IV. INSUFFICIENT HEALTH BEHAVIOR MARKETING EFFORTS

Introduction

To date, overall efforts to counter the many threats and barriers to improved adolescent health have been insufficient and in some cases, wholly ineffective or even harmful. Programs can fail to achieve their objectives for a variety of reasons. These include lack of a sound theoretical structure to guide design, implementation, and evaluation; inappropriate application to a given population, including lack of recognition of limiting factors for members' health; inability to evaluate and incorporate needed changes to program delivery; and inability of speakers, presenters, or promoters to connect to audiences so as to communicate messages effectively.

Ineffective Approaches and Missed Opportunities

Several health interventions have produced unintended "iatrogenic effects," such as by teaching disordered eating behaviors to at-risk participants (O'Brien 2008). In another case, an attempt to use shame to promote smoking cessation among pregnant women actually led many to stop seeing their family practitioners altogether during pregnancy (Linkenbach 2006). Researching previous similar interventions, identifying characteristics of the target audience (e.g., existing attitudes and their prevalence), and becoming competent in ethically applying concepts of persuasive psychology can reduce but not eliminate risk of these outcomes. This acknowledgment is critical for those involved in social marketing. It further warrants humility as well as clear strategies for and commitment to evaluating immediate and longer-term program impacts.

More commonly, ineffectively designed or delivered health promotional messages produce minimal results. Health education has traditionally focused on basic knowledge development rather than skills acquisition and actual behavior change (Van Reusen 1996). Social marketing efforts and messages have at times suffered from similar flaws. Some have created or reinforced perceptions that most audience members were engaging in risky behaviors, helping to perpetuate the behaviors among people tending toward the perceived norm (Linkenbach 2006). Speakers can unintentionally communicate the idea that while they themselves are healthy, audience members are at risk, predisposing listeners to becoming defensive and

tuning the speakers out (Linkenbach 2006).

DARE is an example of a well-funded and long-standing health behavior education program without demonstrable impacts. The format involves local police officers teaching a series of lessons to middle-school students about not using drugs (Clayton 1996). Research comparing behaviors of students who have been exposed to the program to others who have not indicates a lack of any "reliable short-term, long-term, early adolescent, or young adult positive outcomes associated with receiving the DARE intervention" (Lynam 1999). While difficult to pinpoint without more extensive inquiry, possible explanations for this failure include one or more of the flaws mentioned above, inability by students to apply lessons in real-life situations, skepticism about information provided, negative attitudes about police officers, lack of presenter charisma, or unappealing messages. Rigorous evaluation by program developers could yield invaluable insights into these findings but is unlikely to occur absent public demand.

Some interventions may not have appropriately addressed potential behavioral mediators, perhaps due to designers' lack of awareness or insufficient funding. A number of programs intended to promote physical activity failed to increase reported enjoyment among participants (Sallis 1999, Nichols 2000, Castro 1999). This may be a common result of traditional PE curricula as well. Some PE programs have emphasized competitive sport-related skills rather than lifelong enjoyable physical activities (CDC 1997). In other cases, over-reliance on a single behavioral change theory (e.g., the Theory of Reasoned Action) may have precluded consideration of important potential behavioral mediators. For environmental education programs, Gotch and Troy (2004) conclude that having a greater influence on behaviors may require addressing factors beyond *attitudes and* subjective norms.

The limiting factor for other interventions may have been insufficient promotion and reinforcement of messages with champions, leaders, and behavioral models. In South Carolina, a state-wide church-based physical activity program failed to significantly increase activity by participants (Wilcox 2007). The researchers significantly associated pastoral support with physical activity. Lack of a significant state-wide increase in physical activity by parishioners suggests that such support must not have been sufficiently widespread. Meanwhile, among adolescents receiving anti-smoking messages from their mothers, message credibility depended largely on mothers' smoking behaviors (Herbert 2007).

Even interventions specifically tailored for a population may fail due to inadequate message penetration. In reviewing "E-health interventions," Norman et al (2007) conclude that sufficient "dosing" is a must. Providing information in an empowering way can require exposing an audience to it repeatedly in a reinforcing manner.

In some cases, distinguishing the source of a program's ineffectiveness is difficult if not impossible. Evaluation methods are often crude or lacking entirely (Durlak 2007). Identifying flaws is also challenging in cases when well-designed programs may have failed due to improper implementation (Cook 1999). Presenters can alter curricula to suit their interests, and as mediators of the information can exert significant (albeit challenging to measure) positive or negative effects on if and how it is received by audiences (Agatston 2007). The perceived flaws mentioned above are thus mostly hypotheses.

More clearly, certain health education opportunities can simply slip by. Less than half of American physicians reportedly counsel the majority of their patients about physical activity (Walsh 1999). Meanwhile, many schools have responded to budget pressures by cutting back and in some cases eliminating PE programs (Turner 2005). In Maine, where the only requirement is that schools offer PE, many have scaled back class time to minimum levels (Root 2008). These trends may reflect resignation among certain health practitioners and educators about their potential roles in promoting healthy behaviors.

Conclusions

Designing, implementing, or promoting effective health interventions takes more than good intentions. Sharing persuasive messages about health with young audiences confers a measure of risk of doing harm. Some interventions apparently designed or implemented without this understanding have failed to help or made things worse. Others have been largely ineffectual, likely due to lack of educators' ability to connect with audiences. In other cases, inadequate appreciation of multiple mediators or inability to recognize or address limiting factors may have precluded meaningful positive effects on behaviors. Regardless of the outcomes of previous and ongoing efforts, it is imperative that future health leaders and researchers be committed to applying lessons learned through their implementation and evaluation.

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