EDITORIAL

Drugs and suicidal behavior: a call for positive, broad and preventive interventions

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Drug misuse and suicidal behavior are among the most concerning and unclear issues in public health and psychiatry worldwide. Over the years, healthcare professionals have been facing much stigma to evaluate those who seek aid for these issues, but there is still a long way to go concerning prevention, accessibility, and treatment quality. The World Health Organization (WHO) has stated that reducing the suicide mortality rate is a global imperative, considering that it accounts for 800,000 annual deaths.[1]

In this issue, Abdalla et al.[2] provide high-quality evidence that corroborates the association between drug use and suicidal behavior in a representative Brazilian sample, showing a prevalence of suicide attempts ranging from 12.4 to 20.8% in alcohol, cannabis, and cocaine users, vs. 4.7% for non-users. Statistics on suicidal behavior in users with more severe dependence are impressive. Data from 690 male patients hospitalized for substance use disorder (SUD; alcohol and cocaine/crack use) in southern Brazil show a lifetime prevalence of suicidal ideation and suicide attempt of 59.8% and 35%, respectively. Moreover, the prevalence of suicide attempt in the 30 days before seeking treatment was 12%.

Although the cross-sectional designs of the aforementioned studies preclude any inference as to causality, there is a well-established wide overlap of biological, environmental, and psychosocial risk factors for substance use and suicide. In this sense, the data from these Brazilian studies corroborate the global literature in finding that the relationship between drug use and suicidal behavior seems to be reciprocal and multidirectional. These are complex phenomena, and a causal model to explains the pathways involved would be is hard to build. The proposed theoretical model of stress-diathesis is the most comprehensive and explains suicidal behavior as the interaction between acquired vulnerabilities (conditioned and/or learned) and triggering stressors.[3] These include genetic factors, trauma, a history of abuse or neglect, personality traits, psychiatric disorders, socioeconomic problems, discrimination, emotional imbalance, rejection, feelings of failure or helplessness, and chronic pain, among others; the same factors are also associated with abuse of psychoactive substances.

It is estimated that the prevalence of psychiatric disorders in individuals who die by suicide is up to 90%.[3] With the exception of schizophrenia, mood, and personality disorders, SUD is the best-documented predictor of suicidal behavior, and it is frequently comorbid with others. Systematic reviews and meta-analysis reinforce the augmented risk of suicidal behavior in individuals with SUD, especially use of alcohol, opioids, intravenous drugs, and chronic cannabis use.[4-7] Interestingly, the risk factors seem to be the same as in the general population, although effect sizes are larger, suggesting more intense associations with suicide in the presence of substance abuse, which thus seems to act as an enhancer of suicide risk. In the context of low- and middle-income countries (LMICs), a systematic review including 108 studies revealed a consistent pattern of direct associations among all substances and all suicidal behaviors.[8]

An extensive meta-analysis of 365 studies shows that predictive modeling of suicide has stagnated; this area of research awaits new insights and is in urgent need of methodological innovation.[9] Since it is clear that drug misuse is not only a key element in aggravating suicide risk but also a modifiable factor, prevention strategies must be implemented even before the whole puzzle has been solved. These interventions must not be directed only to individuals at risk, but rather should be planned widely and at the community level. First, the focus should shift to intensifying efforts to reduce poverty and mitigate the consequences of socioeconomic and environmental stressors. The WHO highlights the need to implement a system for evaluating and monitoring substance use and for conducting research to deepen knowledge in this area, fostering public policies which encourage education, sport, leisure, and culture, especially in LMICs. Government plans and public policies need to integrate preventive and diagnostic strategies with treatment services, the latter focusing on evidence-based brief interventions, which may include training in problem-solving skills and emotional self-regulation for target populations. Public policies to halt the advance of licit drugs and the cannabis industry are also relevant, especially among young individuals.[8]

Telephone- and internet-based interventions are becoming increasingly popular in this setting, but the evidence for

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their cost-effectiveness is still low; additional studies on these interventions are warranted. Novel technologies using artificial intelligence – such as mobile applications (apps) for symptom monitoring and to facilitate psychotherapeutic approaches – may be useful, especially for high-risk populations such as psychiatric patients, children and adolescents, older adults, and minorities. Interventions that leverage big data through social media should also be explored in the next decade. Lastly, it is important to observe new approaches that aim to decrease stress levels and improve well-being through mindfulness techniques and positive psychology approaches focused on emotions – such as gratitude and forgiveness – and training in optimism and transcendence (e.g., spirituality). In the future, these strategies may represent an inexpensive, user-friendly intervention that can be deployed to large numbers of individuals, possibly even through virtual reality, to promote higher resilience levels and prevent tragic outcomes.[10-12]

Disclosure

The authors report no conflicts of interest.

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