Suicidal Poisoning in India

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Abstract: Suicidal poisoning is a major public health problem in India among adults and, especially among the youth and rural communities. The study reviewed 3996 medico - legal autopsies, revealing that organophosphates accounted for 48.7% of poisoning cases, with a significant prevalence in agricultural settings. The ease of access compounds the problem since these are readily available on farmland. While the statistics are alarming, it is also pertinent to put a counterpart emphasis on mental health services and community support networks to look at the underlying issues leading to such tragedies. The most common poisoning agents have to be pinpointed and then used to plan targeted interventions to improve public health outcomes in India. Many research studies suggest that the following are the key findings: Common Toxicants toxic agents vary by region and the areas with the highest rates of exposure differ from one to another. Easy access to the substances is very much part of this larger issue, especially with agriculture. Identifying the most common toxicants associated with poisoning events helps clarify the best way to prevent them and improve health information for the public. <u>Population Patterns</u>: While the statistics are hair - raising, others feel that more effort should also be placed into mental health interventions and community support networks to confront the root causes behind these senseless acts.

Keywords: Suicidal Poisoning, Public Health, Organophosphate Poisoning, Mental Health Support, Agricultural Poisoning

1. Introduction

It's believed that about 800, 000 people die by suicide each time around the world. In India, it is estimated that roughly 170, 000 individuals engage in self - inflicted mortality each year. Poisoning will probably be the most common cause of these sad events. While this loss of life, implied though it may be, is extremely upsetting, the fact that it is so rarely discussed in public forums makes it all the worse. This paper attempts to describe some case studies of suicidal poisoning in Western Uttar Pradesh. Accounts of poisoning rise steadily throughout the world, but the situation is significantly worse in third - world countries. Phosphine has become the most common chemical used in suicide attempts in India because of its availability in the market and its low price. This circumstance has led to a burgeoning number of poisoning incidents in India, particularly when accounting for both homicide and suicide cases. Those are just big numbers, and it just goes to show that suicide is the 2nd leading cause of death. India has experienced a significantly alarming escalation in suicides, with a reported increase of 10.6% from 2007 to 2017. Pondicherry has recently ascended to the position of the second state with the highest suicide rates in India. Toxically suicidal poisoning has often been defined as the taking of poisonous materials into one's own body to the point of death. Hanging and poisoning seem to be the most common forms of self - harm. Poisoning remains a problem associated with the availability of hazardous substances; however the intra - national differences are substantial. Understanding the sociodemographic makeup is important because it will influence the strategies used in suicide prevention programs. These profiles may therefore help in identifying high - risk populations. Even more basically, analyses of psychological problems, psychopathologies, and socioeconomic statuses will enable a more precise definition of the target of these strategic interventions.

2. Literature Review

It analyses post - mortem reports over the years 2010 to 2014. The most common among these is suicidal fatal poisoning, and it also occurs in males, as well as the age group

of young adults. The most relevant poisons are organophosphates, phosphine, and Aluminium phosphide; among the principal contributing factors, domestic discord or conflict with family members is most common. Most cases occur in rural localities and during daytime hours with a predominance of cases in summer. Even more shocking feature of high suicides, there is even a more shocking feature of high suicides from previous research in the Indian scenario. Reports from Western Uttar Pradesh indicate that suicidal poisoning constitutes 77.7% of casualties due to poisoning and most victims are among the young male group of 11 - 30 years old. The two most common agents, accounting for about two - thirds of all poisoning, are aluminium phosphide and organophosphates. Among other major causes of suicides, suicide attempts, and reported family conflicts and unemployment, increased cultural stigma prevails Indian related contexts where this topic is avoided to be discussed openly, though increased educational qualifications and the existence of extended family structures have been associated with increased attempts at suicide and psychological distress. There is an urgency call in the framing of legislation that regulates access to agricultural pesticides with regulatory government interventions. Community - based questions find better answers for comprehension of suicidal behaviour. There has been a reported very high fatal incidence between the years 2010 and 2014 in autopsy reports, and most of the cases have been men and youths. Most of the common poisons were organophosphates, and almost all the cases reported family issues to have contributed.

3. Results

3.1 Prevalence Trends of Suicidal Poisoning:

1) Gender Differences:

Suicide by poisoning among men was significantly more than among females, and even greater percentages of male cases have been documented by researchers.

2) Age Groups:

Most fatal suicidal poisonings fall within the 20 to 29 years age group. In this case, too, the trend is reflected

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in the paradigm of young people being increasingly exposed to this method of suicide.

3) Temporal Trends:

This increase in lethal cases of suicidal poisoning was noticeable in 2013, and it would therefore indicate possible fluctuations in the rates of suicidal poisoning year by year.

4) **Prevalence in rural:**

With such numbers of suicides through poisoning reported from rural locales, diffusion of mental health services and preventive measures might not have level playing fields in both rural and urban settings.

5) Commonly Used Poisons:

Aluminium phosphate was found to be the most often utilized poison for suicidal suicide, followed by organophosphates and organochlorines.

3.2 Contributing Factors of Suicidal Poisoning:

1) Family Issues:

Among the most notable elements found were disagreements within the family, marital conflicts, and abuse by spouses or family members.

2) Socioeconomic Status:

In both medium - and low - socioeconomic cities and rural areas, there was a positive correlation between low and high suicide rates. The correlation was particularly strong among single people from blended families.

3) Workplace Impact:

The prevalence of suicidal poisoning was higher among laborers, housewives, and agricultural workers, suggesting that workplace pressures may have an indirect effect on suicide tendencies.

4) Geographical Location:

Villages have historically seen a higher rate of suicide poisoning than cities. In villages, household and agricultural poisons might be easily obtained to carry out such suicide ends.

5) **Psychological Stressors:**

Common stressors that have been linked to suicide poisoning include financial difficulties, interpersonal issues, and academic failure. This highlights the psychological aspects of suicidal conduct.

3.3 Interventions and Preventions For Suicidal Poisoning:

1) Restricting Access To Pesticides:

Implementing exacting laws to confine the deal and capacity of poisonous pesticides like aluminium phosphide can offer assistance avoid simple get to these substances by the common population.

2) Enhanced Observing and Licensing: Introducing an obtaining card framework for clients of pesticides, such as agriculturists, along with obligatory checks by businesspeople some time recently offering pesticides, can control and screen the conveyance of poisonous substances, decreasing their availability.

3) **Improved Therapeutic Help Accessibility:** Providing preparatory therapeutic help inside the to begin with hour of harmful substance ingestion, particularly in cases of aluminium phosphide harming. can altogether move forward survival rates and outcomes.

4) Educational Initiatives:

Enhancing instruction and authorization of security directions can raise mindfulness around the perils of poisonous substances, advancing more secure taking care of hones and diminishing the recurrence of harming incidents.

5) **Prevention Strategies:**

Developing anticipation techniques that address the basic issues driving to self - destructive practices, controlling get to unsafe pesticides, and making strides restorative treatment for poisonings are significant steps in decreasing passing from self - poisoning incidents.

4. Conclusion

Suicidal poisoning in India presents a major public health concern, particularly affecting adults, youth, and rural communities. The prevalence of organophosphate poisoning in agricultural settings highlights the presence of toxic substances in these areas. The statistics are intimidating, emphasizing the need for internal health services and community support networks to address the underpinning issues leading to these woeful events. . Recognizing common patterns and implementing appropriate interventions can enhance public health in India. Gender differences, age group trends, and socioeconomic factors play significant roles in suicidal poisoning incidents. Interventions such as restricting access to pesticides, enhancing monitoring and licensing, providing immediate medical support, educational initiatives, and preventive strategies are essential in reducing losses from poisoning incidents in India.

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