

SYNTHETIC SUICIDE AIDS

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ABSTRACT

Each suicide is a unique tragedy that cuts short the life of a person and has far-reaching consequences for their loved ones and the communities in which they reside. More than one hundred thousand people take their own lives each year. Professional/career issues, feelings of loneliness, abuse, violence, family issues, mental diseases, alcoholism, financial loss, chronic pain, etc. are just few of the many factors that might lead to a person taking their own life. Suicide can be committed through a variety of methods, including hanging, burning, taking sleeping pills or hypnotic medications, ingesting poison, etc. Higher doses of sleeping drugs, which are typically used to treat insomnia and to lengthen the sleeping period, can be fatal, and common household pesticides like rat killing drug/chemicals. These are manmade substances with chemical components; suicide is attempted using lethal amounts. According to a recent report by the National Crime Record Bureau (NCRB), Maharashtra has the highest rate of suicide in the country. Suicide data is gathered from police reports submitted to NCRB. The five states with the highest rates of suicide in 2021 are Maharashtra (13.5%), Tamilnadu (11.5%), Madhya Pradesh (9.1%), West Bengal (8.2%), and Karnataka (8%). This paper provides a brief overview of suicide, different types of suicide, rising suicide rates, causes, and mode/means used for suicide, focusing particularly on the usage of sleeping medications (sedative & hypnotic pharmaceuticals) and poisons like pesticides.

KEYWORDS: Poison, sleeping pills, suicide, means of suicide, pesticide, sedative and hypnotic.

INTRODUCTION

Suicide: One of the major social issues nowadays is suicide, which has a negative impact on each and every one of our lives. In contemporary society, it is a regular occurrence and source of news. Furthermore, there is little to no attempt being made to stop or prevent this behaviour, and it continues to be a silent topic of conversation. There has been no action taken for or against this subject by society. Because synthetic products are readily available at home and, to a certain extent, inexpensive, they are frequently utilised in excess as sleeping medications and pesticides. Suicide is defined by the Oxford English Dictionary as "the deliberate taking of one's own life; self-murder." Suicide is the deliberate act of taking one's own life. According to Emile Durkheim, the term "suicide" refers to all situations of death that are directly or indirectly caused by a victim's own good or bad deed that he or she knows will result in death.^[1]

Suicidal thoughts result from a deliberate and conscious desire to die. Once completed, an issue is no longer treatable but can be avoided. Major risk factors for suicide include depression brought on by persistent disappointments in life or personal failure, impulsive emotional behaviours, psychopathology such as alcoholism and illicit drug use, social issues like domestic violence and family conflicts, and disturbed husband-wife or family relationships. Suicide is more likely to occur when someone lacks the ability to cope with difficult circumstances or when they act impulsively and without planning in a conflict situation. Suicide is often planned in order to attract others' attention, exact revenge for one's own suffering, or act as a defence mechanism in an unpleasant situation. Stressful circumstances are typically linked to suicide. Personal problems including those in marriages, extramarital affairs that stress the spouse, parents who prevent young people from dating, bereavement, and severe economic hardship can lead to extreme stress and suicidal behaviour. Long-term disappointment and a sense of isolation may lead to depression, which is the main factor in premeditated suicide. Psychologically, experiencing failure, annoyance, and self-devaluation can lead to internal strife, low self-esteem, and a lack of purpose or hope, as well as the desire to end one's life.^[2]

Use of sedative and hypnotic drugs for committing suicide

Sedative: A drug that makes you sleepy by making you less angry or excited is also called a tranquilliser. They slow down the function of the brain because they slow down the central nervous system. There are different kinds of sedatives, but most of them affect gamma-aminobutyric acid (GABA), a receptor. Even though each tranquillizer works in its own way, most of them calm you down by making GABA more active.^[3]

Hypnotics: It is a type of psychoactive drug that is often called a sleeping pill. Its main purpose is to help people fall asleep and treat sleeplessness. Hypnotics are usually drugs that help people fall asleep, stay asleep, or sleep longer.^[4]

Classification of Sedative Drugs^[5]

Table 1: Shows the class of sedative drugs with examples.

| S. No. | Class | Examples |
|--------|--------------------------|--|
| 1 | Barbiturates | Nembutal and Phenobarbital |
| 2 | Benzodiazepines | Librium (Chlordiazepoxide), Xanax (Alprazolam), Ativan (Lorazepam), Valium (Diazepam), Halcion (Triazolam), Serax (Oxazepam), and Klonopin (Clonazepam). |
| 3 | Z-Drug Sleep Medications | Lunesta (Eszopiclone), Ambien (Zolpidem), and Sonata (Zaleplon). |

Classification of Hypnotic Drugs

| | |
|----------------|---------------------|
| Benzodiazepine | Non-Benzodiazepine. |
|----------------|---------------------|

Use of poisons (Pesticides) for committing suicide

Pesticides - Pesticides are substances (natural or synthetic) used in various agronomic practises to control pests, vegetation, and diseases in plants. Pesticides include herbicides, insecticides, fungicides, rodenticides, nematicides, and other substances. In the course of agricultural development, pesticides have become a crucial instrument for plant protection and crop improvement. Some insecticides may be hazardous to human and environmental health.

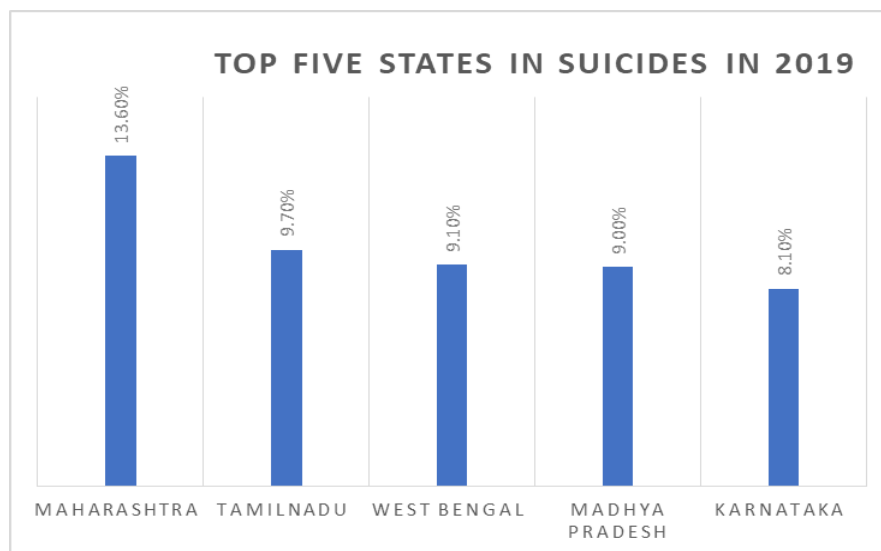
Classification of Pesticides according to chemical composition**Table 2: Shows different classes of pesticide.**

| Insecticides | Fungicides | Herbicides | Rodenticides |
|---|---|---|--|
| Carbamates (Carbaryl) | Aliphatic nitrogen fungicides (Dodine) | Anilide herbicides (Flufenacet) | Inorganic rodenticides (Zinc phosphide, Aluminium Phosphide) |
| Organochlorine (Endosulfan) | Amide fungicides (Carpropamid) | Phenoxyacetic herbicides (2, 4-D) | Organic coumarin rodenticides (Bromadiolone, Coumatetralyl). |
| Organophosphorus (Monocrotophos) | Aromatic fungicides (Chlorothalonil) | Quaternary ammonium herbicides (Paraquat) | -- |
| Pyrethroids (permethrin) | Dicarbox- imide fungicides (Famoxadone) | Chlorotriazine herbicides (Atrazine) | -- |
| Neonicotinoids (Imidacloprid) | Dinitrophenol fungicides (Dinocap) | Sulfonylurea herbicides (Chlorimuron) | -- |
| Various pesticides such as Spinosyns (Spinosad) | -- | -- | -- |
| Benzolureas (Diflubenzuron), | -- | -- | -- |
| Antibiotics (Abamectin) | -- | -- | -- |

India has listed 293 different pesticides, and it is said that 104 of them are still being made or used there even though they are banned in at least two other countries.^[6]

Indian states and union territories with higher percentage share of suicides during 2019 to 2021^[7]**Table 3: Five top States/UTs with higher percentage share of suicides during 2019 to 2021.**

| S. No. | States/UTs & year | | | | | |
|--------|-------------------|-------|----------------|-------|----------------|-------|
| | 2019 | | 2020 | | 2021 | |
| 1 | Maharashtra | 13.6% | Maharashtra | 13.0% | Maharashtra | 13.5% |
| 2 | Tamilnadu | 9.7% | Tamilnadu | 11.0% | Tamilnadu | 11.5% |
| 3 | West Bengal | 9.1% | Madhya Pradesh | 9.5% | Madhya Pradesh | 9.1% |
| 4 | Madhya Pradesh | 9.0% | West Bengal | 8.6% | West Bengal | 8.2% |
| 5 | Karnataka | 8.1% | Karnataka | 8.0% | Karnataka | 8.0% |

**Fig 1: Graph shows the top five states in committing suicides in 2019.**

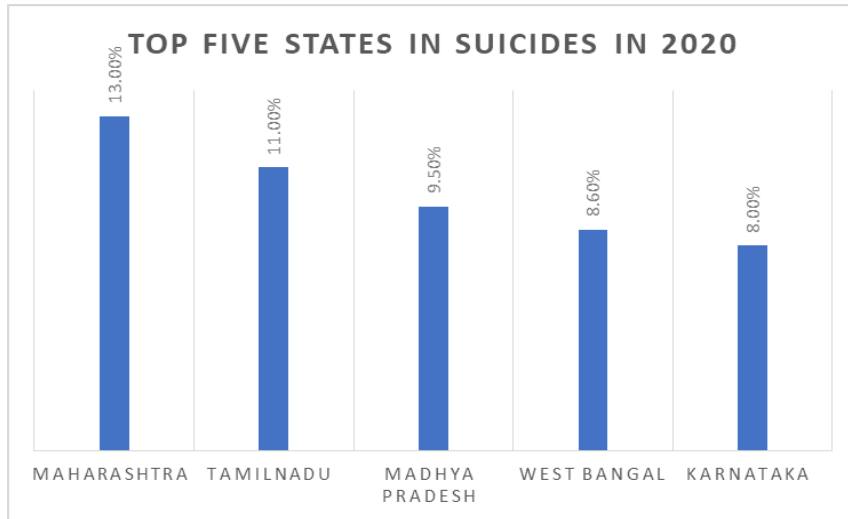


Fig 2: Graph shows the top five states in committing suicides in 2020.

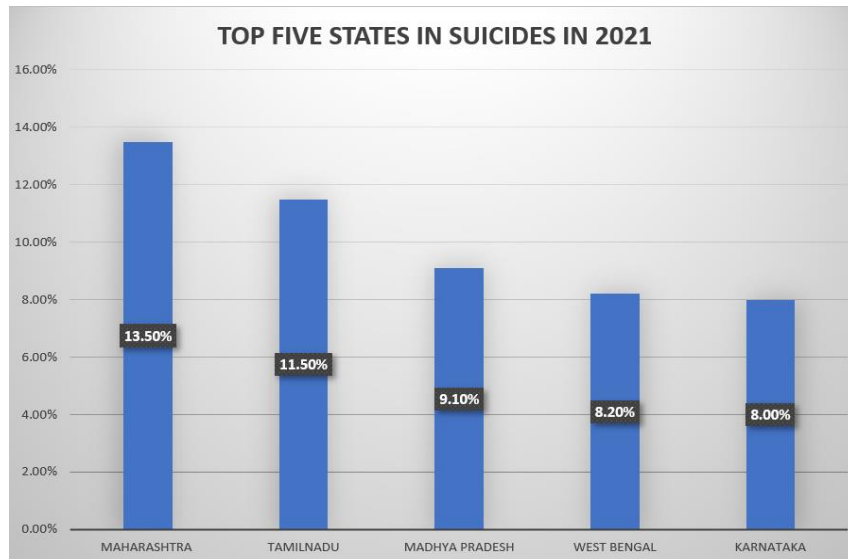


Fig 3: Graph shows the top five states in committing suicides in 2021.

Causes of Suicides^[7]

Table 4: Percentage share of various causes of suicides during 2021.

| S. No. | Causes | Percentage |
|--------|------------------------------|------------|
| 1 | Impotency/infertility | 0.2 |
| 2 | Suspected / illicit relation | 0.4 |
| 3 | Fall in social | 0.5 |
| 4 | Reputation | 1.0 |
| 5 | Failure in examination | 1.1 |
| 6 | Property dispute | 1.1 |
| 7 | Poverty | 1.2 |
| 8 | Professional/career problem | 1.6 |
| 9 | Unemployment | 2.2 |
| 10 | Bankruptcy/indebtedness | 3.9 |
| 11 | Love affairs | 4.6 |
| 12 | Marriage related problems | 4.8 |
| 13 | Drug abuse/alcohol addiction | 6.4 |
| 14 | Other causes | 9.2 |
| 15 | Unknown causes | 9.7 |

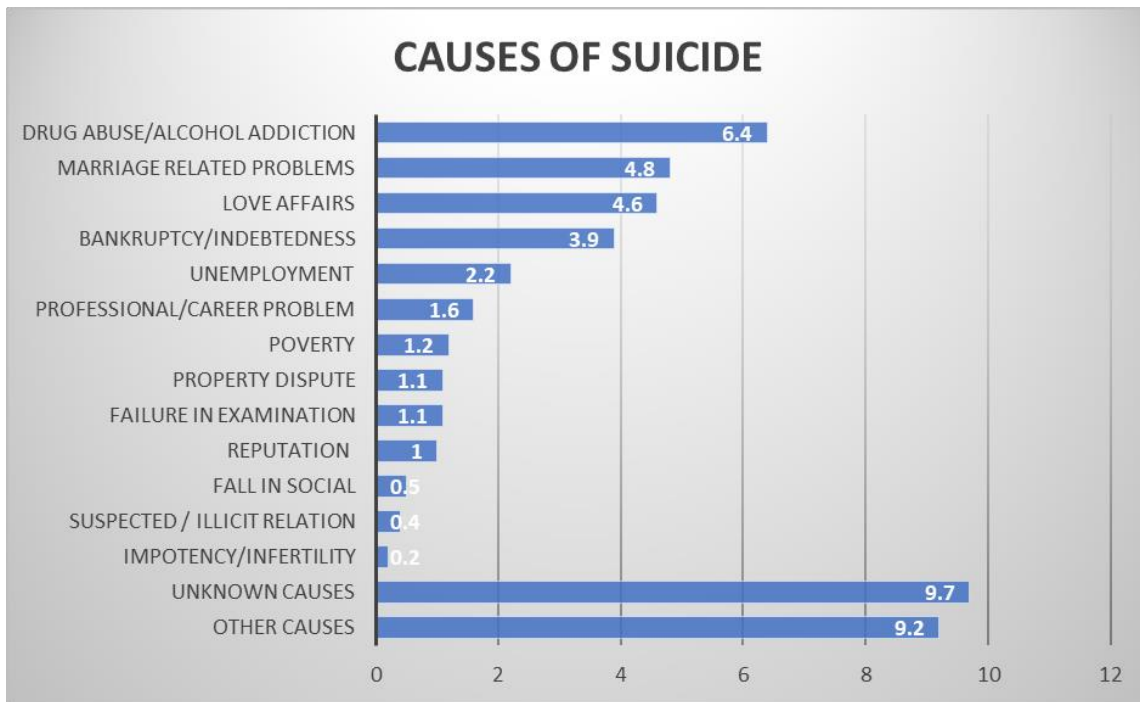


Fig 4: Graph shows the different causes for committing suicide with their percentage.

Modes of suicide^[7]

Table 5: Shows the different mode/means to commit suicide in the year 2020 and 2021.

| S. No. | Mode/means | 2020 | 2021 |
|--------|--------------------------------------|-------|-------|
| 1 | Consuming sleeping pills | 882 | 737 |
| 2 | Drowning | 7977 | 8370 |
| 3 | Fire/self immolation | 4603 | 4195 |
| 4 | Firearms | 444 | 386 |
| 5 | Hanging | 88460 | 93580 |
| 6 | Poison | 38336 | 41197 |
| 7 | Self inflicting injury | 457 | 492 |
| 8 | Jumping | 1843 | 1757 |
| 9 | Coming under running vehicles/trains | 2626 | 3974 |
| 10 | Touching electrical wires | 629 | 627 |
| 11 | Other means | 6795 | 8718 |

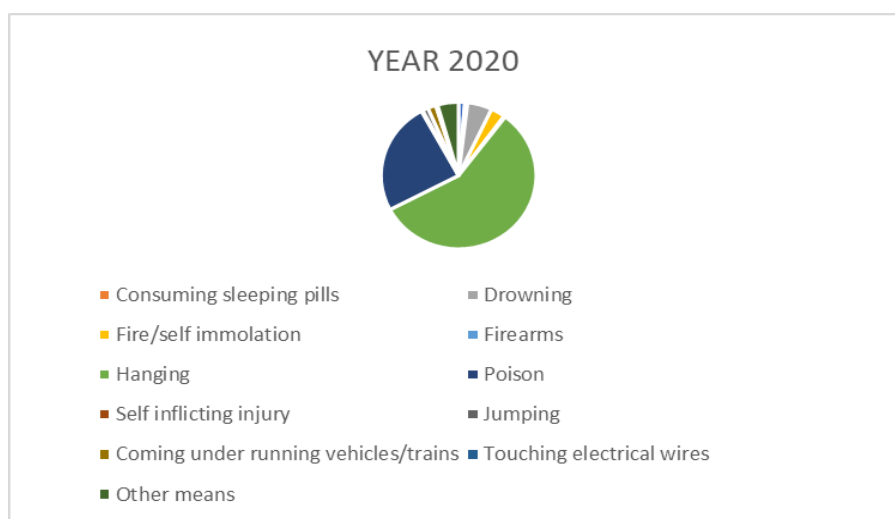


Fig 5: Different modes of committing suicide in the year 2020.

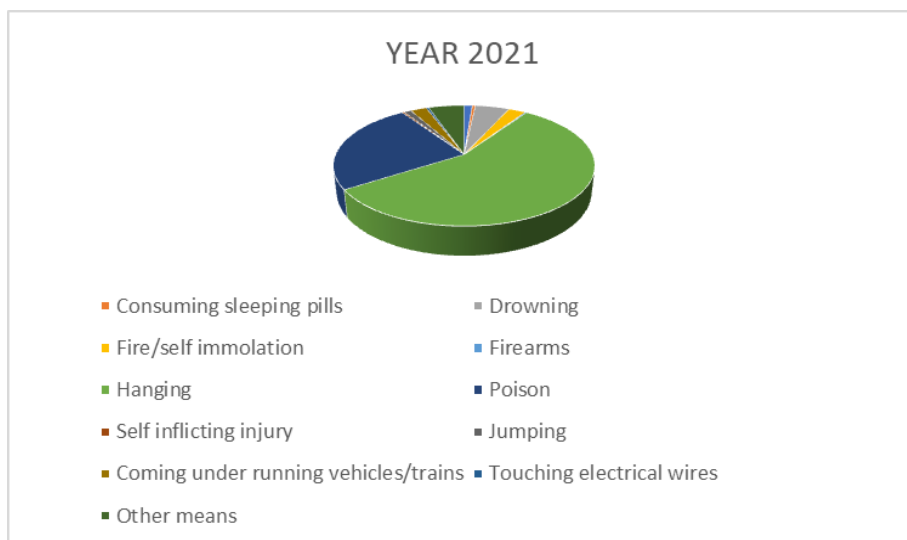


Fig 6: Different modes of committing suicide in the year 2021.

CONCLUSION

In our nation, more than 100,000 people take their own lives each year. The typical reasons for suicide include problems with one's job or career, feelings of loneliness, abuse, violence, family issues, mental health issues, alcoholism, financial loss, and chronic pain. Common methods include hanging, setting oneself on fire, taking sleeping pills (sedative & hypnotic drugs), poison (pesticide), and hanging. In contrast to the usage of sleeping medicines, which are typically used to cure insomnia and lengthen the sleeping time and pesticides that are frequently found in homes, such as rat poison, can also be fatal if consumed in high concentrations. These are synthetic substances made of compounds that are extremely toxic in higher amounts and are used in committing suicide. The top five states for suicides are Madhya Pradesh (9.1%), West Bengal (8.2%), Tamil Nadu (11.5%), Maharashtra (13.5%), and Karnataka (8%), according to a recent National Crime Record Bureau (NCRB) data. Even though sleeping pills are a restricted substance that can only be bought with a legitimate prescription from a doctor, the number of suicides are rising using these pills. Doctors should only prescribe little amounts, and selling illegally without a prescription for abuse needs to be rigorously controlled by raising awareness among both sellers and consumers because it is a matter of life by enacting strict legislation. To spread the message that life is incredibly beautiful and that God has put us on this planet to carry out some special and singular tasks rather than to end it, awareness campaigns should be launched in rural and urban schools, colleges like venues and spread awareness through print and electronic media. Everybody have problems, but committing suicide is not a solution to any of us; instead, fighting those problems is what life is all about, as is the conviction that there are no problems for which there is no cure. We should believe what we hear everywhere that the solution comes first before the problem initiates.

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Conflict of interest: The authors declare that there is no conflict of interest.

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