

Suicide Attempt by Toothbrush Consumption in a Polysubstance-dependent Person

Sarthak Kamath¹, Shankar Kumar², Shreekara Adiga³

ABSTRACT

Aim: To report a case of suicidal attempt by toothbrush consumption in a polysubstance-dependent person.

Background: Substance dependence is a common psychiatric illness. Tobacco and alcohol are the most commonly abused drugs. Polysubstance dependence has the highest prevalence in 18–29-year-old people at 13%. Suicide is one of the most dangerous consequences and is more than ten times the rate in the general population.

Case description: We present a case of a 19-year-old unemployed male patient from Bengaluru who is dependent on tobacco, cannabis, and cocaine with heroin use in a harmful use pattern. He attempted on life by consuming four toothbrushes for which surgical intervention was done and they were removed successfully. In addition, he had substance-induced psychosis and possibility of antisocial personality disorder. We applied the alcohol, smoking and substance involvement screening test (ASSIST) scale, which showed a moderate risk of a health problem with tobacco, cannabis, and cocaine.

Conclusion: This is a unique method of a suicide attempt by consuming four toothbrushes in a substance-dependent person.

Clinical implications: Polysubstance dependence is frequently complicated by suicide attempts. Our case report shows that even apparently harmless objects like toothbrushes could be used to attempt on life. Hence, it is imperative to keep such patients with suicidal risk under 24-hour supervision to prevent complications.

Keywords: Polysubstance dependence, Suicide, Toothbrushes.

Indian Journal of Private Psychiatry (2022); 10.5005/jp-journals-10067-0107

BACKGROUND

Substance dependence is one of the most common conditions we come across as psychiatrists. A diagnosis of polysubstance dependence requires the person to take three or more substances in a dependence pattern without either drug dominating the picture. Diagnostic and statistical manual (DSM) 5 has put it under polysubstance use disorder.¹

According to the National Mental Health Survey conducted in India between 2015 and 2016 showed that alcohol and tobacco were the most commonly abused substances with a prevalence of 20.9% and 4.6%, respectively, with other illicit substances like cannabis and stimulants accounted for a prevalence of 0.6% and higher in the urban metros.² The prevalence of polysubstance dependence was 2% in adolescents but increased to around 13% in young adulthood (18–29 years of age).

Substance, especially polysubstance, use is associated with both medical and psychiatric comorbidity like depression, anxiety disorders, etc.¹ Family dynamics like poor communication and understanding between family members and substance abuse in parents are risk factors for substance use at an early age.³ One of the most serious complications is suicide. It is ten times higher than the general population in substance users and almost twice that in people abusing multiple drugs, of which opioids had the highest risk.^{4,5} The female sex, depression, and physical and sexual abuse are

The ASSIST was developed by the WHO. It is an 8-item screening questionnaire for harmful and hazardous use of drugs of abuse like alcohol, tobacco, and cannabis. It takes five to ten minutes to complete. For each substance, a risk score is generated. Based on this, each substance is classified into lower, moderate, and high-risk categories.⁶

^{1,3}Department of Psychiatry, Bangalore Medical College and Research Institute, Bengaluru, Karnataka, India

²Department of Psychiatry, Bangalore Medical College and Research Institute; St John's Medical College Hospital, Bengaluru, Karnataka, India

Corresponding Author: Shankar Kumar, Department of Psychiatry, Bangalore Medical College and Research Institute; St John's Medical College Hospital, Bengaluru, Karnataka, India, Phone: +91 9844546083, e-mail: shankarkjs@gmail.com

How to cite this article: Kamath S, Kumar S, Adiga S. Suicide Attempt by Toothbrush Consumption in a Polysubstance-dependent Person. *Ind J Priv Psychiatry* 2022;16(1):46–47.

Source of support: Nil

Conflict of interest: None

independent risk factors for suicide.⁵ In our case report, we present a case with polysubstance dependence with an unconventional suicide attempt by consuming toothbrushes.

CASE DESCRIPTION

Mr L was a 19-year-old man residing in Bengaluru who was currently unemployed.

He initially started tobacco consumption five years back in a dependent pattern. Due to curiosity, he started using cannabis a year later, which was also in a dependent pattern. The current quantities were 10 cigarettes and 5–6 joints respectively. During this period, the patient had poor scholastic performance with

repeated absenteeism from school. His paternal grandmother and friends would provide him money to buy these substances.

Once he entered the college three years back, he wanted to try higher drugs. He started chasing cocaine, which was later in a dependent pattern with 5–6 lines per day.

He used heroin injections daily. In addition, he tried many other drugs like nitrazepam, crushing zolpidem and injecting the same into his body after mixing with water, lysergic acid dimethylamide (LSD) blotting paper and venom from a non-poisonous snake on multiple occasions in a month.

To pay for these drugs, he resorted to lying, stealing money and gold ornaments from home, and drug peddling. He was caught by the police on many occasions for drug peddling and possession of weapons. He was admitted in a rehabilitation center twice. Since then, patient had multiple panic attacks, persecutory delusions, second person auditory hallucinations, and aggression against self and family members with two impulsive suicide attempts.

The patient was abstinent from all substances except tobacco and cannabis since eight to nine months.

The patient got angry with the family members for admitting him the second time as he felt they were purposely trying to trouble him. For the same reason, he swallowed four toothbrushes as he felt whatever he ate would come out and he would starve to death. This resulted in severe pain in the abdomen with vomiting. After questioning him, he confided the truth. He was immediately rushed to the surgeon at Victoria Hospital, who noticed intestinal obstruction by toothbrushes. He underwent emergency pylorotomy and pyloroplasty. The obstruction was relieved successfully and the patient got better. He was referred here for further management.

The patient was diagnosed as polysubstance-dependence syndrome (actively using tobacco and cannabis, abstinent from cocaine), cannabis-induced psychosis, and antisocial personality disorder. The Alcohol, Smoking and Substance Involvement Screening Test scale was applied, which showed moderate risk of health problem with tobacco, cannabis, and cocaine and low risk of health problems with sedatives, hallucinogens, and opioids.

DISCUSSION

In this case report, we have described a case of polysubstance dependence with substance-induced psychosis and probable antisocial personality disorder who consumed around four toothbrushes as a means of committing suicide, which led to intestinal obstruction. They were successfully removed by the surgeon, thereby relieving the obstruction.

As this is an unusual method of suicide and has never been reported previously in the literature, we have decided to write this case report.

Clinical Implications

Polysubstance dependence is frequently complicated by suicide attempts. Our case report shows that even apparently harmless objects like toothbrushes could be used to attempt on life. Hence, it is imperative to keep such patients with suicidal risk under 24-hour supervision to prevent complications.

ACKNOWLEDGMENTS

Authors would like to thank Dr Sharon Ruth, Clinical Psychologist, Bangalore Medical College and Research Institute, for her contributions.

ORCID

Sarthak Kamath  <https://orcid.org/0000-0003-2151-381X>

Shankar Kumar  <https://orcid.org/0000-0002-8002-4576>

REFERENCES

1. Connor J, Gullo M, White A, et al. Polysubstance Use. *Curr Opin Psychiatry* 2014;27(4):269–275. DOI: 10.1097/YCO.0000000000000069.
2. Murthy R. National Mental Health Survey of India 2015–2016. *Indian J Psychiatry* 2017;59(1):21. DOI: 10.4103/psychiatry.IndianJPsychiatry_102_17.
3. Pereira-Morales A, Adan A, Camargo A, et al. Substance Use and Suicide Risk in a Sample of Young Colombian Adults: An Exploration of Psychosocial Factors. *Am J Addict* 2017;26(4):388–394. DOI: 10.1111/ajad.12552.
4. Polimanti R, Levey D, Pathak G, et al. Complex Multi-Environment Gene Interactions at the Basis of the Interplay Between Polysubstance Abuse and Suicide Behaviors. *Biological Psychiatry* [Internet]. 2020 [cited 15 November 2021];87(9):S155. Available from: <https://www.nature.com/articles/s41398-020-01153-1>.
5. Armoon B, SoleimanvandiAzar N, Fleury M, et al. Prevalence, Sociodemographic Variables, Mental Health Condition, and Type of Drug Use Associated with Suicide Behaviors among People with Substance Use Disorders: A Systematic Review and Meta-analysis. *J Addict Dis* 2021;39(4):550–569. DOI: 10.1080/10550887.2021.1912572.
6. Humeniuk R, Henry-Edwards S, Ali R, et al. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) Manual for Use in Primary Care. World Health Organization; 2010.