

PURPLE DRANK: AN OLD PHENOMENON RETURNS

Rebecca Juli¹, Giada Juli², Alfredo Juli³ & Luigi Juli⁴

¹Department of Surgery and Medical Sciences, University of Messina, Messina, Italy

²Psychiatric Studies Center, Iseo, Italy

³Department of Surgery and Medical Sciences, University "Magna Graecia", Catanzaro, Italy

⁴G.R.E.C.A. DCA, Catanzaro, Italy

SUMMARY

Purple drank (PD) also known as "lean" or "sizzurp", is a recreational drug typically containing codeine and promethazine hydrochloride, often mixed with soda or alcohol. This drug is not new, in fact it was used in Texas in the 1960s, and became widely popular in the 1990s especially among adolescents and young adults, becoming the "poor man's drug" because it was readily available and not expensive. Several studies suggest that the number of PD abusers today is increasing, and the underestimation of this phenomenon may be related to the fact that PD components are easily available in pharmacies.

Key words: purple drank - recreational drug – codeine - promethazine

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INTRODUCTION

The phenomenon PD expanded widely in the 1990s mainly due to the emphasis given by American rappers in the lyrics of their songs becoming popular among Afro-Americans in the southern region of the United States. Rap singers promoted its tranquillising and euphoric effects through their music and videos (Agnich et al. 2013). In more recent years, increased referrals by influencers have further normalised its consumption, with platforms such as TikTok and Instagram often being used to spread images and videos related to codeine abuse.

DIFFUSION OF PD

However, several studies have pointed out that the abuse of PD today is also widespread in other countries, is heterogeneous and is not strictly linked to ethnic motives or to music and sports preferences (Miuli et al. 2020). PD is also increasing in Europe and particularly in France. This could be due to a greater increase in the number of prescriptions of opioids occurring in France and the UK (Trouvin et al. 2019). Furthermore, according to data from the European Monitoring Centre for Drugs and Drug Addiction, France appears to be the first European country in terms of the number of patients in treatment for opioid addiction.

In Italy, data on Purple Drank use remain limited, but reports suggest a marginal but emerging presence, particularly among adolescents. In 2022, 17 cases of promethazine-codeine intoxication were documented in subjects aged 15 to 22 years. In addition, an online survey conducted by the National Youth Observatory in 2023 found that 2.1% of respondents aged 14-19 admitted to having experimented with imported cough syrups, found through online platforms.

PHARMACOLOGICAL ASPECTS

Codeine is an opioid pro-drug that is metabolised to morphine in the liver by cytochrome P450 2D6. Codeine-6-glucuronide, derived from the glucuronidation of codeine, is the main metabolite that is a strong μ -receptor agonist, responsible for the analgesic activity of morphine. It has long been used as a painkiller and cough suppressant. Promethazine is a first-generation antihistamine helps relieve allergy symptoms such as sneezing, itching and runny nose and is therefore used in cough syrups. It is able to cross the blood-brain barrier and, acting as a histamine H1 receptor antagonist, can lead to disorientation, drowsiness, sedation and even respiratory depression (Chiappini et al. 2022). It also acts as a direct antagonist at muscarinic M1 and dopamine D2 receptors.

These two molecules in combination represent the main treatment for relief of cough and upper respiratory tract symptoms related to allergies or colds in individuals over the age of 18 years. Long-term use is not recommended due to the negative effects of tolerance, dependence and addiction.

The abuse of PD may be a potentially lethal condition, characterized by alteration of consciousness, aggressive agitation, acute delusions, visual hallucinations and anticholinergic toxidrome.

Common health risks associated with long-term codeine use include physical complications such as death from acute poisoning due to respiratory depression, perforated peptic ulcers, liver toxicity, gastrointestinal haemorrhage and psychiatric sequelae such as depression, impulsivity, anxiety, compulsive behaviour and (Wang et al. 2011).

PSYCHOLOGICAL AND PSYCHIATRIC IMPACT

Chronic or high-dose consumption of Purple Drank has been associated with various psychiatric conditions,

including depressive and anxiety disorders, apathy, cognitive disorders, memory and attention deficits. In individuals predisposed to mental illness, psychotic episodes may be triggered (Chiappini et al. 2021). Furthermore, a meta-analysis conducted in 2023 revealed a twofold increase in suicidal ideation and attempts among codeine abusers, particularly when combined with cannabis or alcohol use. Some adolescents report having used Purple Drank as a means of self-medication for post-traumatic stress disorder or chronic stress (Ware et al. 2024).

CONCLUSIONS

Chronic use of PD is associated with serious health consequences, including addiction, cognitive impairment and psychiatric disorders. In Italy, although prevalence remains low, early indications suggest that the phenomenon may be expanding, particularly among young people. Education of young people and a better understanding of risk factors, including psychological, social and economic factors associated with drug use, could be crucial to understanding the phenomenon of PD. To mitigate these risks, public health strategies need to include comprehensive epidemiological surveillance, educational initiatives aimed at adolescents, professional training for health professionals, stricter prescription regulations and increased surveillance of online drug distribution channels.

Contribution of individual authors:

Rebecca Juli & Giada Juli: conceptualization, data curation, formal analysis, investigation, methodology, project administration, visualization, validation, writing original draft, writing review & editing, supervision.

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Correspondence:
Giada Juli, PhD
Psychiatric Studies Center
Iseo, Italy
E-mail: giadajuli@libero.it