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## An Investigation into Suicides Among Bhutanese Refugees Resettled in the United States Between 2008 and 2011

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### Abstract

An increase of Bhutanese refugee suicides were reported in the US between 2009 and 2012. This investigation examined these reported suicides in depth to gain a better understanding of factors associated with suicide within this population. The study employed 14 psychological autopsies to elicit underlying motivations and circumstances for self-inflicted death and to identify potential future avenues for prevention and intervention among refugee communities. Disappointment with current (un)employment, lack of resettlement services and social support, and frustrations with separation from family were believed to contribute to suicidal acts. Suicide within refugee populations may be connected with experiences of family withdrawal, integration difficulties, and perceived lack of care. It is important to assess the effectiveness of improving refugee services on the mental health of migrants. More research is needed in order to better understand, and respond to, suicide in resettled populations.

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## Keywords

Suicide; Refugee; Psychological autopsy; Mental health

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## Background

During the 1980s, a period of cultural and religious oppression of the *Lhotshampas* (an ethnically and linguistically Nepali minority in Bhutan) resulted in the relocation of over 100,000 refugees to neighboring Nepal [1]. Between 2008 and 2011, around 49,000 Bhutanese refugees were resettled to the United States [2]. In 2011, the Office of Refugee Resettlement (ORR) began receiving reports of suicides amongst the resettled Bhutanese population. During 2009–2012, the rate of suicides among Bhutanese refugees relocated to the United States was 20.3/100,000 persons, nearly twice the rate of suicide in the US population as a whole (12.4/100,000) [3, 4]. Alarmed by the elevated suicide rate among the Bhutanese refugee population, ORR requested the Refugee Health Technical Assistance Center (RHTAC) and the US Centers for Disease Control and Prevention (CDC) to conduct an investigation into the suicide deaths in this community. The following study is a summary of the findings from this investigation spearheaded by the CDC.

Mental illness is an important risk factor for suicidal behavior, particularly depression and substance abuse [5–8]. Refugees are considered to be at higher risk for mental illness than the general population [6, 9]. Risk may stem from events in their country of origin that led to emigration, such as violent acts or torture [10–14]. Relocation to a new country may result in lack of social support, economic instability, and difficulties integrating into a new culture [12, 15], which may further exacerbate risks for mental illness among refugee populations. Socioeconomic problems alone—including financial problems and substance abuse—have been found to contribute to suicide risk [16]. The experience of ethnic discrimination is associated with poor mental health [17]. These factors, along with the stigma that often accompanies mental illness, can complicate efforts to seek treatment after resettlement [13]. Trauma has been linked to suicidal behavior in refugee populations [18, 19], however, more research is needed to better understand related pathways and more precise risk profiles. Suicide is a leading cause of death in many South Asian countries [20–23], however there is little research exploring risk factors [24].

Due to the dearth in literature related to suicide amongst refugee populations and varying findings related to risk factors for suicide around the world [24–27], dynamic investigation methods are needed to better disentangle circumstances precipitating lethal self-harm. The psychological autopsy (PA) method provides an opportunity to gather specific detail about the lives of the decedent individuals, and the events surrounding their deaths [28, 29]. The method has been successfully used across cultures [30, 31]. In this study, we applied the PA approach to understand factors associated with suicide among Bhutanese refugees resettled to the United States. Psychological autopsies were conducted with family members and close associates of the decedent to elicit underlying motivations and circumstances of each suicide and to identify potential avenues for prevention or intervention.

## Methods

### Participants and Procedures

Between 2009 and 2012, 16 Bhutanese refugee suicide deaths were identified through the ORR and reported to the US CDC. CDC investigators traveled to the location of each reported deaths (10 states in total) and, working alongside the decedent's local resettlement agency, identified one proxy informant, a family member or close contact over the age of 18 who knew the decedent well. Following informed consent, the survey protocol was conducted face-to-face by a trained interviewer in the participant's preferred language (Nepali or English) in the participant's home. Interviewers were recruited from the Bhutanese refugee community in each city and trained in research ethics, interview techniques, and referral procedures in the event that a respondent became distressed during the interview. Only deaths reported by ORR were investigated in the study. The study was approved by the CDC's Institutional Review Board (CDC approved protocol #6211).

### Instruments

The investigation conducted modified psychological autopsies among the completed suicides, which were designed to describe the suicide circumstances, demographic and psychological characteristics, post migration experiences, and elicit cultural perspectives and experiences surrounding the suicides. The questionnaire employed a mixed methods framework in order to garner sufficient contextual information and provide cultural perspectives on suicide and the refugee experience. Selected questions and instruments were included from autopsy interviews conducted by Appleby et al. [32] and a previous investigation in Bhutanese suicides in Nepal [6]. The questionnaire included demographics, mental health history, details of the suicide, and pre/post migration difficulties. The following standard tools, previously validated against clinical diagnoses and utilized in culturally diverse groups, were used to assess the extent of possible mental illness and trauma.

#### Hopkins Symptom Checklist-25(HSC)

Assessed symptoms of anxiety, depression, and psychological distress. The instrument has been employed with culturally diverse groups, including refugee populations [33–35] and was validated against clinical diagnoses [36, 37].

#### Harvard Trauma Questionnaire

Enumerated traumatic events experienced in Nepal/Bhutan and assessed symptoms of post-traumatic stress disorders (PTSD). The instrument has been used extensively in refugee populations, including Nepali [34, 37].

Open ended questions were included to elicit additional information on the circumstances of the death, perceived causes and precipitating events, help-seeking behaviors, migration difficulties, and potential prevention strategies.

## Analysis

Due to the small sample size, simple descriptive analysis was conducted for quantitative data. Qualitative data (including open ended responses and field notes taken by study staff) were analyzed using content analysis [37] by coding common themes related to perceptions of suicide causation, presence of suicide communication, warning signs, and informant-identified resources for the prevention of future suicides. Data were entered into Microsoft Access (version 2010). Analysis was performed using SAS (version 9.2) for quantitative data and MaxQDA 10.0 for qualitative data.

## Results

Of the 16 confirmed suicides, 14 (88 %) close contacts of the suicide decedent consented to be interviewed. Psychological autopsies were conducted in Arizona, Colorado, Kansas, Maryland, New York, Ohio, Pennsylvania, Tennessee, Texas, and Washington. Proxy informants were mostly male (64 %) and knew the decedent before resettlement in the United States (86 %). Relationships between the proxy informants and the decedent varied across cases, including spouse (2), parent (2), sibling (1), other relative (4), son/daughter (3), close friend (1), and neighbor (1). Thirteen (93 %) had known the decedent for more than 1 year, and 6 (43 %) lived with the decedent.

## Participant Characteristics

The majority of decedents were males (64 %), married (79 %), completed primary or secondary school (64 %), and Hindu (79 %) (Table 1). Most decedents were reported to identify as Brahmin or Chhetri. Ten (71 %) did not have regular income, and 10 (71 %) were not providers of the family (i.e., a person whose expected role was to be financially responsible for the family, regardless of current employment status). Five (36 %) were said to have been in fair or poor general health before death. Open ended responses indicated that many of the decedents were having financial trouble and experienced extreme stress related to work. One respondent indicated that, “(he) did not get what he expected when he arrived in the US; (He) didn’t have a job, and the 9 months of support he received was not enough to enable him to make a transition.” Shifting to a different occupation, schedule, and social setting was difficult for many cases. A wife of one case noted that, “I guess it was his work. He had to stand all day, he got tired. He used to say that when he was in Nepal, he didn’t have to stand all day.” Another mentioned that the decedent was “stressed about his new job, paying the bills and being able to support his parents.”

## Details of Suicide

Median time from arrival in the United States to death was 4.2 months. This varied by gender where women had a shorter time frame (1.1 months) compared with men months). Hanging was the only method reported amongst the informants. Most deaths occurred within the home (71 %). Five (35 %) suicides occurred while the decedent was completely alone and seven (50 %) occurred while someone else was in another part of the house. Only one case ever talked about suicide. Two (14 %) were reported to have consumed alcohol on the day of suicide. A close friend of the decedent remembered, “He used to drink in the camp. He would threaten his wife with suicide. The day he died, he was already drinking at 11

a.m.” Most informants believed that the suicide was unplanned, but they did state that warning signs included social withdrawal and frustration with current situation. No cases left a suicide note.

### **Health, Mental Health Symptoms, and Family History**

One (7 %) case had a family member who was treated for a mental health condition, and seven (50 %) had experienced the suicide of a family member or close friend. Three (21 %) had previously attempted suicide, of whom, only one was reported to have sought professional help. One case with a previous suicide attempt, subsequently lost two of his four children to suicide. The family member interviewed commented that, “he never talked about his emotions directly; he never said he wanted to commit suicide”. Two (14 %) were thought to have been using illicit drugs.

Because some respondents in the psychological autopsies did not know about the mental status of the decedent, we were only able to assess symptoms of all mental health conditions in some of the decedents (Table 2). Seven of the 14 individuals screened positively for any symptoms of the 4 conditions (depression, anxiety, PTSD, and psychological distress). Four (40 %) decedents had reported symptoms suggestive of anxiety; three of five cases (60 %) had symptoms suggestive of depression; two of five (40 %) met the definition for being distressed; and one of 13 (7 %) had symptoms of PTSD. 2 weeks before the suicide, this individual with symptoms of PTSD had run out of medication; family members were unable to navigate the health system to obtain refills. Another individual was reported to have exhibited some symptoms of confusion. The interviewee reported, “A few times in the previous months he had become disoriented—he went out and ended up at a neighbor’s house. He (frequently) talked to himself. He would feel that he had to go away from (where he was) and flee. His wife would have to go retrieve him.” The most prevalent traumatic events endorsed in the HSC were lack of nationality or citizenship (77 %) and having to flee suddenly (69 %) (Table 3).

### **Post Migration Difficulties and Social Support**

The most common post-migration difficulty listed was language barriers (71 %), where respondents commented that the immediate need to speak and understand English was frustrating and seemed to contribute a sense of hopelessness (Table 2). One respondent mentioned that, “The prxoblem of language, it’s difficult to get a job...having to talk to people in English, only English. There’s no Nepali speaking ESL teacher. It makes it too difficult.” One female case was described to be a result of barriers to education. The informant described that, “her desire was to be in school, her sister was enrolled and she really wanted to go and do well. If she had gotten the chance to study, suicide would not have happened.” Many of the respondents (43 %) stated that the decedent experienced difficulty maintaining cultural and religious traditions. Half of the respondents (50 %) reported the decedent having a person to confide in. Two cases (14 %) were thought to be isolated individuals. One informant noted that the decedent was, “always alone, indoors, and stayed at home.”

Separation from family (43 %) and worrying about family back home (57 %) were commonly endorsed as factors deeply contributing to the individual's suicide (Table 2). Familial fragmentation not only caused worry and anxiety about missing family members, but also forced some individuals to take on untraditional family functions. For example, one young female was mentioned to be the only employable person in a household, and thus was required to take on the role of wage-earner. This was cited as a contributing factor to her suicide. In another case, the young woman wanted to pursue an education, but was required to take a job to support her family. The interviewee noted, "Life in America was hard...Her brother could have taken a lot of that pressure off her. If all the family members could have been brought together, not fragmented, this could have been prevented. Separation from family is huge in our community..." Many respondents admitted frustrations regarding family fragmentation, stating that resettlement agencies should prioritize placing families in the same city and claiming that this might help prevent future suicides. Despite the emphasis on family separation, few cases (2, 14 %) reported there being relationship conflicts at home.

### Prevention Strategies

Informants commented readily on needed support to prevent and intervene in suicidal behavior. Participants noted a lack of necessary resources to help families through the refugee transition. One informant reported that suicides could be prevented through "more guidance and support from agencies. Refugees are expecting more than is available to them." This reflects a feeling that the process had been insufficient, and that the refugees had not been given enough money or education to allow them to make a new start. Locally identified prevention measures included training the community in communication strategies to address suicide, engaging newly resettled families immediately into social and educational opportunities, and enhancing and improving resettlement services and support.

### Discussion

Within the recent suicides amongst Bhutanese refugees in the United States, most decedents were unemployed men who committed suicide within 1 year of arrival, and who experienced post migration difficulties including language barriers, employment and financial problems, worries about family back home, and difficulty maintaining cultural and religious traditions after resettlement. From the broader epidemiological investigation of Bhutanese refugee suicidal behavior in the United States, the prevalence of reported suicidal ideation was low (3 %), but likely underestimated due to stigma, while other symptoms of anxiety, depression, PTSD, and mental distress were found to be higher [4]. In this refugee population, significant risk factors for suicidal ideation included: not being a provider of the family, having low perceived social support, screening positive for anxiety, depression, and distress; and increased family conflict after resettlement.

In Nepal, and in our study population, the most common method for suicide is hanging [20]. Previous reports found that suicide in immigrant and refugee populations may be less common compared with the general population [38, 39]. However, studies have also indicated that suicidal ideation may be higher in camps prior to migration where one study

reported that, among women who screened positive for a common mental disorder, 91 % reported having had thoughts of suicide in the previous month [14]. Recent reports in Nepal identified suicide as the leading cause of death amongst women of reproductive age [21, 40]. Further investigation found mixed relationships between caste and suicide where more deaths occurred among higher castes, but more suicidal thoughts were endorsed in lower castes [20, 21]. Other studies have indicated that, in south Asia, suicide is often a performative act used for social protest [41], a reaction to strained relationships and violence [20, 23, 42], and impulsive reactions to trying social circumstances [43, 44]. The Institute of Medicine (IOM) investigated 12 suicides within the refugee camps in Nepal and found that older men were more likely to have completed suicide compared with those that attempted and failed [6]. Moreover, all known cases used hanging and there were no caste, ethnic group, or religion associated with suicide. Similarly, in our study, no suicides occurred within individuals that were identified as lower caste. This is consistent with previous reports that more suicides are documented amongst high caste individuals in Nepal [20, 21], however, suicide deaths are difficult to capture in Nepal as there is no vital surveillance system. It may be that lower castes tend to live in more remote regions and have less access to infrastructure (police, hospitals, etc.). Additionally, Kohrt et al. [45] found that lower castes in Nepal are more likely to suffer from depression, likely due to poverty. Further investigations into caste and poverty will shed more light on the complex relationship. Finally, the IOM investigation in Nepal found that those who experienced gender-based violence and lived in poor conditions were more likely to attempt or complete suicide [6]. Although gender-based violence did not surface as a perceived driver of suicide, post migration difficulties and vulnerabilities were a concern. Interestingly, despite the existence of a Nepali word for suicide, *aatmahatya* (literally meaning soul murder), the term was not used by the participants. The preferred term used to describe suicide and suicidal behavior was *jhundera maryo*, literally meaning “to hang oneself”. This reflects the commonality of the particular method and may serve to distance the moral implications that the term *aatmahatya* carries.

Bruffaerts et al. [46] found that only 14 % of persons exhibiting suicidal behavior in low and middle income countries (LMIC) pursue medical treatment, compared with 52 % in high-income countries, and low-income country informants are less likely to disclose need for treatment. This is corroborated in our findings as few individuals communicated intent to die and very few sought professional help. Lack of help seeking behavior may highlight a gap between the need for mental health services and their use, as well as the availability, accessibility, and perceived efficacy of such services. Also, within our sample, time between arrival and suicide varied across gender where women appeared to be more vulnerable closer to arrival. Historic legislation has also compounded the refugee resettlement experience. In 1996, the Public Responsibility and Work Opportunity Reconciliation Act (PRWORA) reduced the duration of federal support services available to refugees and shifted focus away from education and vocational training programs [47–49]. This may increase stress on resettled individuals during their most vulnerable period as they now must support themselves much faster. Prevention and intervention programs may be well suited to monitor refugees closely within the first year and continue to screen for depression and suicidal intent.

Separation from family and community was endorsed widely as a significant contributor to most suicides within our study. After 20 years in the camps, many social ties and professional identities were rebuilt, only to be dissolved again in the process of third-country resettlement [6]. Terheggen [50] noted similar findings in Tibetan refugees. Individuals that were unable to speak their native language and faced threats to their cultural and religious traditions had significantly worse health and well-being. In addition to cultural assimilation barriers, refugees experience a devaluation of their professional skills and face subsequent economic challenges both in refugee camps (where they are not permitted to work) and after migration where language skills and institutional barriers must be overcome before employment is viable. Chase et al., found that Bhutanese refugees preferred to cope independently and tended to blame themselves for failures [51, 52]. Additionally, findings from Sri Lanka suggest that suicides are understood and used as performative acts of protest or retaliation, often following family conflict [44, 53]. Informants suggested that resettlement programs consider better placement so that families and previously developed social ties remain intact, language courses be taught by instructors with similar cultural background, and social services be made more accessible to migrants. Improved social support is shown to enhance physical and mental health as well as increase quality of life [54, 55]. Therefore, improved community-based support, outreach (including culturally congruent language training), and social support; enhanced mental health screening [56]; and person-centered mental health programs, might help to build resilience in this group.

### Limitations

While the PA method is valuable, all findings were elicited from interviews with family members, friends, and community members of the decedent and were therefore, limited in depth and may be biased. The results of this investigation describe a specific cluster of refugee suicides in the US and cannot be generalized. Only those suicides that were reported to ORR were included in the investigation, and the researchers did not undertake any active case finding. The survey instrument included tools that explored symptoms of depression, anxiety, and PTSD. It is possible that these diagnostic categories are not sufficient to describe the experiences of the resettled population.

### New Contribution to the Literature

As suicides continue to climb as a public health threat, such events in refugee populations are understudied. This unique multi-state investigation suggested that suicides within the Bhutanese refugee populations may be connected with experiences of family withdrawal, integration difficulties, and perceived lack of existing care. It is important to assess the effectiveness of improving refugee services (providing ongoing social support within specific cultural and linguistic communities, etc.) on the mental health of migrants. More research is needed with larger samples in order to better understand, and respond to, suicide risk factors in resettled populations.

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



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**Table 1**

Demographic characteristics of reported Bhutanese refugee suicides in the United States, Feb 2009–2012

Characteristic		Suicides (N = 14) n (%)
Sex	Male	9 (64)
	Female	5 (36)
Age	18–25	3 (21)
	26–39	4 (29)
	40–59	4 (29)
	60	3 (21)
Marital status	Married	11 (79)
	Single	2 (14)
	Other <sup>a</sup>	1 (7)
Education	None	5 (36)
	Primary	4 (29)
	Secondary	5 (36)
	University	0
Literacy	Read English	7 (50)
	Write English	7 (50)
Religion	Hindu	11 (79)
	Buddhist	1 (7)
	Christian	2 (14)
Caste/ethnicity	Brahmin	5 (36)
	Chhetri	5 (36)
	Dalit	0
	Janajati	2 (14)
	Other	2 (14)
	Regular income	Yes
	No	10 (71)
Median time from arrival in US to death (months)	All suicides	5.6
	Males	7.4
	Females	1.1
Number of persons in household	Mean (SD) <sup>†</sup>	3.7 (2.1)
Number of children	Mean (SD)	2.9 (2.7)
Provider of family	Yes	4 (29)
	No	10 (71)
Sole provider	Yes	3 (75)
	No	1 (25)

<sup>a</sup>Widowed, divorced, or separated<sup>†</sup>SD standard deviation

**Table 2**

Stated symptoms of mental health conditions of Bhutanese refugee suicides, Feb 2009–2012

Condition	Response	n (%)
Anxiety <sup>a</sup> (n = 10)	Yes	4 (40)
	No	6 (60)
	Missing	4
Depression <sup>a</sup> (n = 5)	Yes	3 (60)
	No	2 (40)
	Missing	9
Psychological distress <sup>a</sup> (n = 5)	Yes	2 (40)
	No	3 (60)
	Missing	9
PTSD (case definition) <sup>b</sup> (n = 13)	Yes	1 (7)
	No	12 (86)
	Missing	1 (7)
Positive for any condition	Yes	7 <sup>c</sup>

<sup>a</sup>The Hopkins Symptom Checklist (HSC) was used to assess symptoms of anxiety, depression, and psychological distress. An average score of 1.75 or higher out of 4 for the anxiety and depression items was considered positive for anxiety and depression symptoms, respectively. The average of the anxiety and depression scores comprises the psychological distress score, which also has a cut-off point of 1.75 out of 4

<sup>b</sup>The definition of PTSD requires all of the following conditions: at least 1 of 5 re-experiencing symptoms; at least 3 of 7 avoidance or numbing symptoms; and at least 2 of 5 arousal symptoms

<sup>c</sup>No percentage is given due to varying missing data for each condition assessment

**Table 3**

Health characteristics and post migration difficulties of the decedent Bhutanese refugees, Feb 2009–2012

N = 14	Health characteristics	n (%)
General health	Excellent/good	9 (64)
	Fair/poor	5 (36)
Time from arrival to US (months)	Median (SD)	
Male		7.4 (9)
Female		1.3 (1)
Use of drugs	Yes	2 (14)
	No	10 (72)
	Don't know	2 (14)
Drink alcohol	Yes	3 (21)
	No	11 (69)
Treatment of mental health condition	Yes	2 (13)
	No	12 (80)
Previous suicide attempt	Yes	3 (21)
	No	10 (71)
	Don't know	1 (7)
Previous suicide in subject's family	Yes	3 (20)
	No	9 (64)
	Don't know	2 (13)
Family history of mental health condition	Yes	1 (7)
	No	11 (79)
	Don't know	2 (14)
N = 14	Post migration difficulties	n (%)
Language barriers		10 (71)
Worries about family back at home		8 (57)
Having a person to confide in		7 (50)
Separation from family		6 (43)
Difficulty maintaining cultural and religious traditions		6 (43)
Inability to pay living expenses		5 (36)
Poor access to counseling services		4 (29)
Being unable to find work		4 (29)
Poor access to healthcare		3 (21)
Insufficient help from government		3 (21)
Lack of religious community		3 (21)
Insufficient help from charities or other agencies		2 (14)
Increased family conflict		2 (14)
Lack of community structures for resolving family disputes		1 (7)
Discrimination		0

Crime committed against you or your family