Students Against Nicotine and Tobacco Addiction (S.A.N.T.A.): Community-Based Participatory Research in a High-Risk Young Adult Population

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Students Against Nicotine and Tobacco Addiction (S.A.N.T.A.) is a community-based participatory research project involving an active collaboration between University health providers and Job Corps students, administrators, teachers, counselors, and staff. In this article, we describe the project, its evolution, and key strategies that have employed over the course of the initiative and its ongoing efforts.

Keywords: community-based participatory research, action research, citizen health care, smoking cessation

Almost 450,000 Americans die each year from diseases that are caused by smoking, and incalculably more suffer from

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health-related problems caused or exacerbated by the use of those products (Centers for Disease Control and Prevention [CDC], 2005a, 2005b, 2007). Approximately 90% of the 26 million men and 22 million women who smoke in the United States began as teenagers or young adults, and half will eventually die from a smoking-related condition (CDC, 2005b; Duke Center for Nicotine and Smoking Cessation Research, 2006; Minnesota Department of Health, 2005). Young adults (18–24 years old) maintain the highest rates of smoking (28.5%) compared with all other age groups (CDC, 2005a, 2005b). Other significant risk factors include low socioeconomic status. low education, and non-Asian minority status (CDC, 2005b; Fiore, 2000; Schoenborn, 2005).

The Hubert H. Humphrey Job Corps Center in St. Paul, Minnesota, is a federal vocational training program for youth ages 16–24 years who maintain a variety of the above-referenced risk factors. Internal surveys and focus groups conducted in 2005 found that more than 60% of its students smoked, with substantial increases in smoking (across both onset and number of cigarettes smoked per day) after arriving at Job Corps (Haas & Harper, 2005). Although almost 70% of smokers wanted to

quit (and most had tried in the past), few reported having been successful.

Rising to meet this campus-wide problem, the Students Against Nicotine and Tobacco Addiction (S.A.N.T.A.) project was initiated and launched as a communitybased participatory research (CBPR) project involving an active collaboration between University of Minnesota (UMN) medical and mental health providers with Job Corps' students, administrators, teachers, counselors, and staff. In this article, we describe the S.A.N.T.A. project, outline its developmental process and evolution, and highlight key community-engagement strategies that we have employed over the course of the initiative and its ongoing efforts.

STUDENTS AGAINST NICOTINE AND TOBACCO ADDICTION (S.A.N.T.A.)

The S.A.N.T.A. project was initiated in response to a longstanding awareness of widespread smoking at Job Corps, coupled with a frustration regarding the limited scope and effectiveness of conventional cessation programs on site. As Job Corps' representatives (administration and students) began discussing new ways to address smoking with colleagues at the UMN Medical School, CBPR was identified as a methodology that held promise by nature of its departure from top-down, service-delivery approaches in education and treatment.

Community-Based Participatory Research (CBPR)

CBPR emphasizes close collaboration among researchers and community participants who are directly affected by an issue to generate knowledge and solve local problems. Hierarchical differences are flattened through this partnership as all participants work together to create knowledge and effect change (Agency for Healthcare Research and Quality, 2004; Lewin, 1946; Mendenhall & Doherty, 2005). Research is not conducted "on" people but "with" them, as community participants take active

roles in the entire research process—from conceptualizing problems and formulating solutions to solve them, to designing and implementing interventions, to identifying relevant benchmarks of success and analyzing outcome data, to feeding results back into intervention designs (Bradbury & Reason, 2003; Hambridge, 2000; Schultz et al., 2003). Using the Citizen Health Care model as a guide in CBPR (Doherty & Mendenhall, 2006), 5 Job Corps faculty and staff (2 counselors, 2 maintenance and recreation staff, and 1 administrator) joined forces with 16 students and 2 UMN faculty to create a new campus-wide intervention to improve the health and well-being of students at Job Corps through smoking cessation, education, stress reduction, and support.

Process and Evolution of the S.A.N.T.A. Project

Early steps in the evolution of this project encompassed active discussions between Job Corps personnel (administrators, staff, counselors, and teachers), more than 20 students (smokers and nonsmokers), and UMN researchers (medical family therapist, physician). This group met together several times to decide whether smoking represented a "pressure point" of concern in the Job Corps community (i.e., compared to just something that select personnel were worried about). Administrators, teachers, and students alike agreed that it was—for separate and overlapping reasons. Administrators and teachers shared worries about students' smoking and their academic performance and future employability. One remarked that

Ultimately, the mission of Job Corps is to prepare our students to enter the workplace as competent and productive workers in their chosen trades. If employers are worried about the potential... health care costs of hiring somebody who smokes, they're not going to hire our students who smoke. A teacher at Job Corps added to this, saying,

Many of our students who smoke miss class because they're running back and forth from the smoking area during breaks. So they're missing class. And even if this didn't hurt them, students who show up to a job interview someday smelling like smoke are less likely to be hired. We've seen that happen.

Many students shared similar concerns, but they also talked about how smoking affects their own, friends', and loved ones' health:

I used to smoke and I changed. Now I can help somebody else.... I don't want my health to go bad.... My dad, he has high blood pressure and he had a minor heart attack. My mom always tells me "you really need to take care of yourself." I guess I'm getting older, more mature. I think about what my body needs.

Several students also shared how smoking relates to stress (broadly defined) and a limited repertoire of options in managing stress. Several discussed how smoking "takes the edge off" of their myriad worries and boredom on campus, even if only temporarily.

Working Phase of Project

As the members united in their shared and overlapping concerns, the project's action-and-planning group formed—including 16 students, 4 teachers/staff, 1 administrator, and 2 university faculty members. As they developed their name and mission statement ("Our mission is to improve the health and well-being of students at Job Corps through smoking cessation, education, stress reduction, and support"), a strong and shared sense of trust and identity as a collaborative and community-based initiative began to evolve. Several students reflected about how empowering it was to play an active role in shaping and

changing Job Corps' culture as it related to smoking, and to hearing and seeing their voice represented alongside and in collaboration with administrators and teachers heretofore seen as disconnected or autocratic. One student said,

Our voices get heard.... We're doing this and it's getting a lot of people involved—staff, students—and I think [the process] has helped so much to let us speak our minds. We can talk to... all the instructors there [in the group]... and they help us make it happen.

Another reflected, "We're run by students, and that's probably the number one strength [of S.A.N.T.A.] ... We have good energy, people [are] actually talking about getting stuff done."

Administrators and staff at Job Corps, too, communicated empowerment through this process, and several voiced surprise as the S.A.N.T.A. project continued to evolve within Job Corps as an active, influential, and sustained entity. One compared S.A.N.T.A. to almost a decade of experience at Job Corps to the contrary:

In my 9 years at Job Corps, it's been one of the projects that has lasted the longest.... The energy and motivation is still there [a year later]. It's really gotten cohesive and the students are really pulling together.... And they see that staff [who] are involved and interested and consistent.... It's working.

Principal efforts within the project have encompassed activities across Job Corps students' reported stress and boredom, campus and physical environment, governing policies, on-site smoking cessation education and support, and ensuring the sustainability of the S.A.N.T.A. project itself.

Fighting Stress and Boredom at Job Corps

Job Corps students have become increasingly empowered—through their own reports and new activities widely visible on

campus—to "do something" about smoking and the myriad stressors in students' lives. They have taken the lead in addressing campus-wide reports of boredom and stressconnected to reasons and rationales by smokers for smoking in the first place—through a combination of social and exercise groups (e.g., yoga, dancing, arts & crafts, volleyball, basketball, weights, drama, and seminars regarding financial management and dealing with relationship problems). Job Corps administrators and staff have worked hard with students to accommodate and maintain these activities through administrative approvals; accommodation of space, time, and resources; and campus-wide assembly announcements.

Changing the Physical Environment at Job Corps

S.A.N.T.A. has created a campus-wide newsletter that shares survey findings about smoking on-campus, suggestions for stress reduction, information about key smoking and cessation FAQs, and advertises the new and aforementioned activities' loci and times. In addition, the group has worked to post (and continuously update and add to) a variety of attentiongetting posters and advertisements for activities. They have mobilized color changes in underage students' identification cards (described below) so that they are easily recognized around campus as being younger than 18 years old and have successfully advocated for the relocation of Job Corps' designated smoking area to an undesirable location.

Changing Policies at Job Corps

As described above, active discussions with students to change the culture at Job Corps have mobilized successful efforts to change the designated smoking area on campus to a less desirable location and to change the color (now bright red) of underage students' identification cards so that they are easily recognized as being younger than 18 years old (this helps to enforce

no-smoking rules for minors). The group has also advocated and received permission for students to design and wear S.A.N.T.A. T-shirts that have on them a variety of smoking-related education and smoking-cessation text passages (instead of wearing standard Job Corps uniforms). Students, teachers, and even senior administration now wear these shirts on campus, furthering the visibility of S.A.N.T.A.'s efforts and mission. Finally, S.A.N.T.A. has challenged the example set by staff who smoke on site and in view of Job Corps students-and administration has instituted new rules that prohibit staff from smoking in designated smoking areas with students. All Job Corps employees who now wish to smoke during breaks must to do so in their cars.

Revising Smoking Cessation Education and Support at Job Corps

Although many of the activities described above are clearly linked to education and support for smoking cessation at Job Corps, the S.A.N.T.A. group is also working to integrate campus-wide survey findings regarding smoking behaviors and associated variables into standardized and interdisciplinary smoking support groups and cessation classes facilitated by the second and fourth authors. Purposeful attention to stress management and adaptive coping mechanisms is now more explicitly integrated into these groups and classes, along with directed focus on problem solving as it relates to students' most commonly reported sources of stress (e.g., financial issues, relationship stress, family conflict). Facilitating these types of foci in an integrated fashion with standard discussions of smoking triggers, quit dates, and so forth is helpful in tackling smoking holistically while synchronously establishing supportive relationships between participating members.

Maintaining and Ensuring the Sustainability of the S.A.N.T.A. Project

Across the above efforts, UMN researchers have learned—and continue to learn—a great deal about Job Corps' culture, stressors, and strains (and resources heretofore untapped) unique to its student body and across its administrative hierarchy. They have established a great deal of trust and confidence with Job Corps over the course of the project's efforts to date, as well as with colleagues at the UMN's Institutional Review Board as a variety of changes in protocol have been created and approved (which are consistent with the dynamic nature of CBPR). And although all of these efforts are important in terms of the project's evolution and viability, what goes on within S.A.N.T.A. and the Job Corps itself is far more important as it relates to the initiative's long-term sustainability. Indeed, history is full of shining examples of "community projects" that folded as soon as the external grant supporting them ran out or their charismatic leaders or firstgeneration participants moved on, retired (or graduated), or otherwise shifted their energies elsewhere. Work in sustaining the S.A.N.T.A. project over time began in synchrony with its onset, and energies toward this end have continued (and increased) with the ever-evolving nature of community ownership for the project and its mission.

One student member in S.A.N.T.A. communicated to the group his high investment in attending to this: "This is our baby, and we have to coddle it!" Another remarked that "This is something that needs to live on long after we are gone. We have to do this [work] well so that S.A.N.T.A. is still here years from now!"

Replacing student members. Students at Job Corps are generally enrolled for 6–12 months before they graduate. This presented an immediate challenge to S.A.N.T.A. insofar as most CBPR and Citizen Health Care-guided projects take con-

siderably more time than this to design and launch, and generally include a consistent core membership group in action and planning (Doherty & Mendenhall, 2006; Mendenhall & Doherty, 2005). As S.A.N.T.A. first began to come together, this challenge was actively discussed as something to deal with proactively so as to avoid having to "start over" every few months with new students unfamiliar with or less invested in the project. The group (including all of its students, UMN researchers, and Job Corps faculty/staff/administration) decided that the students would be the best positioned to assume responsibility for this. After all, students know each other better than anybody else, and they are thereby well equipped to identify others according to a variety of personality attributes, leadership characteristics, and backgrounds.

Students soon to graduate identify their own replacements several weeks ahead of time. These new students meet with key Job Corps staff for a final "screening" (e.g., sometimes selected students cannot join S.A.N.T.A. because of current or forthcoming academic commitments). Then new students overlap their participation in S.A.N.T.A. with the student they are replacing for 2–4 weeks to facilitate an easy and smooth transition.

Maintaining momentum. A common tension in CBPR rests in the balance between planning and doing, and it is important to attend to this balance in a manner whereby the group works democratically while at the same time it accomplishes tangible "products"—broadly defined—related to its efforts (Doherty & Mendenhall, 2006; Mendenhall & Doherty, 2005). This has been especially important in S.A.N.T.A. because students' participation in the project is so time limited, and consistently "doing something" is highly facilitative of participants' sustained interest and energy. Meetings are very dynamic, and a great deal of effort is oriented to deciding together "what's next?" and "how are we going to get there?" Students (and, indeed, Job Corps

staff and UMN researchers) hold each other accountable between meeting tasks and in follow-though, and the group's members communicate regularly via e-mail and in day-to-day on-campus interactions about progress regarding identified goals and tasks.

Early Evaluation Efforts

Assessing change within temporal cohorts of students at Job Corps is indicated in the evaluation of S.A.N.T.A., insofar as the ever-changing and dynamic flow of the study population is such that it is difficult to establish how much individual students have been exposed to the project's efforts (or for how long) by looking only at wholepopulation statistics. At the same time, larger goals of S.A.N.T.A. encompass reducing the overall prevalence of smoking at Job Corps regardless of how long students have been on campus. Primary dependent variables that are being tracked include students' smoking and tobacco use behaviors, smoking students' readiness to change, and key areas of stress that smokers attribute to their use of cigarettes and other tobacco products. Data collection from campus-wide surveys is ongoing, and in-depth and comprehensive analyses will be performed and submitted for publication next year.

Moving beyond this single-group, repeated measures design and investigation, next steps will include comparing smoking prevalence and associated variables with other Job Corps control sites (e.g., those employing conventional education and service-delivery approaches) that house students who maintain similar demographic characteristics. These assays will follow quasi-experimental designs (because settings are uncontrolled and subjects cannot be randomized) and will serve to further test S.A.N.T.A.'s effectiveness.

DISCUSSION

The community and academic partnership encompassed in S.A.N.T.A. has

evolved quickly and is maintaining solid and strong momentum in its efforts to address smoking at Job Corps. However, it is important to recognize that the pull of the traditional provider-consumer model is always strong, and that consistent democratic decision making requires eternal vigilance. As the current project has evolved (and continues to evolve), it is important to consistently discuss and highlight how our CBPR process is different from conventional research or professionally lead initiatives. This serves to quickly orient new members to the project's processes and culture, as well as to reaffirm and reinforce participants' stake and influence in the group and pursuing the group's mission.

As early and future efforts in evaluating the effectiveness of the S.A.N.T.A. project proceed, we suspect that findings will justify the creation of comparable initiatives at other Job Corps and similarly designed education and training sites. Following the tenets of CBPR, these new initiatives will reflect the unique attributes, strengths, challenges, lived experience, and wisdom of their settings and people involved. Some may look very similar to the original S.A.N.T.A. initiative, and others may not. Replicating the CBPR process is key (as opposed to straightforwardly replicating one project into another area, population, or group) insofar as it enables communities to create and tailor interventions immediately relevant to their needs.

In closing, the larger mission of our efforts in Citizen Health Care is to create a democratic model of health and human services that unleashes the capacity of ordinary citizens as producers of health and social change for themselves and their communities. Students, staff, and professional researchers in S.A.N.T.A. hold themselves as part of something more than a timelimited smoking cessation support group with restricted scope or just another antismoking campaign that echoes sentiments we already hear on TV and see on bill-

boards everyday that say that "smoking is bad." We are instead part of a movement, changing and affecting the lives of people we will never meet and families we will never know, through our collective energies, resources, and passion to change the world.

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