

Prevention of Postdisaster Substance Use

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On February 6th, 2023, two major earthquakes struck southern and central Turkey, causing extensive damage over an area of approximately 350,000 square kilometers. An estimated 14 million people, which accounts for 16 percent of Turkey's population, were impacted by the disaster. Reports indicate that at least 50,000 people lost their lives, and 100,000 were injured across 11 provinces of Turkey. The disaster also affected around 15 million individuals and 4 million buildings. Such calamities are typically referred to as "big events," "community-wide events," or "collective trauma" (Wikipedia Contributors, 2023).

After a disaster occurs, people may experience various negative effects on their mental and behavioral health. This can include using substances such as tobacco, alcohol, marijuana, and drugs, as well as developing anxiety and mood disorders such as depression and posttraumatic stress disorder (PTSD). These outcomes are interconnected, meaning that having one mental health issue can lead to an increased likelihood of using substances. Studies have shown that individuals with mental health problems after a disaster are more likely to smoke cigarettes and marijuana and consume more alcohol than those who do not have mental health issues (Alexander et al., 2018).

Following a major disaster, there may be a significant amount of migration from the affected areas that goes undocumented. Immigrants who have experienced violent trauma during the disaster are particularly susceptible to developing mental health issues such as depression, PTSD, and substance use disorders. Due to their loss of psychosocial support systems, they may be even more vulnerable to social and psychological problems. Governments should document these immigration patterns and take additional measures to address the increased risk of

PTSD and substance use disorders among affected immigrants (Alegria et al., 2019).

In the aftermath of a disaster, certain individuals may turn to alcohol, prescription medications, or other drugs as a coping mechanism to deal with the emotional and physical effects of stress. Although they may believe that using these substances helps them escape negative feelings or symptoms, it can actually exacerbate the situation over time. Substance use can disrupt natural sleep patterns, cause health issues, damage relationships, and lead to addiction. The adolescent stage is a critical period for the development of substance use disorders, and recent research in neuropsychology and neuroimaging has shed light on the neural factors that contribute to the initiation of substance use during this period. Studies indicate that poorer performance on tasks related to inhibition and working memory, smaller brain volumes in regions involved in reward and cognitive control, reduced brain activation during tasks involving executive functioning, and heightened sensitivity to reward are all potential indicators of adolescents who may be at risk for initiating substance use. Additionally, after a disaster, adolescents may be more susceptible to substance use than adults (Squeglia et al., 2017).

Following a traumatic experience, regression can occur as a defense mechanism. This involves reverting to an earlier stage of development, including emotional, social, and behavioral functions, when experiencing stress. The behaviors that accompany regression are often linked to the individual's psychological stage of development. However, regressive behaviors can also lead to maladaptive functioning, potentially resulting in issues such as problematic substance use (Fang et al., 2017).

Efforts to prevent and control drug use among adolescents should prioritize education and intervention



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programs that involve not only the young people themselves but also their parents and other family members. The primary aim of prevention efforts should be to prevent the initiation of drug use among youth. Population-based strategies, known as “prevention interventions,” may have the following objectives.

The main focus of primary prevention is to decrease adolescents’ inclination toward substance use by educating them about the potential harms and long-term negative consequences associated with drug use. Additionally, restricting access to substances and making them more difficult to obtain and use is a crucial aspect of primary prevention. Utilizing criminal or other social penalties to dissuade young people from using drugs is also critical to the success of primary prevention efforts.

The objective of secondary prevention is to intervene early by identifying adolescents who may be at risk or exhibiting signs of problematic substance use, with the aim of reducing their use before it becomes more serious. Tertiary prevention aims to minimize the harm caused by substance use, and treat those who are experiencing heavy or dependent use. The harm reduction approach seeks to minimize the negative effects of substance use on adolescents, their families, and peers, while treatment efforts are aimed at addressing more severe and dependent substance use.

Adolescents may be less likely to use drugs if basic measures are taken. They need to know that people are working to keep the community safe. It’s a good opportunity to show them that when something scary happens, there will be some people for help. Limiting exposure to social media and broadcast coverage of the accident must be done; repeatedly seeing upsetting or powerful visuals makes adolescents more distressed. Spending time as a family and keeping routines at home and at school can boost feelings of safety and give you opportunity to chat and share.

It is essential to teach teenagers to stay away from using drugs, alcohol, and other intoxicants to cope with upsetting emotions. It’s crucial to assist them in discovering enjoyable hobbies, music, reading, and other good forms of relaxation. They are recommended to maintain relationships with their friends, family,

school, and neighbors in order to provide and receive assistance. Healing is aided by helping one another.

There is widespread consensus that there is a requirement for a comprehensive national approach and strategy to coordinate prevention research, policy development, and implementation, which will necessitate substantial investment to optimize and maintain the benefits of prevention initiatives (Simon et al., 2021).

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