REVIEW ARTICLE

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Suicide in India: A Review

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Abstract

Introduction: Suicide is a major public health issue in India and the third leading cause of death among people aged 15–29 years. According to NCRB 2022, India reported 170,924 suicide deaths, showing a 4.2% increase from the previous year and a 27% rise since 2018, with a suicide rate of 12.4 per 100,000 population. Vulnerable groups include young adults, women, students, daily wage earners, and farmers. This review analyzes suicide trends in India from 2018 to 2022, highlighting demographics, causes, and policy implications.**Methods:**The review followed PRISMA 2020 guidelines. Literature was searched in PubMed, Scopus, Web of Science, Google Scholar, NCRB reports, WHO publications, and government documents. Search terms included "Suicide India," "Mental Healthcare Act 2017," "NCRB suicide statistics," and "National Suicide Prevention Strategy." Inclusion criteria were NCRB reports and peer-reviewed English-language studies from 2018 to 2022. Data on epidemiology, risk factors, methods, and policies were extracted and synthesized.**Results:**Suicide mortality rose from 10.2 to 12.4 per 100,000 between 2018 and 2022. Men accounted for nearly three-fourths of deaths. About 67% of suicides occurred among individuals aged 18–45. Major causes included family conflict (31.7%), chronic illness (18.4%), economic distress, and substance abuse. Hanging (58.2%) and pesticide ingestion were the leading methods. Student suicides (~13,000 annually) and farmer suicides (11,290 in 2022) remain significant challenges. Geographic disparities showed higher burdens in Maharashtra, Tamil Nadu, Madhya Pradesh, Kerala, and Chhattisgarh. Legislative responses included the Mental Healthcare Act, 2017, and the National Suicide Prevention Strategy, 2022, aligned with the WHO "LIVE LIFE" framework.
Conclusion: Suicide in India reflects a complex interplay of social, economic, and psychological factors. Preventive efforts must focus on strengthening mental health services, restricting access to means, improving surveillance, and reducing stigma. Forensic medicine contributes critical evidence for surveillance and policy. A multisectoral, evidence-based approach is essential to reverse the rising trend.

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Introduction

Suicide is a significant public health issue in India, becoming the third leading cause of death among people aged 15-29 [1]. The 2022 NCRB data revealed 170,924 suicide deaths, representing a marked increase of 4.2% from the previous year and a 27% rise since 2018 with a rate of approximately 12 per 100,000 population, with high prevalence among young adults, women, students, daily wage earners, and farmers, driven by complex socio-economic, cultural, and psychological determinants. [2] This review compiles NCRB suicide data for 2018–2022, focusing on the trends, demographic patterns, causes and implications for suicide prevention in India.

Methodology

This review followed PRISMA 2020 recommendations.

Databases searched: PubMed, Scopus, Web of Science, Google Scholar, NCRB official reports, WHO publications, and relevant government policy papers.

Search terms: "Suicide India", "Mental Healthcare Act 2017", "NCRB suicide statistics", "Student suicide trends", "Farmer suicide", "WHO LIVE LIFE India", and "National Suicide Prevention Strategy".

Inclusion criteria: NCRB reports (2018–2022), English language, peer-reviewed or official documents.

Exclusion criteria: Pre-2018, non-Indian studies, non-English publications, editorials/case reports without primary data, duplicates, and studies lacking a focus on suicide.

Global Context: The WHO "LIVE LIFE" Framework

Globally, suicide claims over 700,000 lives per year; it is the third leading cause of death among 15–29-year-olds, with 73% of suicides in low- and middle-income countries [1,2].

WHO's LIVE LIFE framework recommends:

Limiting access to means (e.g., pesticides, drugs, firearms)
Interacting responsibly with the media
Valorizing socio-emotional skills in youth
Early identification, management, and support of at-risk individuals and communities.[3].

Legislation and Policy Interventions

Mental Healthcare Act 2017: Paradigmatic reform decriminalising suicide attempts under Section 115, the Act presumes "severe stress" and mandates government rehabilitation with care and treatment rather than punishment. [4,5]

National Suicide Prevention Strategy 2022: India's first national strategy, launched in Nov 2022, follows the WHO LIVE LIFE framework, targeting 10% reduction in suicide mortality by the year 2030.[3]

Healthcare Infrastructure

Mental health services are being integrated with Ayushman Bharat Health scheme and Wellness Centres. However, <4,000 mental health professionals are available in India posing a significant challenge.[4]

Educational Institutions: UGC Regulations 2009 mandate anti-ragging cells, helplines, and committees. Ragging complaints have increased to 208% from 2012 to 2022. National helpline (1800-180-5522) operates in 12 languages. [3,4,5]

Epidemiology and Demographic Trends in India

Incidence and Trends

India's suicide mortality rate rose to 12.4 per 100,000 population in 2022, accompanied by a male-to-female ratio of 72.5:27.4, reflecting persistent and emerging trend. [1,7]

Age and Gender Distribution

67% of suicides occur between the ages of 18 and 45, marking suicide as the leading cause of death in this group. Male suicides are numerically predominant, yet female suicide rates are also high among married women and homemakers. [7,8,9]

Geographic and Urban-Rural Disparities

States including Maharashtra, Tamil Nadu, and Madhya Pradesh report the highest suicide counts, while states like Kerala and Chhattisgarh register elevated per capita rates. Urban centres have higher suicide rates compared to rural areas, [8,9].

Socioeconomic and Psychological Determinants

Family problems (31.7%), chronic illness (18.4%), substance abuse, and marriage-related problems are primary reasons as reported by NCRB. Economic insecurity, particularly among daily wage earners who represent 26% of suicide victims, alongside financial indebtedness and unemployment, increases risk of suicide [8,9,10].

Education: In 2019, 12.6% of suicide victims were illiterate, and 23.3% were educated up to the matric level, with only 3.7% being graduates and above.

Students: Student suicides number over 13,000 annually (7.6% of total suicides), with academic pressure, ragging, mental stress, fear of failure and past attempts being contributing factors [10,11].

Farmers and Agricultural Workers: Agricultural distress persists with more than 11,000 suicides in 2022, attributed mainly to crop failures, debt cycles, limited access to mental health care and uneven implementation of government food and agricultural support schemes [9-11].

Armed Forces: Between 2014 and 2021, 787 suicides were reported in the Indian Armed Forces, with the Army accounting for 591 cases, attributed mainly to operational stress, family separation, and career stagnation [6].

Methods of Suicide

Hanging (58.2%) remains the most prevalent method, owing to accessibility and pain free death. Pesticide poisoning is the second most common, especially in rural areas [6,7,8].

Impact of the COVID-19 Pandemic

The pandemic intensified mental health stress, leading to increased suicide rates, particularly among males and poor socioeconomic groups, contributed by Lockdowns, unemployment, social isolation, and fear of illness. [9,12].

Discussion

This review shows that India's suicide rates have risen from 10.2 per 100,000 in 2018 to 12.4 per 100,000 in 2022, with much of this increase observed during the COVID-19 pandemic period. The rise can be attributed to a complex interplay of socio-economic and psychosocial factors and requires urgent, multisectoral action. Socio-economic determinants (family conflict, debt, illness) outweigh solely psychiatric factors, necessitating integration of health services with social support systems. Family issues remain the most common cause, indicating that domestic and interpersonal factors are central to suicide in India. Young adults and middle-aged individuals are most vulnerable and have major socio-economic implications since they are productive age groups. The male predominance reflects gender differences in coping styles, stress exposure, and help-seeking behaviour. Vulnerable occupational groups—daily wage earners, students, farmers, and housewives require counselling services, social support integration, and targeted interventions. Maharashtra, Tamil Nadu, and Madhya Pradesh account for nearly one-third of all suicides, reflecting urban stress, migration, and economic pressures. In terms of state-specific rates, Kerala (28.5 per 100000), Chhattisgarh (28.2), and Telangana (26.2) report the highest burdens, highlighting disparities in socio-economic and psychological stressors.

Legislative progress (MHCA 2017, NSPS 2022) aligns India with the WHO's global evidence, but implementation and service gaps persist, particularly highlighted during the COVID-19 pandemic. [6-10]

Suicide Prevention Strategies

- Enhancing surveillance and data collection to identify and target high-risk groups.
- Expanding mental health services in primary health-care.
- Implementing gatekeeper training programs in schools, workplaces, and communities.
- Incorporating mindfulness training to enhance resilience, memory, and stress regulation.
- Scaling evidence-based models such as the SEHER program, which improves school climate and reduces depression.
- Promoting family therapy to mitigate intergenerational trauma and manage unrealistic familial expectations.
- Restricting access to lethal means such as pesticides and means of hanging.

- Conducting sustained public awareness campaigns.
- Establishing crisis helpline numbers, such as the 24/7 toll-free Tele-MANAS program and mental health first responders.

Challenges and Barriers

Persistent stigma and socio-cultural taboos prevent people from seeking help and care. Lack of adequate mental health workers and resources limits the access and quality of treatment. Under-reporting of suicide deaths is estimated at 27% for males and 50% for females, with greater gaps in low socioeconomic states, further weakening the policy response. [10,13]

Conclusion

Suicide in India is both a personal tragedy and a public health failure. This review supports an integrated, evidence-based strategy using multisectoral collaborations to reduce India's growing burden of suicides. Forensic medicine has a critical role in this effort. Post-mortem findings, cause-of-death certification, and medicolegal documentation provide the foundational evidence upon which the suicide prevention policies are built. These data not only establish mortality trends but also reflect the underlying social realities—the debt cycle of a farmer, the silent stress of a student, or the invisible struggles of a homemaker.
In essence, suicide in India should be treated not only as a psychiatric disorder but also as a socio-legal and public health emergency. Only when health, law, education, agriculture, labour, and community systems work together will we be able to reverse this disturbing trend.

Declarations

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Competing Interests The authors declare that they have no competing interests.

Ethics Approval Not applicable (review article based on publicly available data and reports).

Consent to Participate Not applicable.

Consent for Publication Not applicable.

Availability of Data and Materials All data analyzed in this study are from publicly available government reports, WHO publications, and peer-reviewed journal articles cited in the References.

Code Availability Not applicable.

Authors' Contributions Conceptualization, design, literature search, data analysis, manuscript drafting: Dr. Hardik Upadhyay. Critical review, manuscript editing, intellectual content: Dr. Ashish S. Singhal. Guarantor: Dr. Hardik Upadhyay.

Use of Generative AI and AI-assisted Technologies During the preparation of this work, the authors used generative AI tools for language editing, formatting, and figure generation. After using these tools, the authors reviewed and edited the content and assume full responsibility for the integrity and accuracy of the final manuscript.

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References

National Crime Records Bureau (NCRB). Accidental deaths & suicides in India—2022. New Delhi: NCRB; 2023. Available from: https://data.opencity.in/dataset/accidental-deaths-and-suicides-in-india-2022

Times of India. 468 people took their lives every day in 2022: NCRB data. 2023 Dec 5. Available from: https://timesofindia.indiatimes.com/city/delhi/468-people-took-their-lives-every-day-in-2022-ncrb-data/articleshow/105738471.cms

World Health Organization. LIVE LIFE: An implementation guide for suicide prevention. Geneva: WHO; 2021. Available from: https://www.who.int/publications/i/item/9789240026629

National Crime Records Bureau (NCRB). Accidental deaths & suicides in India—2019 & 2022 tables. New Delhi: NCRB; 2022. Available from: https://data.gov.in/catalog/accidental-deaths-suicides-india-adsi-2019

Government of India. Mental Healthcare Act, 2017 (Section 115).

Available from: https://indiankanoon.org/doc/53099207/

Kashmir Media Service. Suicide cases on the rise in Indian Army. 2025 Jan 31. Available from: https://kmsnews.org/kms/2025/01/31/suicide-cases-in-indian-army-on-the-rise.html

Swain PK, Tripathy MR, Priyadarshini S, Acharya SK. Forecasting suicide rates in India: an empirical exposition. PLoS One. 2021;16(7):e0255342. doi:10.1371/journal.pone.0255342

Dandona R, Kumar GA, Dhaliwal RS, et al. Gender and state variations in suicide deaths in India: the Global Burden of Disease Study 1990–2016. Lancet Public Health. 2018;3(10):e478–e489. doi:10.1016/S2468-2667(18)30138-5

Arya V, Page A, Dandona R, Vijayakumar L, Mayer P, Armstrong G. The geographic heterogeneity of suicide rates in India by religion, caste, tribe, and OBC. Crisis. 2019;40(5):370–374. doi:10.1027/0227-5910/a000551

Arya V, Page A, Vijayakumar L, Onie S, Tapp C, John A, et al. Changing profile of suicide methods in India: 2014–2021. J Affect Disord. 2023;340:420–426. doi:10.1016/j.jad.2023.07.008

Arya V, Page A, Gunnell D, Armstrong G. Changes in suicide methods after a national pesticide ban in India (2011–2014). J Affect Disord. 2021;278:592–600. doi:10.1016/j.jad.2020.09.062

Arya V, Page A, Armstrong G, Kumar AG, Dandona R. Under-reporting of suicide deaths in India: comparison of NCRB and GBD estimates. J Epidemiol Community Health. 2021;75(6):550–555. doi:10.1136/jech-2020-214482

Ministry of Health & Family Welfare. National suicide prevention strategy, 2022. New Delhi: MoHFW; 2022. Available from: https://www.mohfw.gov.in/sites/default/files/Final%20National%20Suicide%20Prevention%20Strategy%202022.pdf

World Health Organization. Suicide fact sheet (2025 update). Geneva: WHO; 2025. Available from: https://www.who.int/news-room/fact-sheets/detail/suicide

Figure 1: Suicide trends in India from 2018 to 2022

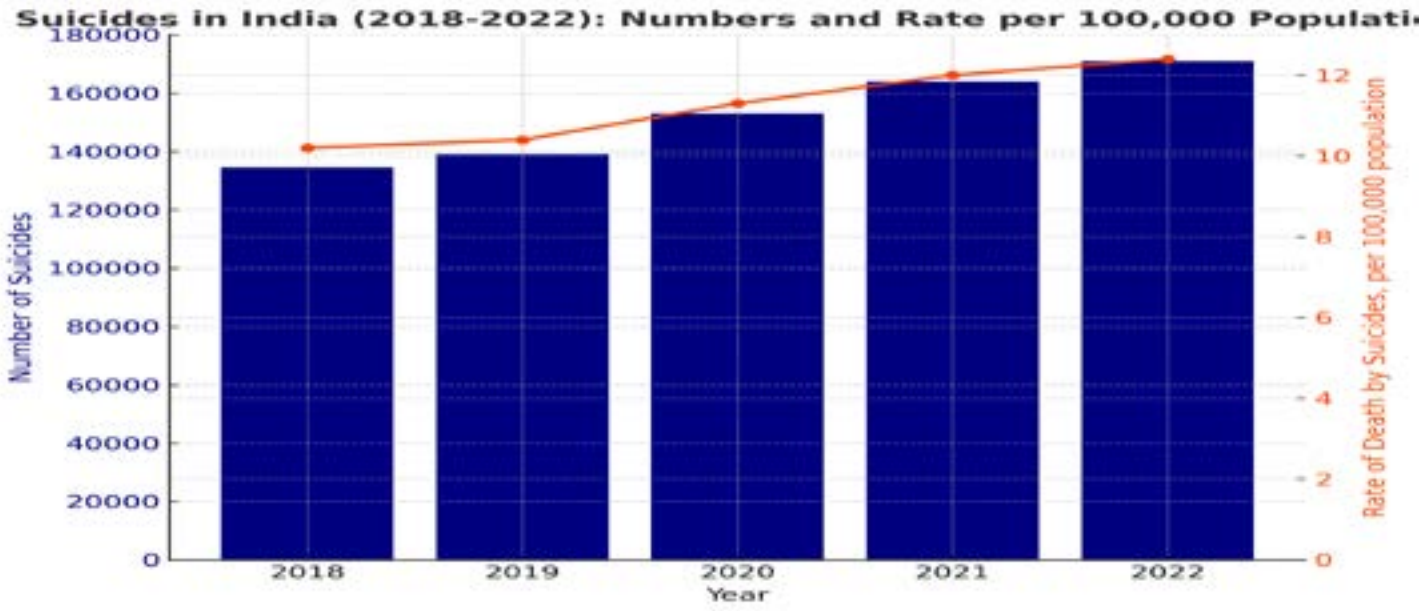

Figure 2: Suicide rates by states in 2022.

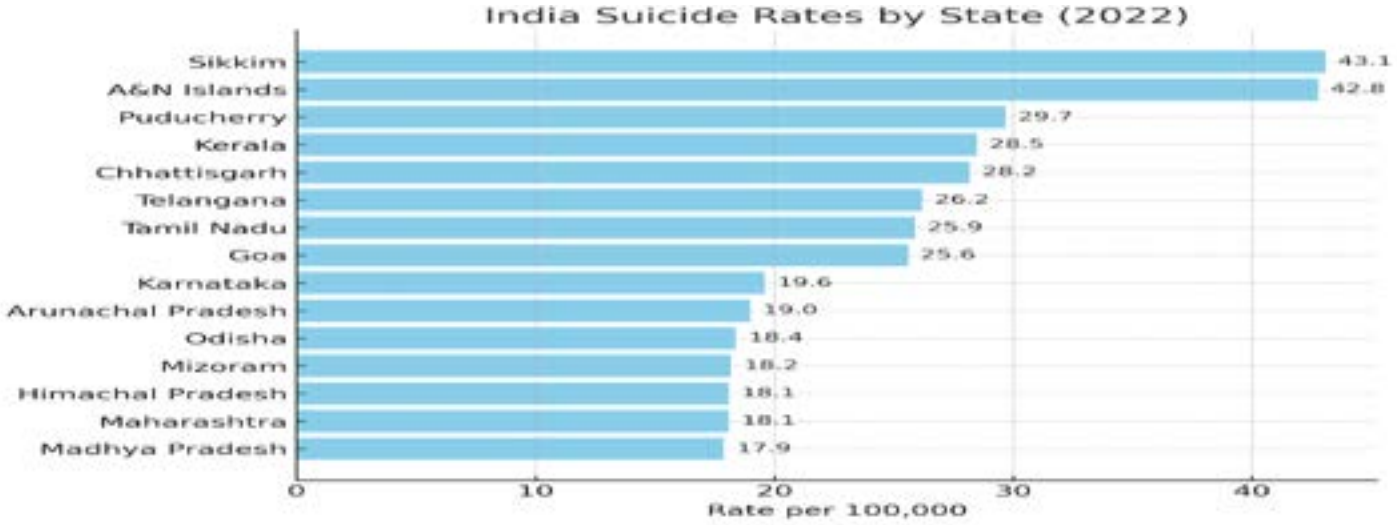

Figure 3: Share of suicides by states in 2022

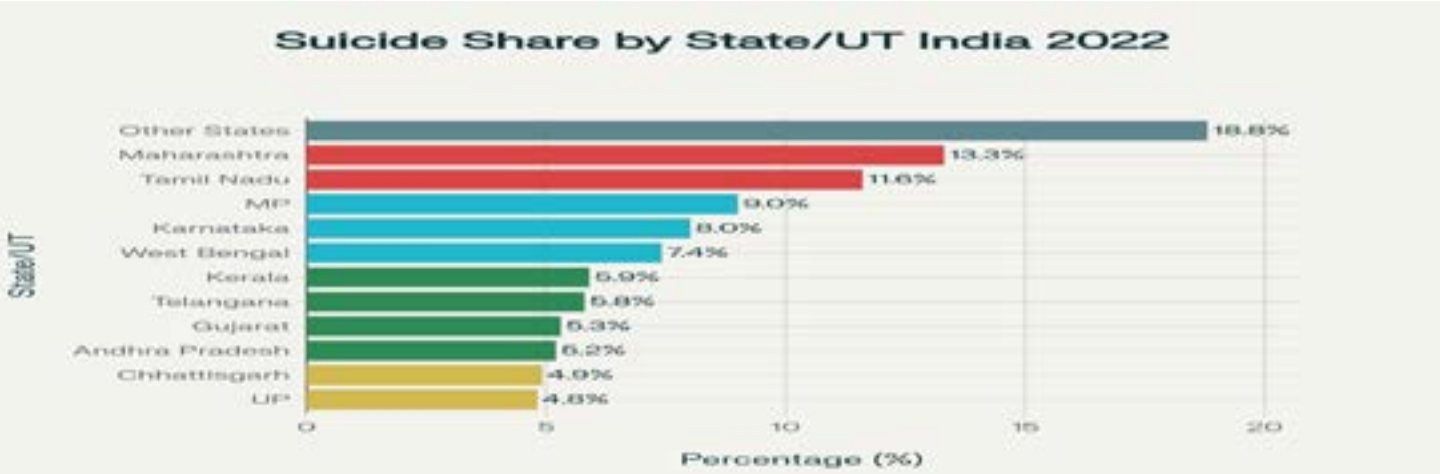

Figure 4: Distribution of causes of suicides in 2022.

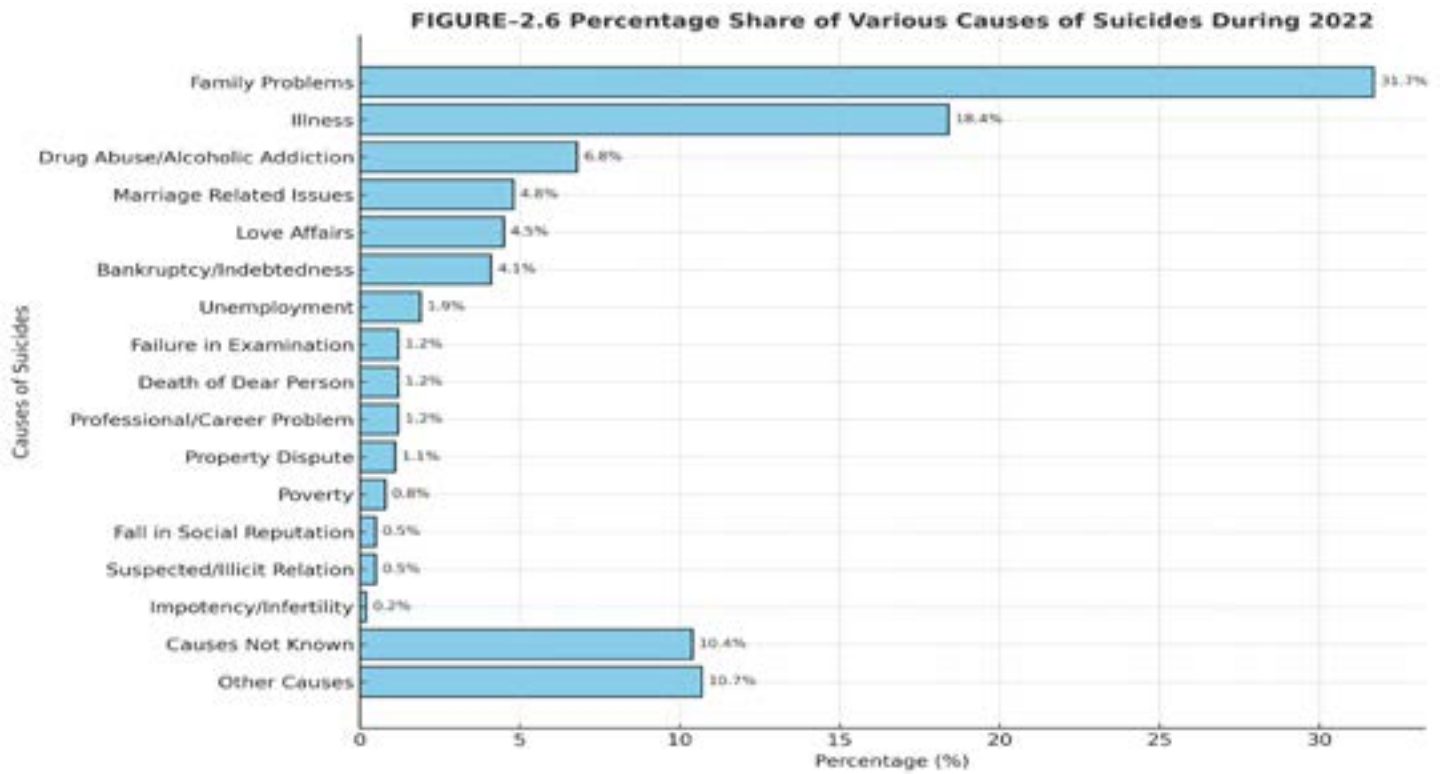

Figure 5: Suicide victims by gender and age in 2022

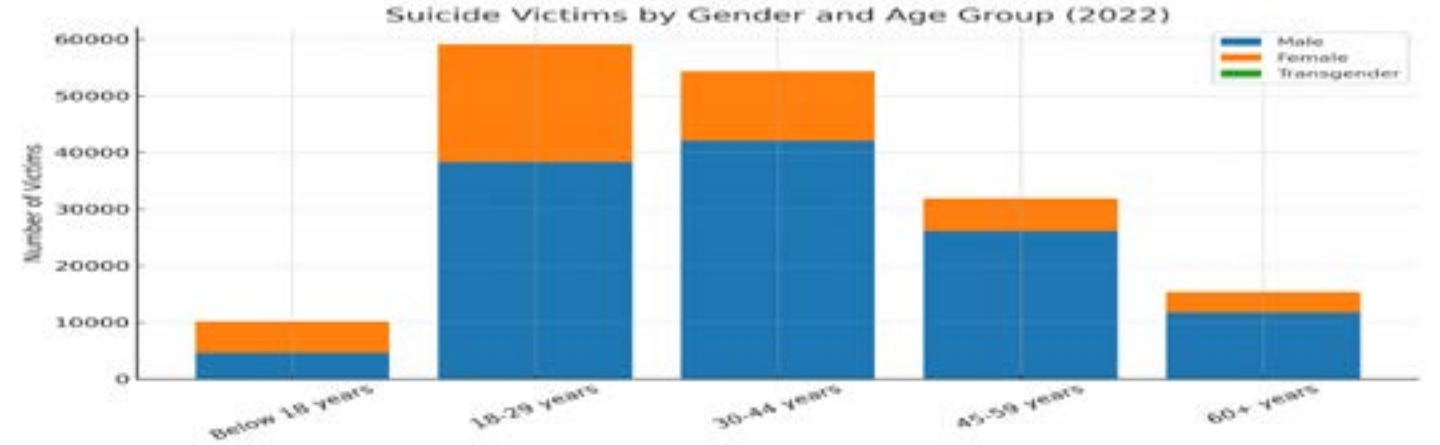

Figure 6: Suicide victims by profession in 2022