

Measures to Improve the Quality of National Suicide Data of India: The Way Forward

Ramdas Ransing¹, Vikas Menon², Sujita Kumar Kar³ , S MYasir Arafat⁴ and Susanta Kumar Padhy⁵

Suicide-related mortality statistics varies across countries, as it is influenced by several risk factors.¹ India accounts for more than 1/4th of global suicides.² Behind every suicide death in India, there are more than 15 attempts for suicide and more than 200 people with suicidal ideation.² The recent National Crime Records Bureau (NCRB) data on “Accidental Deaths and Suicides in India” reports that the suicide rate has increased from 10.2 in 2018 to 10.4 in 2019.³ There is a 3.4% rise in suicide compared to the previous year, which is alarming. Considering the urgent need for intervention, the Government of India has started a national helpline to improve access to mental health care, along with some other initiatives.⁴ Also, there is an urgent need to develop some culturally appropriate interventions or strategies to reduce suicide rates. However, to create effective strategies and measure the change at the national or state level, we need comprehensive data on suicide. Quality data is a fundamental challenge across the globe, especially in low and

middle-income countries. According to WHO estimates, among the 183 member states, only a little more than 1/3rd (80) provide high-quality suicide data.⁵ A nationally representative mortality survey found that 3% of the total deaths were due to suicide.⁶ This survey collected mortality data through a household



survey; this indicates that the data source is likely to influence the mortality statistics significantly.

A Brief Overview of NCRB Suicide Data

Since 1967, NCRB publishes yearly reports on suicides in India. As per the latest information, 139,123 Indians have died due to suicide in the year 2019, with the highest number of cases from five states—Maharashtra ($n = 18,916$), West Bengal ($n = 12,665$), Tamil Nadu ($n = 13,493$), Madhya Pradesh ($n = 12,457$), and Karnataka ($n = 11,288$).³ Suicide rates, causative factors, and patterns differ a lot between different states and union territories (UTs). Remarkable difference was observed also in terms of occupation, economic status, age, and educational level of an individual, which may not be unusual, considering India’s cultural diversity. However, several caveats must be considered before utilizing the data for developing a national suicide prevention strategy.

¹Dept. of Psychiatry, BKL Walalwalkar Rural Medical College, Ratnagiri, Maharashtra, India ²Dept. of Psychiatry, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry, India ³Dept. of Psychiatry, King George’s Medical University, Lucknow, Uttar Pradesh, India ⁴ Dept. of Psychiatry, Enam Medical College and Hospital, Dhaka, Bangladesh. ⁵ Dept. of Psychiatry, All India Institute of Medical Sciences, Bhubaneswar, Odisha, India

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Address for correspondence: Sujita Kumar Kar, Dept. of Psychiatry, King George’s Medical University, Lucknow, Uttar Pradesh 226003, India. E-mail: drsujita@gmail.com

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Limitations with the Existing Data

- **Lack of clarity in the systematic compilation of data:** There are crucial gaps (e.g., nonconsideration of hospital-based registry of data, lack of time-bound compilation of data, no regular weekly or monthly update on the NCRB website) and inadequate or no training in the methodology for data collection and compilation, which is variable across states and UTs.⁷ It makes the data obscure and renders them ineffective for policymaking.
- **Use of legal classification system:** NCRB categorizes all offenses, including suicides, per the provisions of the Indian Penal Code (IPC) and other unique and local laws.⁸ This categorization gives more importance to socioeconomic causative factors or reasons for suicides. For instance, while reporting the suicides, NCRB has segregated the numbers based on the grounds depicted by the relatives of the victims (e.g., financial problems). On the other hand, hospital or medical statistics requires information as per the *International Classification of Diseases (ICD)-10/11*. The lack of coordination among the two systems limits the utility of data.
- **Legal ambiguity around the decriminalization of suicide:** In 2011, the Supreme Court of India and 25 out of 29 Indian states recommended the parliament for the decriminalization of suicide attempts.⁹ Subsequently, the Mental Health Care Act (MHCA), 2017, Section 115, has attempted to decriminalize the suicide attempt in a presumption of mental illness. It must be noted that MHCA 2017 does not repeal section 309 of the IPC but merely provides the presumption of mental illness. Therefore, suicide cases are still registered under NCRB data, and a different section of IPC and abetment of suicides can be registered under sections 305 and 306 IPC.¹⁰ On September 12, 2020, the Supreme Court of India has noticed a legal dichotomy (309 IPC and MHCA 2017 section 115), whether to punish suicide survivors or not. The constitutional validity of section

309 is still under consideration with the Supreme Court of India.¹¹ But, in many states, this ambiguity may be affecting the registration process of suicides and suicidal behavior under NCRB. Further, under these laws, there is limited scope to create awareness about suicide and reduce the stigma and behavior around suicide.

- **Heterogeneous reporting practices across states and UTs:** NCRB assembles the data collected from government or UTs' police sources. A few Indian states and UTs have a lacuna in data collection and often send the data after publication of the volume.^{7,12} Further, the data is mostly dependent on public reports, that is, first information report (FIR) filed by police, and is more prone to bias. There is inter-state variation in the reliability and validity of data. Lack of coordination and collaboration between the states in terms of reporting data, too, attributes to such disparities.
- **Potential possibilities of under-reporting and misclassifying suicides:** In some states, only a small and variable proportion of suicide-related deaths are reported to NCRB.¹² This is due to inconsistent approach towards investigation of unnatural deaths, incomplete certification of the cause of death, non-registration of complaints by police (to present a false picture of a decline in suicides and crime), and non-interest of people (due to fear of harassment by the legal system) across states.⁷ Due to fear of criminalizing suicides, many suicide cases are registered as accidental death (e.g., unintentional consumption of pesticide or insecticide instead of alcohol). When the suicide rates of states of India are compared, despite similarities in socio-occupational, climatic, and other challenges, there are gross disparities in the suicide rates (e.g., Madhya Pradesh—15.1 per lakh versus Uttar Pradesh—2.4 per lakh; similarly, West Bengal and Chhattisgarh 13.0 and 26.4 per lakh, respectively, versus Bihar 0.5 per lakh). This could be due to a better suicide registration system in the states with higher reported suicide rates. Further, there are instances where suicides due

to dowry harassment, femicide, student suicides, debt traps, and sexual violence are misreported; therefore, these figures do not fully reflect realities on the ground.^{7,13-15} Similarly, many non-farmer suicides cases are misclassified as farmers' suicides for government benefits.¹⁵ Also, certain religious and social conventions can impact suicide reporting. For example, in Islam, suicide is viewed as sinful and detrimental to one's spiritual journey. Some religions (including the Abrahamic) do not traditionally allow burial in blessed/sacred ground and restrict funereal rites to people who have died of suicide.¹⁶ This stigma in the religious discourse may be internalized by families and lead to both under-reporting or misreporting.

- **Attributing the cause of suicides to socioeconomic factors than mental health issues:** NCRB 2019 data reports that the significant causes of suicides are family problems (32.4%), illness (17.1%), marriage-related issues (5.5%), and drug-abuse/alcohol addiction (5.6%). It highlights the monocausal association between socioeconomic factors and suicides rather than the complex multifactorial realities of suicides. On the contrary, in Maharashtra and the north-west region, studies incorporating psychological autopsy as a method of assessment found that suicides were predominately associated with psychosocial stressors, psychiatric illness, previous suicide attempts, and alcohol use disorders.^{17,18} It indicates that NCRB data has limited value in developing comprehensive strategies for a national suicide prevention program.
- **Undetermined deaths:** In many states, the cause of death remains undecided at the time of reporting, but these undetermined deaths affect the recording of suicide rates.¹²
- **No responsibility for the quality of data:** NCRB mentions that they are not responsible for the authenticity of the information. Data is being furnished by states/UTs, which raises many questions for the quality of suicide data.^{3,8,19}

Despite these concerns, NCRB data provides valuable insight into the patterns of

suicides, suicide rates, and socioeconomic factors in India. However, the concerns mentioned above must be addressed to develop reliable, homogenous, high-quality, and up-to-date databases and comprehensive interventions. We want to recommend some measures that may improve the database.

Recommended Measures to Improve the Quality of Existing Suicide Data of India

- **National suicide registry of India:** To ensure the systematic, homogenous, timely, and efficient data collection with due regard to the sensitive nature of data acquisition, there is a need to develop a national suicide registry of India. A similar kind of registry has been found useful in a few countries such as Malaysia.²⁰
- **Surveillance and monitoring of suicide and suicide attempts:** To improve the availability and quality of data and to reduce the misclassification and un- and under-reporting, there is an urgent need of developing the surveillance and monitoring system as per the WHO's practice manual for establishing and maintaining surveillance systems for suicide attempts and self-harm.²¹
- **Event of undetermined intent:** Event of undetermined intent may be used as per the ICD-10/11 (Y21-33) in the case of questionable deaths, for separate data analysis. This will reduce the over-reporting of individual events as suicide and facilitate homogenous comparison across the world.
- **Strengthening of the system and effective multisectoral collaboration:** Strengthening of existing systems, such as the hospital registry system (private and government), NCRB, and police forces, and state-level registry mechanisms, such as civil registration systems and effective collaboration among them, are needed for accuracy of data. Further, each state government may send monthly data of attempted suicide and complete suicide (similar to maternal and child care services) from primary/secondary/tertiary health care cen-

ters, including medical colleges. Also, Panchayati Raj organizations, such as Gram Panchayat, can play a vital role in suicide data collection. This may help for the beginning of sensitization about suicide prevention strategies at the grass-roots level, which may generate a robust national suicide registry in the long term.

- **Multidisciplinary teams and training:** To understand the complex socioeconomic factors and psychological and biological determinants of suicide, there is a need to establish multidisciplinary teams that include medical experts, psychologists, social workers, and legal experts, under the district mental health program. The team can be trained to record suicide cases using a well-designed case record form.²² Further, efforts may be taken to link the data collection with interventions to reduce the stigma around suicide and improve mental health. Staff training can include clearing the confusion around different terminologies (e.g., suicide, parasuicide, extended suicide, self-harm, deliberate self-harm, non-suicidal self-injury), avoiding using language such as mental patient, using appropriate terms such as death due to or of suicide rather than committed suicide, and conducting the interview sensitively.
- **Sustainability of data collection and monitoring:** Sustainable, scalable, and systematic approach for gathering this data is needed to achieve the long-term goal of suicide reduction in India.
- **The digitalization of data:** A timely publication of data is vital to measure the changes in the pattern of suicides, for generalization and appropriate interventions. Weekly or monthly update of suicide-related data has advantages in predicting the effect of socioeconomic crises such as celebrity suicide or COVID-19 pandemic.²³ The digitalization of data can help to resolve these multiples issues.
- **Cultural and religious considerations:** Attempts can be made to improve the quality of suicide data in the religious minority, tribal, or marginalized populations through adequate consideration of cultural and

religious perspectives. Active involvement of leaders or prominent figures for creating awareness about suicides and efforts to reduce the stigma and discrimination around suicide can help.

Conclusion

In our understanding, NCRB's 2019 suicide data has a limited value from the perspectives of researchers, policymakers, mental health professionals, and other stakeholders. Taking the data at face value will warrant additional emphasis on suicide prevention efforts in Andaman & Nicobar Islands and Sikkim. In contrast, suicide in Bihar and Uttar Pradesh, due to their low rates, will not get due attention. More accurate, reliable, and robust data, with a regular update, is needed to develop effective, scalable, and innovative strategies for suicide prevention in India. To improve the suicide registration, which is otherwise complicated, and multilevel procedures (medical or legal), there is an urgent need to develop the national suicide registry of India under the suicide prevention plan. Continuous, systematic, and sustainable data collection will help in suicide research and to formulate effective policy to achieve the sustainable development goal in 2030, that is, the one-third reduction in the suicide death rate.³

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ORCID iD

Sujita Kumar Kar  <https://orcid.org/0000-0003-1107-3021>

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