



PREVENTION
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BRIEF

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PREVENTION

A Public Health Strategy for Affecting Change



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PREVENTION AS A PUBLIC HEALTH STRATEGY has been implemented for centuries. Whether to reduce the spread of disease or to mitigate the use of substances, educating the public on the dangers and potential negative outcomes of risky behaviors has become a mainstay of preventative actions.

Educating the general public about health prevention is complex. Within society are cultures and subcultures with their own values, systems of belief, education levels, cultural traditions, and socioeconomic statuses. Additionally, demographics concerning age, racial identity, access to healthy food and healthcare, quality of available education, safe neighborhoods, and affordable housing also factor into prevention-oriented messaging. In short, blanket, one-size-fits-all prevention strategies often fall short of expected outcomes (SAMHSA, 2019).

Public Policy and Prevention

A pivotal step in prevention is the establishment of local, state, and federal policies. The development of these policies can be an effective way to not only influence public health but also as a more far-reaching strategy for the prevention of disease and negative health behaviors (Pollack Porter et al., 2018). Among the Centers for Disease Control and Prevention's (CDC) top 10 list of successful preventative programs that resulted in policy change, are motor vehicle safety, tobacco control, and maternal and infant health (CDC, 2011).

While evidence-based intervention programs have a history of success, other prevention strategies have fallen short. A primary example is the recent COVID-19 pandemic and messaging developed for the public at large and policymakers. Although there were solid research findings about COVID, the communication about these findings was far from optimal. A lack of explanation of national policies as a preventative strategy, as well as presenting the current research as a public health opportunity necessary to mitigate the spread of the disease resulted in ineffective communication (Tufekci, 2021). Instead, much of the public dissemination about policies

concerning COVID (mask-wearing, social distancing, and the availability of a new vaccine) was not only confusing but mostly offered in non-accessible 'research speak' that was difficult for laypersons to interpret (Soriano, et al, 2002; Tufekci, 2021).

In a 2019 study to better understand just how much the general public knows about science, the Pew Research Center (Pew, 2019), conducted a survey using an 11-question multiple choice survey instrument available online. The impetus behind this research was to more fully assess the public's understanding of science in light of readily accessible information available through numerous sources of public media. The results of this study revealed a median score of seven correct answers, with approximately 39% (9-11 correct answers) of respondents categorized as having high scientific knowledge, 32% as having medium scientific knowledge (5-8 correct answers), and 29% as having low science knowledge (0-4 correct answers) (Pew, 2019). As could be expected from a survey of this type, the public's knowledge of science was directly tied to the respondent's level of education (Pew, 2019). This also held true among elected officials participating in the study despite being more informed on current issues concerning science and health prevention and their importance in policy making.

In another study that analyzed the factors that influence legislators' decisions regarding prevention programs, a seven-point rating scale was used in a survey to measure legislators' political ideology on social and fiscal issues (Dodson et al, 2013). Among the 75 legislators who participated, the top-rated factor reported concerned constituent needs and opinions, with evidence of scientific effectiveness ranking second. These findings affirm that policy as a preventative measure is important (Dodson et al, 2013). Prevention programs need to consider not only policymakers' opinions, but the degree to which they value the opinions of their constituents (Snyder et al, 2004), and tailor dissemination and advocacy efforts that demonstrate and communicate evidence-based research and prevention measures in a timely and accessible manner, to gain buy-in and support.

Public Policy and Prevention

Helping the general public to separate truth from fiction contained within some health and preventative messaging is challenging but necessary. Public opinion about health and prevention education is largely informed by a variety of media sources, particularly social media. Although the use of social media as a prevention strategy can be a persuasive vehicle for disseminating information and educating the public, social media does have its downside, especially when messaging on prevention and health education become skewed (Fuentes & Peterson, 2021), or when users accessing social media have difficulty separating fact from fiction. Thus, even well-intentioned messaging may end up doing more harm than good when shaping public opinion about prevention and health (Charalambous, 2019).

Evidence-based research is important for changing public opinion and affecting change (U.S. Department of Health and Human Services (HHS), 2016) and has been instrumental in influencing policy change at the federal, state, and local levels. For example, laws enacted to reduce alcohol consumption and driving under the influence have seen positive benefits through administrative changes such as license revocation and lowering of blood alcohol limits, resulting in a significant reduction of alcohol-related deaths since the 1980s (HHS, 2016). Effective prevention programs informed by evidence-based research when designed and implemented well, can significantly decrease threats to public health (Wandersman & Florin, 2003).

The National Research Council and Institute of Medicine identified three types of prevention programs: universal, selective, and indicated (IOM, 2009; HHS, 2016):

- A **universal approach** is designed to reach all segments of a population and addresses a specific health concern. It aims to reduce risk factors and to promote protective factors through establishing policies, reducing community substance use or other health factors, or targeting schools to support mental and social health.
- A **selective approach** to prevention targets a specific population, such as families or children who may be at increased risk for poverty, substance misuse, or low social skills. This

approach focuses on interventions that promote protective factors creatively designed for high-risk groups.

- An **indicated approach** to prevention targets individuals already demonstrating risky behavior, such as substance misuse or exhibiting problems yet to be diagnosed as a disorder. This approach to prevention can be expensive and time-consuming but is generally thought of as worthwhile because it can result in mitigating future expensive disorders or negative consequences by the individuals targeted.

Awareness vs. Prevention

Informing the public about prevention involves not only increasing awareness but communicating key strategies designed to affect change. When prevention campaigns are done well, positive outcomes are the result. When messaging is not done well, despite the importance of the prevention message, the well-intended communication can actually do more harm than good by leading to no action by the public, influencing the wrong audience, and possible repercussions (Christiano & Neimand, 2017). For example, the 2011 preparedness campaign released via a blog post by the CDC, 'Preparedness 101: Zombie Apocalypse' was created to increase both public awareness and spur action for being prepared in the event of an emergency such as a terrorist attack. While the campaign did make the public more aware, the delivery of the online message attracted so much attention that 30,000 people attempting to post a comment managed to crash the CDC's website. In a study assessing if being aware of something leads to taking preventative action, Fraustino and Ma (2015) discovered that while humorous prevention campaigns like 'Zombie Apocalypse' do gain public attention, it does not always mean that people will take the recommended necessary action because the intended message can get lost within the humor. In the 1980s several public awareness campaigns were initiated by the Reagan Administration in an attempt to curtail the use of illicit drugs. Choosing to target school-aged youth, the 'Just Say No' prevention strategy supported the Drug Assistance Rehabilitation Education (D.A.R.E) initiative and fell short of its objectives. Messaging for this program was heavily focused on creating fear of drugs. In a study assessing the effect of this prevention strate-

gy, the long-term outcome for individuals who went through the D.A.R.E. program found the program to be ineffective and in some cases, adolescents actually increased their use of tobacco and alcohol (Lilienfeld & Arkowitz, 2014).

A prevention messaging strategy that was successful, was former First Lady Michelle Obama's 'Let's Move' campaign. Designed as a strategy to reduce obesity among children, this prevention program was solidly built on evidence-based research about the causes of child obesity, as well as research on implementing successful public messaging for reaching the intended audience (Christiano & Neimand, 2017; Belluz, 2016;). As a result, the 'Let's Move' campaign was very successful, yielding a reduction in child obesity numbers by nearly half (Belluz, 2016).

Awareness vs. Prevention

The first step in implementing prevention programs is planning. The more strategic the plan, the greater likelihood of success in reaching the plan's intended audience(s) (SAMHSA, 2019). In developing a prevention plan, consideration needs to be taken concerning the specific problem and behaviors to be prevented. For example, what are the primary risks and preventative factors concerning the prevention issue? Who is the intended audience for the prevention strategy? How will the prevention message be communicated and does the messaging work in reaching the intended audience? When will the messaging be implemented and for how long? The answer to each of these questions coupled with specific goals for the prevention strategy will help to inform anticipated short-term and long-term outcomes. For example, a short-term outcome of a prevention program might be to change risk and protective factors, while a long-term outcome demonstrates changes in behaviors (SAMHSA, 2023; SAMHSA, 2019; HHS, 2016). Additionally, finding the best spokesperson or individual to communicate the prevention strategy, particularly someone who has influence with the audience to be reached, is paramount because if the intended audience does not share the beliefs or values of the program's messenger, it is unlikely they will be persuaded to take action to initiate change (Christiano & Neimand, 2017).

Since the early 20th century, prevention as a public health strategy has impacted the ways the general public has responded to issues concerning health ranging from the spread of disease to mitigating substance misuse (HHS, 2016). While disease reduction was the primary early driver of public prevention campaigns, issues concerning health and healthy habits have become more specialized and targeted. Yet developing and implementing successful strategies to affect change in behaviors remains challenging.

Advanced technologies have made access to information more widely available, with social media a popular communication tool used for disseminating information for educating the public and promoting health behavior modification (Wakefield et al, 2010; Collinson et al, 2015). In a study examining the use of social media for the dissemination of health and health issues, Ghahramani et. al, (2022) found that social media has a significant positive influence on both public perception of health and for potentially influencing change in the public's behaviors regarding health and healthy habits.

Another study examining disease spread during the COVID pandemic, and the use of social media platforms for educating the public and promoting behavior change revealed that social media efforts had a positive impact and were an integral part of the pandemic's prevention strategy for reducing both the spread and overall numbers of infected by the contagion as well as the importance of emergency preparedness (Kumar et al., 2022).

As with any method of dissemination, social media has both pros and cons. While some prevention strategies have been highly successful, such as the 'Let's Move' for decreasing childhood obesity, other social media focused on health and risky behaviors have been less so, especially among adolescents. For example, substances such as tobacco, alcohol, and marijuana have been both marketed to increase sales while also as a means for bringing attention to and public education about the risk factors associated with these substances (Romer & Moreno, 2017), but if the tenor of the message downplays risk factors, adolescent viewers become particularly vulnerable. Thus, the successful dissemination of evidence-based

research on prevention calls for well-thought-out, well-placed media to create awareness to affect change (Ross-Hellauer et al, 2020).

CONCLUSION

Prevention is an important public health strategy. Whether disseminating information concerning the spread of disease or as a campaign to help mitigate substance misuse, strategically planned prevention programs have the power to increase the public’s awareness, gain support from legislators for setting policies, and reduce risky behaviors. The who, what, when, why, and how of prevention is contingent on the specific issue(s) identified as needing the public’s attention and their taking action as a preventative measure. Understanding the complex dynamics of prevention programs is the first step in improving the public’s health and well-being.

KEY POINTS +

- ▶ Educating the general public about health prevention is complex.
- ▶ An important area of prevention is the establishment of local, state, and federal policies.
- ▶ Prevention is both increasing awareness and communicating strategies to affect change.
- ▶ Effective prevention programs are informed by evidence-based research.
- ▶ Successful dissemination requires well-thought, well-placed media to create awareness and effect change.

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