New Perspectives in Behavioral & Health Sciences

S. M. Yasir Arafat · Murad M. Khan
Editors

Suicide in Bangladesh

Epidemiology, Risk Factors, and Prevention

Springer

New Perspectives in Behavioral & Health Sciences

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ISSN 2731-9296 ISSN 2731-930X (electronic)
New Perspectives in Behavioral & Health Sciences
ISBN 978-981-99-0291-0 ISBN 978-981-99-0289-7 (eBook)
https://doi.org/10.1007/978-981-99-0289-7

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

Asma Khatun, wife of S. M. Yasir Arafat

Preface

Suicide is a major, however, an under-researched public health problem in Bangladesh. The country still lacks a national suicide surveillance system, and a national suicide prevention strategy. Therefore, access to quality suicide data for policymaking is a fundamental challenge. There are wide variations in the suicide rate as per different studies and international reports. Additionally, there are strong possibilities of under-reporting of suicide in the country. Suicide is a criminal offense in the legal system of the country that certainly hinders the disclosure of suicide. A high level of stigma, lower level of suicide literacy, enduring culture, Muslim majority religious background, criminality badge, and patriarchal social norms affect suicide prevention in Bangladesh. Fortunately, an increased number of studies are coming out in the current decade exploring multiple aspects of suicidal behavior indicating that social factors have a prominent role than mental disorder which is a noticeable difference in the country. Nevertheless, there is no book on suicide in Bangladesh neither in English nor in Bangla. Therefore, this book aimed to present a comprehensive outlook on suicide in Bangladesh based on existing evidence and expertise covering epidemiology, sources of quality data, local culture, forensic and legal aspects, health and mental health care, media and suicide, crisis management system, suicide prevention, and status of evidence in the country. This book is the first of its kind to address multiple aspects of suicide in Bangladesh. It would be a useful resource material for academics, researchers, policymakers as well as non-governmental and voluntary organizations interested in suicide prevention in Bangladesh. It highlights the research gaps and recommendations for the national suicide prevention strategy in Bangladesh.

Dhaka, Bangladesh — S. M. Yasir Arafat
Karachi, Pakistan — Murad M. Khan

Acknowledgements We are grateful to Dr. Sujita Kumar Kar and Dr. A. M. Fariduzzaman for their support in the different phases of preparing the book.

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About the Editors

Dr. S. M. Yasir Arafat is currently working as an Assistant Professor of Psychiatry at Enam Medical College and Hospital, Dhaka, Bangladesh. His research focused on suicidal behavior, social aspects of human behaviors, and psychometrics. He completed his M.D. in Psychiatry from Bangabandhu Sheikh Mujib Medical University, Dhaka, and his MBBS from the Dhaka Medical College, Dhaka, Bangladesh. He also did an MPH in Health Economics and M.B.A. in Marketing. Dr. Arafat has (co)authored more than 300 peer-reviewed articles and book chapters. He has been included in the global 2% researcher list in 2021 and 2022 due to his authorship contribution. Earlier, he (co)edited two books with Springer on Panic Buying; those are the first published books on Panic Buying in academia.

Professor Murad M. Khan MRCPsych, Ph.D., is Professor Emeritus, Department of Psychiatry and Brain & Mind Institute, Aga Khan University. He is also Associate Faculty at the Centre for Bioethics and Culture (CBEC), Karachi. Professor Khan is the past President of the International Association for Suicide Prevention (IASP) 2017–2020, and continues to serve on the Board of IASP, where he contributes to the organization's global suicide prevention strategy. He also serves in several other mental health non-governmental organizations and bioethics forums in Pakistan. Professor Khan's research interests include focusing on epidemiology and socio-cultural and religious factors in suicide and self-harm in South Asia and developing economies, mental health of women and the elderly, narrative medicine, and organizational ethics. His extensive research work, findings, and contributions to social and ethical issues have been published in several medical journals and the Lay Press, where he is a frequent contributor.

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CHAPTER 1

Epidemiology of Suicide and Data Quality in Bangladesh

Russell Kabir, Md. Rakibul Hasan, and S. M. Yasir Arafat

Abstract As a public health problem, suicide gets less attention than it deserves in Bangladesh. The exact rate of suicide is still arguable based on different sources as the country does not have any national suicide surveillance system and it varies in different reports and empirical studies. We know very little about the epidemiology of suicidal ideation, plan, and non-fatal attempts. The available evidence suggests that the majority of suicides happen among young populations especially those under 30 years of age, females are dying more than males, and students and housewives are vulnerable groups. Life events, psychiatric disorders, unemployment, social isolation, sexual abuse, marital discord, and familial disharmony are the prominent risk factors for suicide. Social events show more harmful associations than psychiatric illnesses. The family has an untapped role in suicide prevention as a significant proportion of suicides could be attributed to events closely related to family conflicts. Forensic medicine and police are identified as the prominent sources of data for suicide research in Bangladesh. This chapter aims to discuss rates, gender distribution, and risk factors for suicide in Bangladesh. It also discusses the sources of suicide data in the country along with concerns about its quality.

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S. M. Y. Arafat and M. M. Khan (eds.), *Suicide in Bangladesh*,
New Perspectives in Behavioral & Health Sciences,
https://doi.org/10.1007/978-981-99-0289-7_1

Keywords Suicide in Bangladesh · Epidemiology · Data quality · Suicide rate · Protest suicide

1 Introduction

According to the World Bank, Bangladesh has been one of the fastest growing economies in the world over the past decade (The World Bank, 2022). Like many other developing nations, Bangladesh is also experiencing enormous political, environmental, and social challenges within itself. Her most significant challenge is the country's large population. Dhaka, the capital, is the sixth most densely populated city in the world, with around 29,069 per square kilometer (World Atlas, 2020).

Although the public health scenario has improved remarkably in Bangladesh over the last 30 years, the country still faces significant health challenges, and there are still numerous health issues that its healthcare system is yet to handle successfully (Muhammad et al., 2017). Suicide is one of them (Shah et al., 2017). Suicide is a complex phenomenon and is considered as a major public health problem. Not only demographic factors but also an amalgam of psychological, social, biological, cultural, and environmental factors pushes an individual to die by suicide (Zalsman et al., 2016). Effective suicide prevention warrants good empirical studies, and epidemiological data helps us to identify the population at risk, emergency preparedness, and population-level disease progression, and this, in turn, can be used to reinforce decision-making (Fairchild et al., 2018). Against this backdrop, this chapter is aimed to explore the epidemiological aspects of suicide in Bangladesh and evaluate the quality of suicide data in Bangladesh.

2 Epidemiology of Suicide in Bangladesh

2.1 Suicide Rate

Bangladesh has no central suicide database or national suicide surveillance system. To the best of our knowledge, no nationwide study has been conducted to assess the burden of suicide in the country in different age groups. There are wide variations among the rates published in World Health Organization (WHO) reports, non-government organization data, and empirical studies. Above all, there are concerns about under-reporting and misclassification of suicides that hide the real gravity of the problem. The WHO publishes suicide rates periodically using a modeling approach. We mention the WHO-published suicide rates in Bangladesh in 2012, 2016, and 2019 in Table 1.

Table 1 Suicide rate in Bangladesh according to WHO reports

Year	*Sex*	*Number of suicides*	*Crude suicide rate (per 100,000)*	*Age-standardized suicide rate (per 100,000)*
2012	Total	10,167	6.6	7.8
	Female	5,773	7.6	8.7
	Male	4,394	5.6	6.8
2016	Total	9,544	5.9	6.1
	Female	5,666	7.0	6.7
	Male	3,878	4.7	5.5
2019	Total	5,998	3.7	3.9
	female	1,331	1.7	1.7
	Male	4,667	5.7	6.0

Adapted from WHO (2014, 2017, 2021)

Surprisingly, the data revealed that Bangladesh is relatively prosperous in suicide reduction without any visible efforts and research from the government. In 2012, the suicide rate for both sexes was 7.8/100,000, while it was 6.1/100,000 in 2016, and 3.9/100,000 in 2019. Another surprising finding is that the rate was more in females until 2016, but the recently published 2019 data showed that males died more than females, as shown in Table 1. WHO (2014) reported that the age-standardized suicide rate for both sexes was 7.8/100,000: for males it was 7.3/100,000 and for females 8.2/100,000. A community-based survey conducted by Feroz and his colleagues identified the rate of suicide attempts was 281.8 per 100,000 and the rate of suicide was 128.8 per 100,000 which seems to be significantly higher in comparison to the WHO reports (Feroz et al., 2012). Another community-based study with 20 years duration conducted in South-East part of the country from 1983 to 2002 identified a suicide rate of 39.6 per 100,000 population (ICDDR,B, 2003). Mashreky and his colleagues interviewed 819, 429 community populations from 12 different districts of Bangladesh in 2003 and found the rate of suicide was 7.3 per 100,000 population (Mashreky et al., 2013). Another rate was revealed from police data from 1996 to 2014 that revealed the rate of unnatural death was 10.4 per 100,000 population; among them, hanging and pesticide poisoning covered 6.5 per 100,000 population (Chowdhury et al., 2018). The unnatural deaths include hanging, pesticide/medication poisoning, road traffic, railway, and waterway accidents, fall from height, construction injury, snake bite, drowning, electrocution, thunderbolt injury, and burn-related deaths (Chowdhury et al., 2018). Another report published in 1998 found that the suicide rate among young populations was 30 per 100,000 populations living in the rural part of Bangladesh (Ruzicka, 1998 cited in Begum, Rahman et al., 2017). A recent study in *Jhenaidah* district of Bangladesh assessed 3,152 suicide data of an NGO (*Societies for Voluntary Activities (SOVA*) during 2010–2018 (Khan et al., 2020). The study found