Intervention:** A Dangerous Game video, slideshow presentation, magazine advertisements, t-shirts, oral examination materials, self-help guide to quitting
- **Evaluation:** Questionnaires, equipment to obtain saliva samples, pre-paid postage envelopes

Evaluation:

- Design: Cluster randomized controlled trial
- Methods and Measures:
 - Questionnaires assessed self-reported use of smokeless tobacco, presumed predictors of smokeless tobacco use cessation and initiation and demographic factors.
 - Saliva samples measured validity of self-reports.
 - Questionnaire assessed smokeless tobacco use status, actions related to quit attempts, discomfort experienced, perceived effect on athletic performance when trying to quit, intention to use in the future and current daily cigarette use.
 - Questionnaires assessed the overall acceptability of the intervention and the importance of its specific contents.
 - Telephone interview questionnaires for non-respondents assessed smokeless tobacco use.

Outcomes:

- Short Term Impact: Not measured
- Long Term Impact: The quit rate in the intervention group was higher than the control group.

Maintenance: An advisory board that consisted of the principal, athletic director, baseball coach, peer leader on baseball team and anyone else the principal deemed appropriate (e.g., health educator, school nurse) was established at intervention high schools to provide feedback on scheduling and other intervention logistics.

Lessons Learned: Implementation of this intervention in high schools would require a partnership between local dentists and dental hygienists, as well as high school principals, coaches and student athlete leaders. It may be feasible for this high school athletic team-based intervention to be sustained as part of state-supported tobacco use education programs. Nicotine replacement therapy may need to be included as part of a comprehensive cessation program to help more physically dependent smokeless tobacco users cope with the discomfort of nicotine withdrawal.

Citation(s):

Walsh, M. M., J. F. Hilton, et al. (2003). "Spit (Smokeless) Tobacco Intervention for High School Athletes: results after 1 year." *Addict Behav* 28(6): 1095-1113.