

Age, Gender and Marital Status as Correlates of Suicide in India during 2020-2024

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Abstract: ***Background:** Suicide is an important public health concern in India. On examining the distribution of recorded suicides by age, gender and marital status, the demographic patterns relevant to prevention planning can be identified. **Objective:** To describe the distribution of recorded suicide deaths in India by age group, gender and marital status from 2020 to 2024. **Methods:** A retrospective descriptive analysis was prepared using the annual aggregated counts obtained from the open dataset regarding the Accidents and suicide deaths in India reports from 2020 to 2024. Frequencies, proportions and trends between 2020 and 2024 were summarized. **Results:** The annual total increased by 11.6% during 2020-2024. People aged 18-44 years accounted for the largest share of recorded deaths. Male deaths represented approximately 70.9% of the total in 2020 and 73.5% in 2024. Married individuals comprised the largest marital-status category of suicides in each year. **Conclusion:** The data demonstrated important differences in the distribution of recorded suicidal deaths across various demographic groups. However, aggregated counts alone cannot establish individual risk or causation. Verified official source tables, population denominators and more detailed analyses are needed before drawing stronger conclusions.*

Keywords: India, suicide mortality, age group, gender, marital status

1. Introduction

Suicide is a complex and preventable public health concern shaped by interacting individual, interpersonal, community and societal circumstances.^{1,2} In India, prevention planning must account for the country's large population, regional diversity, differences in access to healthcare, varied family and community structures, and substantial social and economic inequalities. Reliable surveillance is essential for understanding the distribution of deaths and identifying areas where further investigation and prevention services may be needed.^{3,4}

Age is an important dimension of suicide surveillance. Indian studies have identified substantial variation in suicide mortality by age, although the pattern differs according to sex, geography and the data source used.^{3,5,6} Adolescence and young adulthood can involve educational pressure, transitions into employment, changing peer relationships and family expectations. Adults in their thirties and forties may face employment insecurity, financial responsibilities, caregiving demands and relationship difficulties. Older adults may experience bereavement, social isolation, chronic illness or reduced independence. These circumstances are potential topics for further investigation; they cannot be confirmed as explanations for the deaths using age-group counts alone. Gender differences in recorded suicide deaths are also relevant to public health planning. Indian studies report differences by sex and age, alongside variation in suicide mortality across states and over time.^{3,5,7,8} Social expectations, occupational and economic circumstances, access to support, help-seeking behaviour and differences in the circumstances of deaths may be relevant, but their contributions must be assessed using appropriate evidence. A difference in the number of deaths is not equivalent to a difference in population-adjusted risk.

Marital status may provide another useful descriptive characteristic. Indian surveillance research has found that the

distribution of deaths by marital status varies by sex, year and state; absolute counts alone cannot establish whether marital status increases or reduces risk.^{9,10} Marriage, unmarried status, widowhood, divorce and separation can be associated with different life circumstances, but marital status is not a direct measure of relationship quality, social support or psychological well-being. In India, interpretation also requires attention to population structure, age, gender, regional variation and completeness of recording. The National Crime Records Bureau (NCRB) publishes annual data on accidental deaths and suicides in India, providing an important source for examining recorded suicide mortality and its demographic distribution.¹¹⁻¹⁵ However, administrative mortality data should be interpreted in the context of reporting practices, data completeness and population denominators. Comparisons with other estimates of suicide mortality have raised concerns about possible under-enumeration in official data.^{3,4}

This study describes the supplied national data for 2020-2024 by age group, gender and marital status. It aims to provide a cautious, India-focused summary of the observed patterns and to identify implications for suicide surveillance and prevention without assuming that the demographic characteristics examined cause suicide.

2. Objectives

The primary objective was to describe the distribution of recorded suicide deaths in India by age group, gender and marital status during 2020-2024.

3. Materials and Methods

3.1 Study design

A retrospective descriptive analysis of annual aggregated suicide mortality counts for India from 2020 through 2024 was undertaken.

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3.2 Data source

The variables employed for the study included calendar year, age group (below 18, 18-29, 30-44, 45-59, and 60 years and above), gender category (male, female and transgender), and marital status (unmarried, married, widowed/widower, divorced, separated, others and status not known). The data were obtained from the Accidental Deaths & Suicides in India reports published by the National Crime Records Bureau (NCRB).¹¹⁻¹⁵

3.3 Statistical analysis

Descriptive statistics such as frequencies and percentages were used to summarise the annual distribution of recorded suicide deaths by age group, gender and marital status for the period 2020-2024.

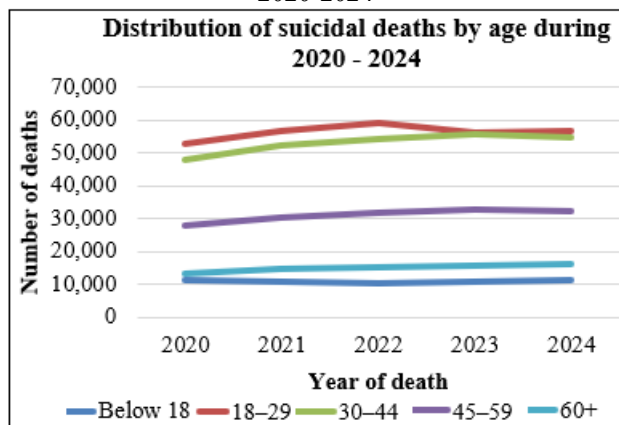
4. Results

4.1 Overall annual pattern

According to the supplied figures from the NCRB annual series, the total number of recorded deaths increased from 153,052 in 2020 to 164,033 in 2021 and 170,924 in 2022. The total reached 171,418 in 2023 and then declined to 170,746 in 2024.¹¹⁻¹⁵ The difference between 2020 and 2024 was 17,694 deaths, an increase of approximately 11.6%. The 2024 total was 672 deaths, or approximately 0.4%, lower than the 2023 total.

4.2 Distribution of suicidal deaths by age

Table 1: Recorded suicide deaths by age group in India, 2020-2024



The 18-29-year age group had the largest count in 2020, 2021 and 2022, while the 30-44-year group had the largest count in 2023 and 2024. Combined, the 18-29 and 30-44-year groups accounted for approximately 65.8% of recorded deaths in 2020 and 65.2% in 2024.

From 2020 to 2024, the recorded count increased by approximately 7.2% in the 18-29-year group and 14.4% in the 30-44-year group. The count for people aged 60 years and above increased from 13,126 to 16,036, a rise of approximately 22.2%, the largest proportional increase among the supplied age categories. This is a change in counts, not proof of an increase in age-specific risk; population

ageing and changes in population size must be considered.^{3,5,6}

The count for people below 18 years declined between 2020 and 2022 and subsequently increased to 11,184 in 2024. This pattern indicates annual variation. It should not be interpreted as a sustained decline or rise without examining rates and data quality.

4.3 Distribution of suicidal deaths by gender

Table 2: Recorded suicide deaths by gender in India during 2020-2024

Year	Male n (%)	Female n (%)	Transgender n (%)
2020	108,532 (70.9%)	44,498 (29.1%)	22 (0.014%)
2021	118,979 (72.5%)	45,026 (27.5%)	28 (0.017%)
2022	122,724 (71.8%)	48,172 (28.2%)	28 (0.016%)
2023	124,730 (72.8%)	46,648 (27.2%)	40 (0.023%)
2024	125,449 (73.5%)	45,245 (26.5%)	52 (0.030%)

Male deaths accounted for the majority of recorded deaths in each year. The male count rose from 108,532 in 2020 to 125,449 in 2024, an increase of approximately 15.6%. Moreover, the suicidal deaths of females increased from 44,498 in 2020 to 48,172 in 2022 and then declined to 45,245 in 2024. The supplied male share rose from 70.9% in 2020 to 73.5% in 2024.

The recorded deaths by suicide among the transgender category increased from 22 in 2020 to 52 in 2024. Since these counts are small, year-to-year comparisons should be cautious. Recording practices, classification, completeness and access to services may affect the observed figures. The data do not establish difference between gender categories or estimate the risk for individuals in those groups. Research on suicide mortality in India also demonstrates that gender patterns should be examined alongside age and regional variation.^{3,7,8}

Table 3: Recorded suicide deaths by marital status in India during 2020-2024

Marital status	2020	2021	2022	2023	2024
Unmarried	36,803 (24.0%)	39,421 (24.0%)	42,049 (24.6%)	44,756 (26.1%)	43,431 (25.4%)
Married	101,181 (66.1%)	109,749 (66.9%)	114,485 (67.0%)	114,929 (67.0%)	115,180 (67.5%)
Widowed	2,491 (1.6%)	2,485 (1.5%)	2,518 (1.5%)	2,711 (1.6%)	2,640 (1.5%)
Divorced	831 (0.5%)	788 (0.5%)	960 (0.6%)	1,113 (0.6%)	1,074 (0.6%)
Separated	963 (0.6%)	871 (0.5%)	999 (0.6%)	1,097 (0.6%)	1,218 (0.7%)
Others	2,170 (1.4%)	2,192 (1.3%)	2,757 (1.6%)	2,370 (1.4%)	2,038 (1.2%)
Unknown	8,613 (5.6%)	8,527 (5.2%)	7,156 (4.2%)	4,442 (2.6%)	5,165 (3.0%)
Total	153,052 (100%)	164,033 (100%)	170,924 (100%)	171,418 (100%)	170,746 (100%)

Married individuals formed the largest category of suicides in every year. The recorded count increased from 101,181 in 2020 to 115,180 in 2024, a rise of approximately 13.8%. In 2024, the married category represented approximately 67.5%

of the annual total. The unmarried count rose from 36,803 in 2020 to 44,756 in 2023 and then declined to 43,431 in 2024. Counts for the widowed category fluctuated between 2,485 and 2,711. The divorced category increased from 831 in 2020 to 1,074 in 2024, with fluctuations between years. The separated category increased from 963 to 1,218. The count for which marital status was not known declined from 8,613 in 2020 to 4,442 in 2023 and then rose to 5,165 in 2024.

The large number of deaths in the married category should not be interpreted as evidence that marriage itself increases suicide risk. The number of married people in the population, their age distribution, gender, social circumstances and the quality and completeness of marital-status recording are not accounted for in these descriptive counts. Research using NCRB data has also examined variation in the recorded characteristics of women who died by suicide, illustrating the value of examining demographic categories in their wider social and geographical contexts.^{9,10}

5. Discussion

5.1 Age and suicide mortality in the Indian context

The concentration of recorded deaths among people aged 18–44 years makes young and middle adulthood important groups for further public health investigation. Nationally representative mortality research and NCRB-based analyses have also highlighted the substantial burden among younger and working-age populations, while showing that age patterns vary by sex and geography.^{3,5,6,16} In India, the transition from education to employment, financial obligations, family responsibilities, migration and changing social expectations may be relevant contextual factors. However, none of these factors was measured in the supplied dataset, and the present analysis cannot attribute deaths to them.

The increase in counts among people aged 60 years and above merits further examination alongside population ageing and age-specific rates. Because this analysis uses counts rather than population denominators, it cannot establish a change in age-specific risk. Research on Indian suicide mortality has documented substantial state-level heterogeneity, underscoring the need for age-standardised and geographically disaggregated analyses.^{7,8}

The observed distribution also highlights the importance of examining suicide mortality across the life course rather than focusing exclusively on one age category. Future research should consider access to healthcare, chronic illness, bereavement, living arrangements, social connection and regional differences using suitable data rather than assuming that these circumstances explain the observed trend.

5.2 Gender differences and prevention

The persistent predominance of male deaths in these supplied counts suggests that prevention planning should examine the circumstances and support needs of men as well as those of women and transgender people. However, sex differences in suicide deaths can vary by age, and population-based studies have reported a substantial burden of suicidality among women even when mortality counts are lower.^{3,6,18} Potential

areas for investigation include employment and financial pressures, help-seeking, access to mental healthcare, substance use and differences in the circumstances of deaths. The supplied counts cannot determine the contribution of any of these factors.

A lower count of recorded deaths in a gender category does not imply a low burden of psychological distress or non-fatal self-harm. Mortality, suicide attempts, self-harm, service use and mental health outcomes are distinct measures and should be studied separately. The World Health Organization emphasises the need for comprehensive prevention approaches that combine surveillance, early identification, timely support and coordinated action across sectors.^{1,21,22}

The increase in the recorded number of deaths among transgender people warrants careful attention, but the small counts do not support reliable conclusions about changes in population-level risk. Inclusive, non-stigmatising services and respectful demographic recording are important considerations for Indian health systems.

5.3 Marital status, family structure, and social support

The married category contributed the largest absolute number of recorded deaths throughout the study period. This pattern needs to be interpreted in the context of the population distribution of marital status. Marriage can provide companionship and support, but marital status alone does not indicate relationship quality or protection from distress. Similarly, unmarried, divorced, separated and widowed people have diverse experiences and levels of support.

NCRB-based research on women has examined how the demographic characteristics of recorded suicide deaths vary across time and place, reinforcing the importance of contextual analysis rather than interpreting marital status in isolation.^{9,10} Further Indian studies could examine marital status alongside age, gender, state or district, socioeconomic conditions, family circumstances and access to services. Such analyses would help avoid treating broad demographic categories as explanations for individual deaths.

The relatively large proportion of deaths recorded among married individuals may partly reflect the size and age structure of the married population. Establishing whether marital status is associated with higher or lower suicide risk would require population denominators and appropriate statistical adjustment for potential confounding variables.

5.4 Implications for Indian public health policy

The results support continued investment in high-quality suicide surveillance and accessible prevention services. India's National Suicide Prevention Strategy identifies suicide prevention as a multisectoral public health priority, while the World Health Organization recommends coordinated surveillance, responsible media reporting, life-skills development, limiting access to lethal means and timely support for people affected by suicidal behaviour.^{19–22}

Priorities for assessment may include age-appropriate support for adolescents and young adults, services accessible to

working-age adults, attention to the needs of older people, gender-responsive approaches and support for people experiencing relationship breakdown or bereavement. These are policy considerations, not intervention effects demonstrated by this study.

India's diversity means that national figures should be complemented by state- and district-level analysis. Public health planning should use reliable population denominators, consistent definitions, improved recording of demographic information and evaluation of prevention initiatives. Collaboration among healthcare services, educational institutions, community organisations and relevant public agencies may help improve identification of needs and access to support.

The interpretation of official mortality statistics also requires attention to data quality. Research comparing administrative data with other estimates of suicide mortality in India has raised concerns about potential under-reporting.^{3,4} Consequently, changes in recorded deaths should not automatically be interpreted as equivalent changes in the true incidence of suicide. Improved death registration, consistent classification and transparent documentation of data revisions are important for monitoring progress.

6. Strengths of the study

The study provides a descriptive overview of the supplied national figures across five consecutive years, allowing demographic patterns to be examined consistently across age group, gender and marital status. Its use of aggregated data also permits a straightforward presentation of the recorded mortality burden without exposing individual-level information.

The analysis may serve as a starting point for more detailed investigations using population denominators, state-level data and longer time series. However, its contribution is descriptive: it identifies patterns in the supplied counts but does not establish causal relationships, explain individual deaths or evaluate the effectiveness of suicide prevention interventions.

7. Limitations

Population denominators were not available; therefore, the analysis reports counts and distributions rather than population-adjusted suicide rates. Aggregated data do not permit individual-level analysis, adjustment for confounding or conclusions about causation.

The dataset does not contain clinical, socioeconomic, regional or circumstance-of-death information that could help explain the observed patterns. Research comparing NCRB administrative data with other mortality estimates has raised concerns about possible under-enumeration and variation in reporting.^{3,4} Therefore, the present results should be interpreted as recorded deaths rather than a definitive estimate of the full burden.

Changes in reporting completeness and demographic classification may affect comparisons between years. The

five-year period is relatively short for distinguishing sustained long-term trends from annual variation. The supplied figures also require verification against the corresponding original NCRB reports before publication. The analysis should not be interpreted as evidence of individual risk or as establishing causal relationships between demographic characteristics and suicide.

8. Conclusion

The supplied data for 2020-2024 show an overall increase in recorded suicide deaths in India, with the annual total peaking in 2023 and declining slightly in 2024. People aged 18-44 years accounted for the largest share of deaths, male deaths consistently exceeded female deaths, and married individuals formed the largest marital-status category. These findings describe the distribution of recorded deaths and should not be interpreted as proof that age, gender or marital status independently causes suicide or determines individual risk.

A stronger understanding of suicide mortality in India requires verification of the underlying official data, population-adjusted rates, disaggregated regional analysis and research into the social and service-related circumstances associated with deaths. Reliable surveillance and accessible, inclusive, evidence-informed prevention services should remain central to public health planning.^{1, 3, 19, 21}

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Conflict of interest

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References

- [1] World Health Organization. Suicide [Internet]. Geneva: World Health Organization; 2025 [cited 2026 Oct 12]. Available from: <https://www.who.int/news-room/fact-sheets/detail/suicide>
- [2] Rane A, Nadkarni A. Suicide in India: a systematic review. *Shanghai Arch Psychiatry*. 2014;26(2):69-80. doi:10.3969/j.issn.1002-0829.2014.02.003.
- [3] Dandona R, Bertozzi-Villa A, Kumar GA, Dandona L. Lessons from a decade of suicide surveillance in India: who, why and how? *Int J Epidemiol*. 2017;46(3):983-93. doi:10.1093/ije/dyw113.
- [4] Arya V, Page A, Armstrong G, Kumar GA, Dandona R. Estimating patterns in the under-reporting of suicide deaths in India: comparison of administrative data and Global Burden of Disease Study estimates, 2005-2015. *J Epidemiol Community Health*. 2021;75(6):550-5. doi:10.1136/jech-2020-215260.
- [5] Patel V, Ramasundarahettige C, Vijayakumar L, Thakur JS, Gajalakshmi V, Gururaj G, et al.; Million Death Study Collaborators. Suicide mortality in India: a

- nationally representative survey. *Lancet*. 2012;379(9834):2343-51. doi:10.1016/S0140-6736(12)60606-0.
- [6] Mayer P, Ziaian T. Suicide, gender, and age variations in India. Are women in Indian society protected from suicide? *Crisis*. 2002;23(3):98-103. doi:10.1027//0227-5910.23.3.98.
- [7] India State-Level Disease Burden Initiative Suicide Collaborators. Gender differentials 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.
- [8] Arya V, Page A, River J, Armstrong G, Mayer P. Trends and socio-economic determinants of suicide in India: 2001-2013. *Soc Psychiatry Psychiatr Epidemiol*. 2018;53(3):269-78. doi:10.1007/s00127-017-1466-x.
- [9] Dandona R, Kumar GA, Dhaliwal RS, Naghavi M, Vos T, Shukla DK, et al. Sociodemographic characteristics of women who died by suicide in India from 2014 to 2020: findings from surveillance data. *Lancet Public Health*. 2023;8(4):e309-e317. doi:10.1016/S2468-2667(23)00028-2.
- [10] Abhijita B, Gnanadhas J, Kar SK, Cherian AV, Menon V. The NCRB Suicide in India 2022 Report: key time trends and implications. *Indian J Psychol Med*. 2024;46(6):606-7. doi:10.1177/02537176241240699.
- [11] National Crime Records Bureau. Accidental deaths & suicides in India 2020. New Delhi: Ministry of Home Affairs, Government of India; 2021. Available from: <https://ncrb.gov.in/>
- [12] National Crime Records Bureau. Accidental deaths & suicides in India 2021. New Delhi: Ministry of Home Affairs, Government of India; 2022. Available from: <https://ncrb.gov.in/>
- [13] National Crime Records Bureau. Accidental deaths & suicides in India 2022. New Delhi: Ministry of Home Affairs, Government of India; 2023. Available from: <https://ncrb.gov.in/>
- [14] National Crime Records Bureau. Accidental deaths & suicides in India 2023. New Delhi: Ministry of Home Affairs, Government of India; 2024. Available from: <https://ncrb.gov.in/>
- [15] National Crime Records Bureau. Accidental deaths & suicides in India 2024. New Delhi: Ministry of Home Affairs, Government of India; 2025. Available from: <https://ncrb.gov.in/>
- [16] Arya V, Page A, Spittal MJ, Dandona R, Vijayakumar L, Munasinghe S, et al. Suicide in India during the first year of the COVID-19 pandemic. *J Affect Disord*. 2022;307:215-20. doi:10.1016/j.jad.2022.03.066.
- [17] Sauvagat C, Ramadas K, Fayette JM, Thomas G, Thara S, Sankaranarayanan R. Completed suicide in adults of rural Kerala: rates and determinants. *Natl Med J India*. 2009;22(5):228-33.
- [18] Gautham MS, Gururaj G, Varghese M, Benegal V, Rao GN, Kokane A, et al. A population-based analysis of suicidality and its correlates: findings from the National Mental Health Survey of India, 2015-16. Bibliographic details should be verified before submission.
- [19] Vijayakumar L, Chandra PS, Kumar MS, Pathare S, Banerjee D, Goswami T, et al. The national suicide prevention strategy in India: context and considerations for urgent action. *Lancet Psychiatry*. 2022;9(2):160-8. doi:10.1016/S2215-0366(21)00152-8.
- [20] Singh OP. National suicide prevention strategy of India: great leap forward in field of mental health. *Indian J Psychiatry*. 2023;65(1):1-2. doi:10.4103/indianjpsychiatry.indianjpsychiatry_835_22.
- [21] World Health Organization. Preventing suicide: a global imperative. Geneva: World Health Organization; 2014.
- [22] World Health Organization. LIVE LIFE: an implementation guide for suicide prevention in countries. Geneva: World Health Organization; 2021.
- [23] Franklin JC, Ribeiro JD, Fox KR, Bentley KH, Kleiman EM, Huang X, et al. Risk factors for suicidal thoughts and behaviors: a meta-analysis of 50 years of research. *Psychol Bull*. 2017;143(2):187-232. doi:10.1037/bul0000084.
- [24] World Health Organization. Preventing suicide: a resource for media professionals, update 2023. Geneva: World Health Organization; 2023.
- [25] Menon V, Mani AM, Kurian N, et al. Newspaper reporting of suicide news in a high suicide burden state in India: is it compliant with international reporting guidelines? *Asian J Psychiatr*. 2021;60:102647. doi:10.1016/j.ajp.2021.102647.
- [26] Ransing R, Arafat SMY, Menon V, Kar SK. National suicide prevention strategy of India: implementation challenges and the way forward. *Lancet Psychiatry*. 2023;10(3):163-5. doi:10.1016/S2215-0366(23)00027-5.
- [27] World Health Organization. Suicide worldwide in 2019: global health estimates. Geneva: World Health Organization; 2021.