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GRADUATE SCHOOL OF DEVELOPMENT
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Suicide in Asia: A Literature Review

Shahnaz Savani

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Abstract
Suicide is a serious and complex global problem. About 1.5 million people die by suicide each year, and approximately one billion people are affected by it. Although most suicides occur in the low and middle-income countries of the world, research on suicides largely comes from upper-middle-income and high-income countries (Bantjes et al., 2016). Suicide varies around the globe due to factors relating to culture, context, and environment. There are striking differences in the appearance of suicide between the world's richer and poorer countries. The meaning and significance of suicide, the causes of suicide, and the risk and protective factors for suicide are uniquely embedded in the cultural and religious contexts of different geographical regions. Although much literature on suicide in Asia has emerged in the last decade, suicide in Central Asia (comprised of Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan) is poorly researched. Little is known about prevalence data, risk and protective factors, and effective treatments in this region. To develop effective prevention and intervention strategies for the phenomenon of suicide, it has to be studied within its own socio-cultural context. This paper attempts to provide an overview of the literature on suicide, prevalence trends by age, gender and economic status, and the common risk factors associated with suicide in Asia, focusing specifically on Central Asia.

Keywords: Suicide, Low and Middle-Income Countries, Asia, Central Asia.
JEL classification: I120, I140.

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Contents

Introduction and Scope

Suicide is a serious and urgent public health concern in the world today. Approximately 1.5 million people die by suicide each year (WHO, 2015). To be more precise, each year, between 10-20 million individuals attempt suicide, and over 50-120 million are affected by the suicide of a loved one (Beautrais, 2006). Suicide and self-harm comprise 1.5% of the Global Burden of Disease (GBD) and contribute to 22.5 million Years of Life Lost (YLL) to premature mortality (Patel, Chisholm, Parikh, Charlson, Degenhardt, Dua et al., 2016). In 2015, suicide was the 17th leading cause of death worldwide and accounted for 1.4% of all deaths (WHO, 2017). Seventy-nine percent of all suicides occur in the low and middle-income countries of the world where resources and services for identification and intervention are scarce (WHO, 2019). Meanwhile, over 60% of the world's suicides occur in Asia (Chen et al., 2012), with India and China being the most significant contributors to global suicides. There are striking differences in suicidal behavior between the wealthier and the low and middle-income countries. In the more affluent countries, the suicide rate is highest in the elderly population, whereas in the low and middle-income countries, the rate is highest among those under 30 years of age (Vijayakumar, 2004). Also, in the richer countries, more males than females die by suicide and those who are divorced, widowed, or separated have an even higher risk of suicide. In the low and middle-income countries, the male-female suicide ratio is low (1.4:1 in India and 1:1.3 in China), and married women are at a particularly high risk of suicide (Vijayakumar, 2004).

Suicide is usually understood as a multidimensional issue, with no single factor or reason fully explaining its causes or rationale. Suicide is generally considered to be a complex outcome of biological, psychological, social, environmental, and cultural factors (Alonzo & Gearing, 2018). Across the world, suicide is perceived to have different epidemiologies, with causes ranging from biology, genetics, and mental disorders to religious, spiritual, familial, social, economic, or physical factors. In many Asian countries, suicide is understood as a social problem rather than an individual or mental health issue (Goldsmith, Pellmar, Kleinman et al., 2002). Societal and familial issues, a lack of economic and educational opportunities, low socio-economic status, unemployment, and religious and cultural factors are all associated with suicide in developing countries (Vijayakumar, 2005).

Although there are many definitions in the literature, suicide is broadly defined as the act of deliberately killing oneself. While almost two-thirds of all suicides occur in Asia (Tandon & Nathani, 2018), most countries in Asia lack high-quality vital registrations systems that are used to track data on suicides (Vijayakumar et al., 2016). Therefore, there is skepticism about the quality and accuracy of suicide information across Asian countries and it is generally accepted that the national suicide rates are unreliable (Tollfsen et al., 2012) and underreported (Jordans et al., 2014). Consequently, this gap in the research has consequently limited the investigation into suicide prevention and treatment.

This paper seeks to review the literature on suicide in Asia regarding prevalence, the extent of the problem and common risk factors associated with it. It also aims to provide a broad overview of the limited literature available on suicide in Central Asia. This review finds the presentation of suicide in Asian countries unique, with risk factors, trends, and patterns contextual to the region.

Suicides by Age and Gender

Suicides vary significantly by age and gender. Around the world, suicide rates among men are higher than those among women (Windfuhr et al. 2016); however, there is significant variation across geographical regions. The high male-to-female suicide ratio is mostly evident in developed countries around the world. In wealthier countries, three times more men die by suicide than women (WHO, 2016). In low and middle-income countries, the male-to-female suicide ratio is much smaller - 1.5 men to one woman (WHO, 2014). In several Asian countries, the gap between male and female suicide rates is minimal. In India, the male-female suicide ratio is 1.4:1 (Vijayakumar, 2015), and in China, the ratio is reversed – more women than men die by suicide (Chen et al., 2012). Across the world, suicides account for 71% of violent deaths among women and 50% among men (Windfuhr et al. 2016). It is noteworthy that female suicides and suicidal behavior in women are far more prevalent in the world's poorer countries (Vijayakumar, 2015), particularly in South Asia. This becomes significant in the context of gender-specific risk factors for women in these countries.

Suicide among young people has historically been less frequent than among the elderly (UNICEF, 2013). More recently, this trend is being reversed in most countries (UNICEF, 2013). Globally the rate of suicide among those aged five years to 44 years has surpassed the rate of suicide among those 45 years and older (UNICEF, 2013). Although the numbers vary by region and country, in the age group of 15-24 years, suicide is among the three leading causes of death in most countries (WHO, 2014). Therefore, in low and middle-income countries in Asia, targeted approaches that offer specific interventions for adolescents and females are likely to be more successful in reducing the overall suicide rate.

The Extent of the Problem

Given that suicide data are not available for about 20% of Asia's population (Vijayakumar, 2008) due to several social, cultural, and religious factors, it is striking that the reported rates of suicide in Asia are still higher than on any other continent. Moreover, considering the substantial underreporting of suicides in the region, the overall suicide rate in Asia is still about 30% higher than the global average (Chen et al. 2012). Even in the world's poorer nations, suicides are more prevalent among the already marginalized and discriminated groups of society like refugees and migrants, indigenous peoples, and women (WHO, 2017). In recent years, critical research has emerged, which is crucial to understanding the scope, scale, and cultural nuances of suicide among populations where it is most prevalent.

Common Risks of Suicide

Simplistic explanations for suicide often attribute it to a single event such as major financial loss, a relationship breakup, or the diagnosis of a severe illness. However, the phenomenon of suicide is much more complicated than that. Suicide is better understood as a multidimensional issue. In other words, no single factor, cause, or reason can fully explain why it happens. Suicide is an unfortunate outcome of a complex set of interactions that occur at

the personal, social, cultural, biological, and environmental levels in a person's life (Alonzo & Gearing, 2018).

Causes for suicide are generally studied and quantified under the broad framework of objective indicators of risk and protective factors. Risk factors include the characteristics of a person or their environment that increase the chances that they will die by suicide, whereas protective factors include personal or environmental characteristics that help protect people from suicidal behavior (Suicide Prevention Resource Center, 2018). Detailed below are the most studied risk and protective factors globally, and the distinctive aspects of these factors in Asian countries.

Mental Illness. Mental illness and alcohol-related disorders are found to have a consistent relationship with suicide in many countries (Chen et al., 2012; Pompili et al., 2010) and are universal risk factors for suicide. However, suicide can exist independently of common mental disorders, in which case it is largely associated with a host of psychosocial factors. A generally accepted method for investigating the characteristics of suicide is a psychological autopsy. This investigation method involves interviewing people (family, friends, and key personnel) on how and why the suicide occurred (Isometsa, 2017). Psychological autopsies can demonstrate mental disorders as a significant contributing factor to suicide (Arsenault-Lapierre, Kim, Turecki, 2004). In high-income countries, 90% of those who die by suicide had mental disorders (Phillips, 2010). However, in low and middle-income countries, mental disorders are secondary to other socio-cultural and environmental factors (Patel et al., 2016). The incidence and prevalence of suicide, and the risk and protective factors in low and middle-income countries in Asia seem distinct from those in Western countries (Hendin, Vijayakumar, Bertolote et al., 2008). For example, there are some striking differences in suicide risk patterns and factors between Asia and the U.S. (Phillips, Li, & Zhang, 2002; Wong, 2004).

Several other risk factors for suicide that are uniquely contextual (Vijayakumar, 2012) take precedence over mental disorders in Asia. For example, only 40 percent of those who died by suicides in China, 35 percent in India, and 37 percent in Sri Lanka were diagnosed with depression (Abeyasinghe and Gunnell 2008; Phillips et al., 2002; Vijayakumar and Rajkumar 1999). The existing literature on suicide in Asia offers much evidence to support the notion that socio-economic issues, familial problems, oppression and gender-based violence, and other cultural factors appear to play a greater role in suicide (Vijayakumar, 2015). In the five Central Asian countries, socio-economic issues, family problems, gender-based oppression, and cultural factors are the most prominent risk factors associated with suicide (Savani et al., 2020).

In the United States and other developed countries around the world, societies are typically more individualistic, whereby individual interests supersede family or community interests. In many Asian countries, societies are less so and tend to be more collectivist. The influence of family norms and traditions, societal expectations, socio-economic pressures, and culturally specific understandings of suicide is crucial (Lester 2011). Therefore, in many Asian countries, suicide is often considered to be more of a social phenomenon than an individual act (Goldsmith, Pellmar, Kleinman et al., 2002). In Central Asia, suicides are more often as-

sociated with broader familial, social, and environmental issues, rather than issues related to the particular individual (Savani et al., 2020).

Economic Issues. Globally, there is a significant and consistent relationship between unemployment and suicide (Nordt et al., 2015). Yet, the interplay between economic and social forces cannot be understated. Increases in social vulnerabilities like divorce and mental health issues may also result in both unemployment and suicide (Mishara, 2008). Additionally, Bhat and Rather (2004) find that socio-economic phenomena related to globalization, such as migration, poverty, employment pressures, culture, and social change may also be risk factors for suicide.

In Asia, suicide is a phenomenon greatly influenced by gender whereby acute life stresses seem to be more devastating to men in Asia than to men in the West. This is even more evident in men who do not have diagnosed psychiatric disorders (Chen et al. 2012). Among Asian men, unemployment or job-related stress is a more common trigger of suicide than for men in the developed world (Amagasa, 2005; Phillips, 2002). Circumstances such as gambling debts, job loss, and work-related factors are often acute stressors in the lives of Asian men leading up to suicide (Amagasa, 2005; Phillips et al. 2002; Wong et al. 2010). Among Asian men, financial problems are more commonly associated with suicide than among men in the West (Liu et al. 2009). Interestingly, economic issues and poverty are significant issues found in suicides in Central Asia (Savani et al., 2020).

Marriage. In developed countries, being married is commonly identified as a protective factor against suicide for both men and women (Stack 1992). In Western liberal societies, there are laws against domestic abuse and sexual violence, whereby the law of the land protects individual freedoms and rights within marriage. Individuals mostly stay in marriages if they are loved and supported, and the mechanisms to end a problematic marital relationship such as separation and divorce are socially and culturally accepted and protected by the law. Thus, research has often found that being single, unmarried, separated, divorced, or widowed are risk factors for suicide (Stack 1992); however, most of this research comes from developed countries.

For women in developing countries, there is less evidence that marital status is a risk factor for suicide (Aliverdinia & Pridemore, 2009). Instead, studies have found that marriage is not necessarily a protective factor against suicide in low and middle-income Asian countries. (Alonzo & Gearing, 2018; Phillips et al. 2002, Rao, 1991; Ponnudurai & Jeyakar, 1980). The nature of family relationships in Asia partially explains the predominance of family problems in suicides. Extended family systems are a dominant feature of traditional Asian societies. Individual interests in such contexts are secondary to those of kinship or family. In such a family system, young married women have the lowest social status in the family hierarchy.

A crucial precipitating factor for suicide among women in many Asian countries is family disputes. For example, it has been reported that an estimated 98% of suicides among women in India involve dowry disputes (Vijayakumar, 2008). Many young women die from self-immolation due to the harassment and abuse they are subjected to by their in-laws for dowry-related matters (Vijayakumar, 2008). Furthermore, studies have identified that young women are particularly burdened with vulnerabilities that come with being very young at

the time of marriage, having an arranged marriage, bearing children at a young age, financial and social dependence on the husband and the in-laws, coupled with physical and sexual violence. These stresses make women more vulnerable to suicidal behavior (Vijayakumar, 2015). This phenomenon has also been found among immigrant women in more developed countries. Family and societal pressures that are put on woman to demonstrate chastity, marry due to family pressure, and be forced to stay in an unhappy marriage were among the factors associated with suicidal behavior among immigrant women (Montesinos et al., 2013; van Bergan et al., 2009). Consistent with the broader research on marital status and suicide, in Central Asia spousal abuse and family issues are major risk factors for suicide (Savani et al., 2020).

Violence Against Women. Gender-based oppression in general, and violence against women, are strongly associated with suicide (Canetto, 2015; Devries et al., 2011; Khan & Reza, 1998; Khan 2005, Vijayakumar et al., 2005). A meta-analysis looking at 37 papers found a consistently strong relationship between intimate partner violence and suicidality (McLaughlin et al., 2012). The association between violence against women and suicide is also found among immigrant women in more developed countries (Montesinos et al., 2013; van Bergan et al., 2009).

In the literature on suicide in contexts where women have little agency and suffer extreme abuse with no recourse, suicide appears to be a form of culturally adopted behavior (Counts, 1988). In such cultural contexts, women's suicide is seen as a way to punish the surviving family members responsible for the oppression against them (Counts, 1988). The suicidal act thus has specific socio-political and legal implications. Increasingly, after the work of Counts (1988), research on women's suicides carried out in a particular way is studied as signifying an objection and rebellion toward a particular system of oppression—whether it be social or political or a mixture of the two (Aliverdina & Pridemoore, 2009; Canetto, 2015). Much work has been produced concerning women's suicides by self-immolation in rural India, Iran, Iraq, and Central Asia. The symbolism of self-immolation as a sensational, agonizing and lethal method of taking one's life—usually carried out as a demonstration of outcry against oppression—appears to have special meaning in these socio-cultural contexts, focusing attention to issues of female oppression (Aliverdina & Pridemoore, 2009; Canetto, 2015). Such suicides have special cultural significance, and are used within the community as a metaphor, personifying something much more than death by suicide (Counts, 1988).

Self-immolation as a method of suicide is common in rural parts of Iran, Iraq, and India, and among lower-class and less educated women. In Iran, it is the third leading cause of death for women (Rezaie et al., 2011) and is also not uncommon in Western Tajikistan (Khushkadamova, 2010). The cultural symbolism of self-immolation, coupled with the ease of access to flammable materials and the disproportionate exposure to this method of suicide can compel certain women to attempt it impulsively (Rezaie et al, 2011).

Suicide in Central Asia

In 2016, WHO data on the rates of suicide per 100,000 people across Central Asia showed the following: Kazakhstan 40.1; Turkmenistan 11.0; Uzbekistan 10.3; Kyrgyzstan 14.8; and

Tajikistan 5.0 (WHO, 2016). While Central Asia is a vast region populated by diverse peoples consisting of different ethnicities who speak different languages, it is often treated as one region due to its geography and shared Soviet past. The five Soviet republics of Central Asia became independent following the dissolution of the USSR in 1991. While these countries are largely distinct, they all continue to feel severe growing pains as they continue to adjust to reality in the post-Soviet era (Hill, 2002). The rapid shift in economic, governmental and social-political philosophy and the resulting unrest have further exacerbated the gaps in the countries' ability to see to the basic needs of their citizenry, such as primary health care, satisfactory education, sufficient jobs and income (Hegland, 2010). The Central Asian governments are burdened by the challenges of corruption, limited resources, and weak infrastructure (Hill, 2002). In addition, this region has high unemployment rates, particularly among the youth, often resulting in increased labor migration to secure economic employment (Hegland, 2010). Nascent research in this area has highlighted several factors related to suicide among young people, including economic hardship, interpersonal violence, migration, and unmet basic needs (Savani et al., 2020).

The five countries in Central Asia have varying suicide rates. However, the common thread among them in terms of suicide is the minimal effort made thus far to develop systematic suicide prevention or intervention programs by government, social or educational institutions. This lack of attention to suicide is not uncommon in other low-income countries with limited governmental and public resources available. Effective research on suicide ideation, behaviors (i.e., suicide attempts and completions), and the prevalence of this phenomenon may support future governmental efforts to address suicide within their own national borders and across the region as a whole. Thus, there is an urgent need to investigate suicide in this region.

Despite the very high rates of suicide in some Central Asian countries (especially Kazakhstan and Kyrgyzstan), in the last 30 years, only 15 peer-reviewed articles published in academic journals were identified that examined suicide in Central Asia (Savani et al., 2020). The general focus of these articles is on prevalence and gender distribution of suicide, the quality of suicide data and the association of suicide with alcohol consumption, autopsy rates, cultural and religious factors, exposure to radiation, and marital violence (Savani et al., 2020). All of these articles include one or more countries in Central Asia in their analysis but offer little in terms of regional specifics in dealing with suicide. The limited research done on suicide in Central Asia impedes a more nuanced understanding of the rich diversity of risk and protective factors for suicide in the region.

For this review, risk factors for suicide in Central Asia are related to mental health (including alcohol abuse), the family and community system, socio-economic issues, lack of services and psychosocial support, and environmental hazards. Interestingly, most of the risk factors here do not relate to the individual but are predominantly focused on social and environmental factors confirming prior research on suicide being contextualized as a larger social phenomenon rather than an individual act (Goldsmith, Pellmar, Kleinman et al., 2002). Consistent with the broader literature on suicides in low and middle-income countries, this paper has found suicide to be associated with familial, social and economic factors in addition to mental health issues (Patel, Chisholm, Parikh, Charlson, Degenhardt, Dua et al. 2016).

Among the identified risk factors for suicide in Central Asia, several specific factors center on marital and family violence and gender-based oppression. The most researched risk factor identified for women suicides was spousal violence, which includes physical and sexual abuse by the husband, and physical abuse by the mother-in-law. Other significant risk factors for women in this category were family conflict and forced marriage (Haarr, 2010).

Under the socio-economic category, risk factors included low educational attainment, work-related conflicts, the husband's migration for economic reasons and poverty. Risk factors in other categories related to the unavailability of help or support for women and the generally inadequate medical care and limited psychosocial support for men and women. This review also found higher temperatures in the summer months, exposure to radioactive materials and exposure to civil war trauma as identified risk factors for suicide in Central Asia (Savani et al., 2020). Overall, the protective factors identified include the absence of mental health issues, the absence of violence and the presence of family support and improved socio-economic conditions to protect against suicide (Savani et al., 2020). Existing data on suicide in Central Asia lack nuanced attention to sub-populations and geographical regions and gendered experiences.

A particularly interesting study focused on the relationship between marital violence and suicide in Tajikistan. A striking feature of suicidal behavior among women is that those who seek help are more vulnerable to suicidal behavior (Haarr, 2010). In this context, help-seeking action on the part of the women seems to yield more isolation and victimization. Within Tajikistan's cultural context, men typically have a lot of support from family and society for their use of violence. Meanwhile, Tajik women have no support for speaking up against violence (Haarr, 2010).

Conclusion

The incidence and prevalence of suicide, the common factors associated with suicide and the experiences of suicide across the world are varied. There are striking differences in the factors related to suicide in the richer countries of the world versus the low and middle-income countries. More men in the richer countries die by suicide than women. In the poorer countries of the world, the opposite is true whereby more women, including those in Asia, exhibit higher levels of suicidal behavior. Mental health issues are significantly more prevalent among suicides in developed countries. In developing countries, particularly in Asia, a host of factors, including socio-cultural, religious, familial, and political factors play a particularly significant role. Meanwhile, economic factors, family issues, abuse, and oppression also seem to perform a predominant role in this regard. Particularly among women, gender-based oppression and marital violence are dominant factors in suicide in Asia.

Suicide, by definition, is a unique and purposeful act, deeply embedded in the particular cultural and religious context. Suicide prevention interventions need to be heavily contextualized. A rich and nuanced understanding of why people engage in suicidal behavior, what meaning the act has for individuals, and how people experience suicide are much-needed aspects for future suicide research.

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