DEPRESSION AND SOMATIZATION IN BHUTANESE-NEPALI REFUGEES

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ABSTRACT

The number of Bhutanese-Nepali refugees entering Allegheny County has exceeded 4,500 over the last several years. Local physicians who work with this population have reported patients exhibiting symptoms of various mental disorders. This phenomenon is of grave concern, as various studies have found a suicide rate among Bhutanese-Nepali refugees that is significantly higher than the suicide rates for the general US population and other refugee groups. This research will determine if Bhutanese-Nepali cultural conceptualizations of mental health correlate to mental disorders classified in the Diagnostic Statistical Manual of Mental Disorders (DSM-V) through a series of individual interviews and a single focus group. By determining and improving the correlations between Bhutanese-Nepali culturally specific disease and western mental health diagnoses physicians will be able to provide informed, culturally-appropriate healthcare for refugees. As a result, public health practitioners will be able to better develop interventions that effectively address the mental health needs of Bhutanese-Nepali refugees and the quality of mental healthcare refugees receive will improve.

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1.0 INTRODUCTION

In the early 1990s over 86,000 Bhutanese-Nepali fled over the border from southern Bhutan into Nepal. While they were able to escape government persecution, many were exposed to trauma, violence and torture. Throughout the twenty years spent in refugee camps large number of Bhutanese-Nepali have committed suicide, a trend which has continued upon resettlement in the United States. Estimates suggest that suicide rates for Bhutanese-Nepali refugees living in the US are almost thirty times higher than other resettlement countries (Schinina, Sharma, Gorbacheva, & Mishra, 2011). Depression is a significant risk factor for suicide in this population, with the prevalence of depression being three times higher in Bhutanese-Nepali refuges than adults in the general US population (Pratt, 2014; Vonnahme, Lankau, Ao, Shetty, & Cardozo, 2014). This trend is also manifesting at the local level, with local physicians in Allegheny County reporting a large number of Bhutanese-Nepali refugees presenting at their practices with high rates of mental distress. Allegheny County hosts one of the largest community of Bhutanese-Nepali refugees in the US, with approximately 4,500 resettling in the Pittsburgh area since 2008. In order to address this public health problem this research study was designed to explore whether Bhutanese-Nepali conceptualizations of mental health, particularly idioms of distress, correlate with diagnostic criteria for common mental disorders outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition). By arriving at a better understanding of how this population perceives mental health, doctors can better inform their practice to provide culturally-appropriate diagnostic and treatment options.

2.0 BACKGROUND

Since their arrival in 2008, a large number of Bhutanese-Nepali refugees have become established patients at the Squirrel Hill Health Center (SHHC). SHHC is specially equipped to serve migrant and refugee populations and is the largest primary evaluator of the medical needs of refugees once they arrive in Pittsburgh. In 2012, SHHC provided medical and referral services to 407 refugees, of which 88% were Bhutanese-Nepali (Horn, Smith, & Whitehill, 2013). In February of 2015 physicians from SHHC approached faculty member Steven Albert, Ph.D., from the University of Pittsburgh Graduate School of Public Health, and expressed their concern about a large number of Bhutanese-Nepali refugees presenting at their practice with symptoms of mental and physical distress. This trend was particularly troubling given the poor mental health outcomes of Bhutanese-Nepali refugees at the national level, including high rates of depression and suicide (CDC, 2013; Hagaman et al., 2016; Vonnahme et al., 2014).

With the guidance of Dr. Albert, two graduate students from the Department of Behavioral and Community and Behavioral Health Sciences (BCHS) designed a research study that would explore mental health outcomes among Bhutanese-Nepali refugees living in Allegheny County. Data collection involved a series of interviews with patients from SHHC and a single focus group with members of a local community organization, the Bhutanese Community Association of Pittsburgh (BCAP). The purpose of the research was to determine whether Bhutanese-Nepali cultural conceptualizations of mental health correlate to mental disorders classified in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V).

In order to implement the study, researchers partnered with staff from SHHC and BCAP. As a Federally Qualified Health Center the SHHC employs multi-lingual staff to "provide patient-driven, high quality, comprehensive, evidence-based primary and preventive healthcare and social services, with a special concern for patients' religious beliefs, race, national origin, primary language, age, sex, and disability status and without regard for their ability to pay" (Squirrel Hill Health Center, 2015). SHHC provides services to any patient, even if the patient does not have health insurance. While patients still have to pay for services out of pocket, their fee is based upon need and ability to pay. In addition, SHHC employs staff that speak six languages, including Nepali. As a result, many refugees continue to seek out SHHC as their primary health care provider due to the high quality of care they receive. This makes SHHC one of the best potential partners to engage the Bhutanese-Nepali community.

To carry out their approach to healthcare SHHC has established relationships with various community partners, including BCAP. BCAP is a community-based organization that helps connect new arrivals to social services in Allegheny County and provides established refugees with a cohesive sense of community. Specifically, SHHC and BCAP work together to provide Bhutanese-Nepali refugees with culturally-appropriate, affordable primary healthcare and dental services. To make this work possible members from BCAP serve as certified medical translators and peer supports for refugees that come into the clinic. Members from the research team collaborated with these peer supports to serve as translators during the recruitment process and the qualitative interviews. In addition, peer supports served as liaisons between the research team and BCAP and helped set up a series of stakeholder meetings. During these meetings

BCAP staff members were informed about the purpose of the research and their role in facilitating the focus group.

3.0 LITERATURE REVIEW

3.1 STAGES OF MIGRATION & MENTAL HEALTH RISK FACTORS

Disparities in mental health outcomes between different migrant groups, and refugees in particular, are dependent on a variety of factors attributable to the process of migration itself. “Migration can be defined as the process of going from one country, region or place of residence to settle in another” (Bhugra, 2005, p. 14). This process can be divided into three broad stages, all of which have unique risk factors that affect the mental health of migrants in different ways. These stages include the pre-migration stage, the migration stage, and the post-migration stage.

3.1.1 Pre-Migration Stage

During the pre-migration stage individuals make the decision and preparation to move (Bhugra, 2005). Risk factors during this period may include interruptions in traditional social roles and networks, poor living conditions in the country of origin, and the potential exposure to violence, war, or torture (Kirmayer et al., 2011; Lindert, Schouler-Ocak, Heinz, & Priebe, 2008). In fact, many of these traumatic experiences are factors “which prompt the decision to emigrate in the first place” (Pumariega, Rothe, & Pumariega, 2005, p. 583).

3.1.2 Migration Stage

In the second migration stage individuals physically relocate from one place to another (Bhugra, 2005). The duration or trajectory of migration, exposure to harsh living conditions, further exposure to violence, and prolonged uncertainty about the outcome of migration are all experiences which affect the mental health of migrants during the migration period (Kirmayer et al., 2011; Lindert et al., 2008). Despite the potential exposure to these risk factors the mental health of migrants during the initial migration period tends to be positive. “Once future status is decided, resettlement usually brings hope and optimism, which can have an initially positive effect on well-being” (Kirmayer et al., 2011, p. 961).

3.1.3 Post-Migration Stage

The final stage, known as post-migration, involves “the absorption of the immigrant within the social and cultural framework of the new society” (Bhugra, 2005, p. 19). As migrants begin the resettlement process exposure to numerous post-migration stressors have the potential to lead to negative mental health outcomes. Major difficulties may include uncertainties about legal status, unemployment, decrease in social status, loss of social supports, concerns over family members left behind, family conflict, language barriers, and problems with acculturation. Furthermore, fewer opportunities for education and social mobility in their countries of origin put migrants at an even greater disadvantage upon arrival in their host countries.

> They inhabit inner city neighborhoods where rents are low, but which are crime infested. Families survive in overcrowded buildings with little space with little opportunity for privacy. The neighborhoods are unsafe and children live in an atmosphere of impending

> danger and risk of crime and violence…Inner city schools are usually overcrowded and offer an inferior level of education, when compared to suburban schools. The cycle of poverty, coupled with inferior levels of education, threatens to create a downward spiral of declining financial opportunity that the immigrant family may have difficulty escaping from. (Pumariega et al., 2005, p. 584)

In addition, discrimination and prejudice are common problems that migrants may face upon their arrival. This is especially true when there is an increased dissimilarity between the culture of origin and the culture of resettlement (Bhugra, 2005). While mainstream cultures tend to be the source of discrimination and prejudice, migrants also encounter these problems with other migrants who may view them as a threat to job security, limited social resources, and other opportunities (Pumariega et al., 2005). “Disillusionment, demoralization, and depression can occur…when initial hopes and expectations are not realized and when immigrants and their families face enduring obstacles to advancement in their new home because of structural barriers and inequalities aggravated by exclusionary policies, racism, and discrimination” (Kirmayer et al., 2011, p. 961). As a result, the prevalence of mental disorders and the risk of engaging in unhealthy behaviors may increase among migrants when discrepancies arise between initial hopes and the actual achievement of goals upon resettlement (Bhugra, 2003, 2005).

3.2 RISK FACTORS UNIQUE TO REFUGEES

While there are unique risk factors associated with the different stages of migration that affect mental health, the extent to which individuals are exposed to these risk factors depends heavily upon the conditions underlying their reasons for migrating. These differences in risk factor exposure subsequently result in disparities in mental health outcomes between different migrant groups, especially among refugees. Specifically, the conditions under which refugees enter a host country are markedly different from immigrants and need to be distinguished in order to provide a context for the differences in mental health outcomes seen between these two groups.

A key distinguishing factor is that immigrants are pulled towards their country of resettlement and choose to leave voluntarily to pursue perceived opportunities, including better standards of living, better jobs, and increased access to education (Hsu, Davies, & Hansen, 2004). In contrast, a refugee is defined as an individual "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country" (UNHCR, 2010, p. 14). Thus, refugees are pushed away from their native countries against their will to escape violence or persecution. Furthermore, refugees do not have a choice in where they are resettled and do not have the option of returning to their homeland.

The circumstances of these forced migrations often expose refugees to extreme social, political, economic, and environmental trauma. Before being resettled in a new host country refugees usually spend extended periods of time in refugee camps that are overcrowded and short on resources.

> The conditions found in sheltered zones, in larger cities, or across the border in neighboring countries are not necessarily better than the ones left behind. The lack of sanitation food and water shortages, loss of family and social support networks, crowding and overall deprivation experienced in refugee camps impose additional health risks, increased mortality and morbidity, and inflict further suffering among survivors. Outbreaks of cholera, dysentery, tuberculosis, acute respiratory infections and other viral diseases, such as measles, are common occurrence in most refugee camps…Rape and commercial sex is also widespread in refugee camps, often resulting in unsafe abortions and the spread of sexually transmitted diseases, including AIDS. The displaced are usually deprived from social, material, and emotional support systems, which may make them more fragile and vulnerable to environmental adversities and social distress. (Pedersen, 2002, pp. 181-182)

Under these circumstances refugees often have a sense that they have lost control over their lives and future, a process which contributes significantly to depression and other poor mental health outcomes they face (Kirmayer et al., 2011; Pumariega et al., 2005).

3.3 MENTAL HEALTH OUTCOMES IN MIGRANTS & REFUGEES

3.3.1 Mental Health Outcomes in Migrants

These differences in the conditions under which migrants and refugees leave their countries of origin have distinct effects on their risk for developing a mental disorder upon resettlement. Population-based studies demonstrate that migrants to the United States tend to have better health outcomes than the general native-born population, a phenomenon commonly known as the "healthy immigrant effect" (Breslau et al., 2007; Kirmayer et al., 2011; Singh & Siahpush, 2002). In one study, immigrants had a significantly lower lifetime prevalence and lifetime risk for anxiety, mood disorders, impulse control, and substance use when compared to native-born residents (Breslau et al., 2007). Furthermore, lifetime mortality risks have been found to be lower across multiple ethnic-immigrant and US-born groups, including foreign-born blacks (48%), Hispanics (45%), Asians/Pacific Islanders (43%), US-born Asians/Pacific Islanders (32%), US-born Hispanics (26%), and foreign-born whites (16%), in comparison to US-born whites with similar socioeconomic status and demographic characteristics (Singh & Siahpush, 2002). However, these differences in health outcomes gradually disappear and prevalence rates for common disorders among immigrants begin to resemble those of the general US population over time (Breslau et al., 2007; Singh & Siahpush, 2002). These findings suggest that while certain characteristics may protect individuals from adverse health outcomes during migration and initial resettlement, these factors progressively dissipate due to the effects of the acculturation process (Bhugra, 2005).

3.3.2 Mental Health Outcomes in Refugees

In contrast, research demonstrates that refugees are at a higher risk for developing common mental disorders when compared to migrants and the general population. One systematic review found that refugees are almost ten times more likely to suffer from posttraumatic stress disorder than aged-matched populations in western countries (Fazel, Wheeler, & Danesh, 2005). In addition, the prevalence of depression (44%) and anxiety (40%) among refugees is more than double the prevalence found among labor migrants (Lindert, Ehrenstein, Priebe, Mielck, &

Brahler, 2009). This higher prevalence of mental disorders in refugees is thought to be attributable to increased exposure to political violence and trauma which precipitates their forced migration to another country and their subsequent resettlement in an unfamiliar environment (Fazel et al., 2005; Hollifield et al., 2002; Hsu et al., 2004; Lindert et al., 2009; Pumariega et al., 2005). Thus, differences in risk factors may partially explain the observed disparities in mental health outcomes between refugees, migrants, and their host country populations.

3.4 CULTURAL AND POLITICAL HISTORY OF THE BHUTANESE-NEPALI

3.4.1 The Lhotshampas and Early Settlement of Bhutan

Bhutanese-Nepali, also known as Lhotshampas ("Southern-Border Dweller"), are a primarily Hindu, Nepali-speaking group of people who migrated from Nepal and India to southern Bhutan following the Anglo-Bhutanese war in 1865 (Hutt, 2003, 2005). Upon signing the Treaty of Sinchula to end the war the British Empire encouraged Nepali peasants who had originally migrated to the Darjeeling and Sikkim states of India to settle in Bhutan (Sinha, 2001). Northern inhabitants of the region did not contest the arrival of the Lhotshampas as the south was still uncultivated and malaria was endemic to the area (Evans, 2010). "The agricultural knowledge of the Nepalese was encouraged in Bhutan and they were allowed to clear the forestland of southern and central Bhutan to start their agricultural activities" (Barman, 2009, p. 59).

The Lhotshampas quickly became the largest producers of food in Bhutan (Hutt, 2005), with 90% of the population becoming dependent on agriculture for their main sources of food and income (Wangdi, 2002). Continued migration and economic success allowed the population to grow until 1930 (Hutt, 2005). Over time the Bhutanese-Nepali became the second largest ethnic group in Bhutan, comprising 35% of the total population (Barman, 2009). In the southern part of the country the Lhotshampas formed majority of the population in five districts, including Sachi, Chhukha, Chirang, Geylegphug and Samdrup Jongkhar (Barman, 2009). However, while the Lhotshampas constitute a cohesive minority group within Bhutan they are not homogenous, as “they migrated from different regions of Nepal and India, with their traditional caste, social and linguistic differences” (Barman, 2009, p. 59). Common caste groups among the Hindu Bhutanese-Nepali include the Brahmins, Chhetris or Dalitas (Evans, 2010). Other Lhotshampas may belong to ethnic groups such as the Rais, Limbus, Gurungs, Tamangs, Bahuns, Magars, and Newars, some of whom practice Buddhism (Barman, 2009; Evans, 2010).

3.4.2 Political and Cultural Equality

It was not until 1907 that the British helped to establish an official monarchy in Bhutan and direct policies towards the Lhotshampas began to be enacted (Hutt, 2003). Bhutanese-Nepali were restricted from owning land in the north, a ploy to keep them isolated to the southern region of the country (Evans, 2010). Furthermore, many did not learn to speak Dzonghka (Evans, 2010), the primary language spoken by the Drukpa majority ethnic group who compromised approximately 50% of the Bhutanese population (Barman, 2009). Additional early policies required the Lhotshampas to pay their taxes in cash and labor, while the Drukpas were allowed to pay their taxes in kind until 1960 (Hutt, 2003, 2005). The Bhutanese-Nepali were also taxed more heavily and were barred from serving in the police force or the armed forces (Hutt, 2003). In an attempt to receive equal rights regarding taxation and government service a group of Bhutanese-Nepali formed the Bhutan State Congress (BSC) across the border in the Indian state of Assam in 1952 (Hutt, 2003). It was not until 1958 with the passage of the Nationality Law of Bhutan that full citizenship was finally granted to Lhotshampas (Hutt, 2003, 2005).

In 1961 Bhutan enacted the First Five-Year Plan (1961-66) to put the country on the path of modernization (Evans, 2010). The combined effects of the development and the 1958 Nationality helped to integrate the economy and government administration of south with the rest of the country, and the Lhotshampas became a part of the national mainstream (Hutt, 2003; Rose, 1977). “Financial incentives were introduced to encourage marriage between northerners and southerners. Southern Bhutanese were politically represented and occupied many senior government posts, as well as being recruited into the army and the police force” (Evans, 2010, p. 28). In addition, southern schools were permitted to teach their students in Nepali and Sanskrit (Hutt, 2003).

3.4.2 Rise of Bhutanese Cultural Nationalism

Despite the successful integration of the Lhotshampas into the Bhutanese government, economy, and culture mainstream attitudes towards the minority group again began to shift in 1972.

> It would appear that the assimilation process accelerated too quickly for some powerful members of the elite, who felt that the newly admitted Lhotshampas were bringing with them democratic claims and values. These apprehensions were greatly heightened by the violence of the Gorkhaland movement in the Darjeeling district of West Bengal…and by the success of the democratic movement in Nepal. (Hutt, 2005, p. 45)

Rumors of a “Greater Nepal” conspiracy began to circulate (Evans, 2010), and government officials claimed the Lhotshampas were attempting “to turn themselves into a majority through illegal immigration in order to take over political power” (RoyalGovernmentofBhutan, 1993, p.

34). The government came to feel threatened by this rapid growth of the Bhutanese-Nepali minority and began to push for a unified and homogenous national culture as a means to protect national security (Barman, 2009; Evans, 2010). New citizenship acts were passed in 1977 and 1985 which revoked the Nationality Law of Bhutan and required individuals to prove their residence prior to 1958 in order to acquire automatic citizenship (Evans, 2010; Hutt, 2005). In addition, a marriage act enacted in 1980 made it "more difficult for Bhutanese to marry non-Bhutanese, and disqualified those who did so from receiving various state benefits" (Hutt, 2005, p. 46).

In 1980 the National Council for Social Cultural Promotion was founded in order to carry out this new government agenda. The main objectives of the commission

> were the (a) organization and promotion of social, cultural and educational activities to foster and strengthen a feeling of national community transcending regional loyalties; (b) adoption of schemes to develop the sense of national identity among the youth and make them dedicate their service to the king and the country; (c) initiations of plans and programs calculated to emphasize the social, cultural, and spiritual aspects of life and to make the youth participate in activities conducive to national development at the rural level. (Barman, 2009, p. 61)

An additional commission, the Special Commission for Cultural Affairs, was established in 1986 to further these goals and to promote the cultural heritage of the Drukpa majority group as the true national culture of Bhutan (Barman, 2009).

As a result of these political changes the Lhotshampas were expected to abandon their traditional Nepalese culture and to adopt the values and beliefs of the Drukpas. In 1989 a code of conduct, known as *Dirglam Namza* ("One Nation, One People, One Language"), was officially enacted (Barman, 2009; Evans, 2010). Dzongkha was declared the national language of Bhutan (Barman, 2009), and the Nepali language was banned from being taught in southern schools (Evans, 2010). Government officials even went so far as to burn Nepali textbooks (Hutt, 2003). In addition, all citizens were forced to comply with traditional Drukpa dress and etiquette, and heavy fines were imposed upon individuals who refused to follow the law (Barman, 2009; Evans, 2010).

Changes in census policies during this period also challenged the legal status of the Lhotshampas.

> Until the late 1980s feelings of disquiet were largely restricted to more educated Lhotshampas. But the annual census conducted in southern districts from 1988 onward impinged upon the Lhotshampas population more generally. While the Bhutanese government claims that the exercise was devised to address a growing problem of illegal immigration in Southern Bhutan, many Lhotshampas saw it as an initiative designed to reduce the size of the ethnic population of Bhutan. (Hutt, 2005, p. 46)

Thus, it became increasingly difficult for many southern Bhutanese to prove their citizenship status. As a result, many Lhotshampas were re-classified as non-nationals (Evans, 2010; Hutt, 2005). In order to combat these changes the Bhutanese-Nepali reported their grievances to Tek Nath Rizal, a southern representative serving on the Royal Advisory Council. Upon taking these problems to the King, Rizal was subsequently removed from his government position and arrested in April 1989 (Hutt, 2003, 2005). After being released Rizal fled to Nepal but was later extradited back to Bhutan where he was found guilty of treason. He was re-imprisoned and was allegedly tortured until his release from prison in December 1999 (Hutt, 2005). This event marked the beginning of Lhotshampa dissent and the use of physical force and violence by the Royal Government of Bhutan (RGB) to enforce their political agenda.

3.4.4 Political Dissent and Conflict

In response to the policies and actions of the RGB a large number of Lhotshampas began to politically organize. In 1988 between 150 and 200 individuals came together to form the Students' Union of Bhutan at Sherubste College. Members worked to organize peaceful demonstrations and circulated pamphlets that advocated messages of equal rights and democracy (Evans, 2010). Students and teachers from National Institute of Education established another organization, known as the People's Forum for Human Rights, in 1989 under the leadership of Tek Nath Rizal in Nepal (Evans, 2010). The organization distributed pamphlets throughout the country encouraging the Lhotshampas "to unite and protect their culture" (Evans, 2010, p. 31). The RBG considered these actions to be "seditious" and a threat to overthrow the government (RoyalGovernmentofBhutan, 1993, p. 7). As a result, the RGB quickly took action to suppress the growing resistance and arrested 45 protestors, which included the extradition of Tek Nath Rizal from Nepal, between October and December 1989 (Evans, 2010; Hutt, 2003).

After the establishment and subsequent crackdown on student organizations, a variety of political parties began to form. This included the re-emergence of the BSC (Parmanand, 1992) and the creation of the Bhutan People's Party (BPP). A group of activists fleeing arrest in 1989 found "refuge in a tea plantation in Garganda, West Bengal, whose manger, an Indian Nepali, was sympathetic to their political cause" (Hutt, 2003, p. 202). The Bhutanese activists and some members of the Gorkhaland movement came together to form the BPP in June 1990 with the purpose of organizing a political movement in southern Bhutan (Hutt, 2003).

The influence of the Gorkhaland movement was notable as some Lhotshampa BPP members began to adopt violent tactics characteristic of extremists belonging to the Gorkha National Liberation Front (GNLF).

> Some refugees described a campaign of violence conducted by the BPP to ensure support for their movement amongst the southern Bhutanese population. Their methods included forced ‘donations’ in cash and kind, the demand that at least one member of every household join the party, kidnaps of and attacks on those perceived to be non-supporters, and theft of animals. They also engaged in military activities, such as bombing government buildings. (Evans, 2010, p. 32)

In addition to these violent tactics BPP members would force individuals to attend protests and mass demonstrations in southern districts of the country throughout 1990 (Hutt, 2003). As a result of these actions many Lhotshampas felt trapped between the RGB and the BPP. Ultimately, the violence provided additional evidence for the Bhutanese government that the Lhotshampas were a valid threat that had to be eliminated.

In response to the protests and demonstrations the RGB began to arrest large numbers of political activists and supporters (Hutt, 2003). “Those arrested reported torture and ill-treatment in jail, including being forced to perform incongruent acts, which violate a person’s cultural or religious beliefs” (Evans, 2010, p. 34). Schools, hospitals, and other government facilities serving southern populations were closed down (Hutt, 2003). In order to gain employment citizens had to obtain certificates from the state police which indicated that the individual or their family members had not partaken in illegal activities (Hutt, 2003). Ultimately, the Royal Bhutan Army responded to Bhutanese-Nepali protests with a series of torture, rape, arson and looting

(Evans, 2010). Under these threats of violence the Lhotshampas slowly began to flee across the border into the neighboring country of Nepal.

3.4.5 Flight from Bhutan

While some Lhotshampas had begun leaving Bhutan in 1989, a large majority of the population still remained in the southern part of the country until 1991 through 1992. The escalation of government actions eventually culminated with a system of forced exile of the Bhutanese-Nepali from the country. Individuals were forced to sign voluntary migration forms with the threat of physical violence if they refused to do so (Evans, 2010). Political detainees were only released from government custody if they agreed to leave the country or the government would forcibly remove them (Hutt, 2005). Once a family member had left the country pressure was placed on remaining family members to follow them (Hutt, 2005). Finally, in September 1991 the United Nations High Commission for Refugees recognized the need for emergency relief and formally established five different refugee camps in Nepal: Timai, Goldhap, Beldangi and Khudunabari in Jhapa district, and Sanishchare (Pathri) in Morang (Hutt, 2005). By 1994, over 86,000 Lhotshampas had fled Bhutan and registered in the Nepalese refugee camps (Evans, 2010). This number eventually grew to 107,923 in 2007 as a large number of children had been born in the camps (Evans, 2010).

Between 2008 and 2014, the International Organization for Migration (IOM) has facilitated the resettlement of 94,651 Bhutanese-Nepali refugees to eight different countries (IOM, 2015). Approximately 75,000 have been resettled in the US (US Department of State, May 23, 2014). Between 2008 and 2012, Pennsylvania received the largest number of Bhutanese-Nepali refugees with 4,909 individuals (US Department of Health and Human

Services, Centers for Disease Control and Prevention, & National Center for Emerging and Zoonotic Infectious Diseases, 2014). Of these, an estimated 3,000 Bhutanese-Nepali refugees have been resettled in Allegheny County, with an additional 1,500 relocating via secondary migration (Horn, Smith, & Whitehill, 2013). The majority of these families live in the South Hills, and is one of the largest resettled Bhutanese-Nepali communities in the US.

3.5 MENTAL HEALTH IN BHUTANESE-NEPALI REFUGEES

3.5.1 Prevalence of Mental Disorders

Depression is the most commonly reported mental disorder in this population with prevalence ranging from 15% to 21% (CDC, 2013; Ellis et al., 2015; Kumar et al., 2014; Vonnahme et al., 2014). Refugees reporting symptoms of anxiety are also common with a consistent prevalence of 18% across multiple studies (CDC, 2013; Ellis et al., 2015; Vonnahme et al., 2014). Posttraumatic stress disorder (PTSD) is the mental disorder reported most infrequently ranging from 4% to 5%.

Upon assessing the mental health outcomes of Bhutanese-Nepali refugees the results are unique when compared to other refugee groups from South Asia. In general, the most commonly diagnosed mental disorders among South Asian refugees include depression, somatization and physical disorders, adjustment disorders, anxiety, and PTSD (Hsu et al., 2004). Prevalence of depression among Bhutanese-Nepali refugees is comparable to the prevalence found in Chinese Americans, ranging from 11.7% (Meinhardt, 1990) to 22.5% (Kung & Lu, 2008), and Vietnamese refugees, ranging from 12.9% (Meinhardt, 1990) to 30% (Tran, Manalo, & Nguyen, 2007). However, the prevalence of PTSD among Bhutanese-Nepali refugees are significantly lower when compared to the results for different refugee groups in other studies (Fazel et al., 2005; Hsu et al., 2004). These variations in the occurrence of mental disorders among different refugee groups demonstrates that the conditions and risk factors leading to the development of mental disorders are unique. Thus, while refugees may be exposed to similar traumatic events during the migration process local environmental factors also need to be taken into consideration, and broad generalizations about causal mechanisms should be interpreted with caution.

When the mental health of Bhutanese-Nepali refugees is compared to the general US population a distinct pattern emerges. The prevalence of refugees reporting symptoms of anxiety (18%) and PTSD (4%-5%) are similar to the prevalence of US adults over the age of 18 that are diagnosed with any anxiety disorder (18.1%) and PTSD (3.5%) (Kessler, Chiu, Demler, & Walters, 2005). However, research reveals that Bhutanese-Nepali refugees are unduly burdened with higher rates of depression in comparison to the general US population. While the rate of refugees who suffer from depressive symptoms ranges from 15% to 21% (CDC, 2013; Ellis et al., 2015; Kumar et al., 2014; Vonnahme et al., 2014), only 7.6% of US adults over the age of 18 have been diagnosed with the disorder (Pratt, 2014). Thus, Bhutanese-Nepali refugees may be two to three times more likely to suffer from depressive symptoms than American adults.

3.5.2 Depression in Bhutanese-Nepali Refugees

In addition to the higher rates of depression among Bhutanese-Nepali refugees, the physiological and cognitive ways in which depression manifests among individuals from this population may also differ from depressed individuals living in the US. Research suggests that depressed individuals from Asian cultures are more likely to present with somatic symptoms (Kleinman, 1982; Kung & Lu, 2008). Among the Bhutanese-Nepali evidence suggests that certain individuals somatize mental health (Van Ommeren, Sharma, et al., 2001). Furthermore, studies demonstrate that Bhutanese-Nepali with a mental disorders also report a high frequency of somatic complaints (Ellis et al., 2015; Hoge et al., 2006; Shrestha et al., 1998; Van Ommeren, de Jong, et al., 2001; Vonnahme et al., 2014). Thus, while there is research to support the claim that individuals from Asian cultures tend to somatize their mental distress, the reasons why they may do so are less clear.

Many researchers have shown that mental health is highly stigmatized in many Asian cultures. In contrast, seeking medical attention for a physical complaint that impedes daily functioning is seen as a culturally acceptable behavior (Kleinman, 1982; Kung & Lu, 2008). Thus, communicating physiological distress as a somatic complaint due to stigma may be a potential reason individuals somatize depression (Katon, Kleinman, & Rosen, 1982).

An additional hypothesis is that in contrast to western biomedicine where there is a distinct dichotomy between the mind and the body, non-western medical systems emphasize holism and refuse to distinguish between the two (Scheper-Hughes & Lock, 1987). According to Hoge et al. (2006, p. 964) "traditional medicine in many parts of Asia do not distinguish between mind and body, making distinctions in symptom irrelevant and increasing the likelihood that individuals will manifest psychological distress with somatic symptomology." However, clear mind-body divisions do exist in the Nepali language, which has a direct impact on the different ways Bhutanese-Nepali refugees perceive and experience mental health.

In the Nepali language, researchers have identified five separate domains of the self, including *man* (heart-mind), *dimaag* (brain-mind), *jiu* (the physical body*)*, *saato* (spirit), and *ijjat* (social status) (Kohrt & Harper, 2008). The *man* is considered to be source of wants, desires, likes and dislikes. The *dimaag* does not refer to the anatomical brain (*gidi*), but instead reflects the actual processing of thoughts and rational decision-making. The *dimaag* serves to "monitor thoughts and desires from the heart-mind, then inhibit socially inappropriate desires or actions" (Kohrt, Maharjan, Timsina, & Griffith, 2012, p. 93). "The *jiu* is the corporal body and is seen as the site of physical pain. Diseases and injuries damage this physical body" (Kohrt & Harper, 2008, p. 472). Another element, *saato*, represents the soul or the life force of the body. "Proper functioning of the *jiu* is tied intrinsically to the presence of *saato*, which provides the energy and vitality of life. The *saato* also helps prevent supernatural forces from entering the body" (Kohrt & Harper, 2008). The final domain, *ijjat*, refers to the social status of an individual.

Health in Nepali culture is directly related to these mind-body relations, and problems with a particular element are perceived differently within society. While the *man* can express negative emotions such as sadness, worry, or anger, there is no social stigma associated with experiencing these emotions because they are not associated with any illness (Kohrt & Harper, 2008). In fact, "heart-mind problems are considered commonplace. Individuals often will share openly about 'thoughts playing in the heart-mind' or 'worries in the heart-mind'" (Kohrt et al., 2012, p. 94). Furthermore, physical disease (*angha betha*) of the *jiu* are seen as legitimate forms of suffering that require medical treatment (Kohrt & Harper, 2008). Soul loss (*saato gayo*) is also common and occurs when an individual becomes afraid and the soul is scared out of the body. In contrast, problems with the *dimaag* carry a great deal of social stigma due to the impact on daily functioning and social status.

According to Kohrt and Harper (2008), a spectrum of problems can occur with the *dimaag* ranging from being confused or irrational all the way to going crazy. The most extreme condition, known as *paagal* or *bualaahaa*, refers to an individual going crazy, mad, or psychotic, and results from a dysfunction of the *dimaag* (Kohrt & Harper, 2008). The conditions are highly stigmatized and are viewed to be contagious, incurable, and sometimes permanent.

> The crux of our perspective on mind-body divisions, mental illness and stigma lies in the unique position that *dimaag* holds in Nepali conceptions of self. Because of the centrality of social relations in status and perceived well-being, any dysfunction that impairs social positioning is highly stigmatized. The *dimaag*, as opposed to other elements of the self, is principally responsible for this regulation. (Kohrt & Harper, 2008, p. 471).

Thus, a dysfunction of the *dimaag* is highly feared in Nepali culture due to the potential loss of *ijjat* that could result. "If the brain-mind is not operating properly one suffers *bejjat* (loss of *ijjat*, or social status), which is associated with social marginalization and in extreme cases 'social death'" (Kohrt et al., 2012, p. 94).

The different levels of stigma associated with the dysfunction of the elements of the self directly affect how the Nepalese seek treatment and care (Figure 1). In Nepal, a pluralistic system of medicine exists where people access both western biomedical care and traditional healers for treatment (Pigg, 1995; Subedi, 1989; Tausig & Subedi, 2007). "Faith healers such as *jhankries* and *dhamis* play a significant part in meeting the villagers' health care needs" (Subedi, 1989, p. 414). These healers frame illness as loss of soul (*saato gayo*) which results from spiritual affliction (*laago*) or witchcraft, and are often sought out early for care. After seeking out more traditional forms of care, people will meet with a general physician to alleviate pain or other physical complaints with medication.

> From the perspective of the indigenous mind-body divisions, they treat a nonstigmatized part of the self, the *jiu*. The Cartesian dichotomy central to biomedicine reinforces the valorized space of the general physician; they address "real" problems, rather than

> problems of the mind. Thus *iijat* is not damaged by visiting a general physician. (Kohrt & Harper, 2008, p. 479).

In many cases individuals will seek out treatment from both traditional healers and general physicians.

As a last resort, individuals will seek treatment from psychiatrists, also known as “crazy doctors”. This is generally in cases when individuals are perceived to have gone crazy (*paagal*) and treatment from traditional healers or doctors have failed. Oftentimes, when families bring patients for treatment they will use a fake name to protect the anonymity of their sick loved one (Kohrt & Harper, 2008). In addition, doctors are reluctant to provide referrals to patients who may benefit from seeing a psychiatrist due to the stigma that may be place on the family. “This stigma against psychiatry is rooted in the daily discourse of mind-body divisions that identify dysfunction of the *dimaag* as socially threatening and damaging” (Kohrt & Harper, 2008, p. 480).

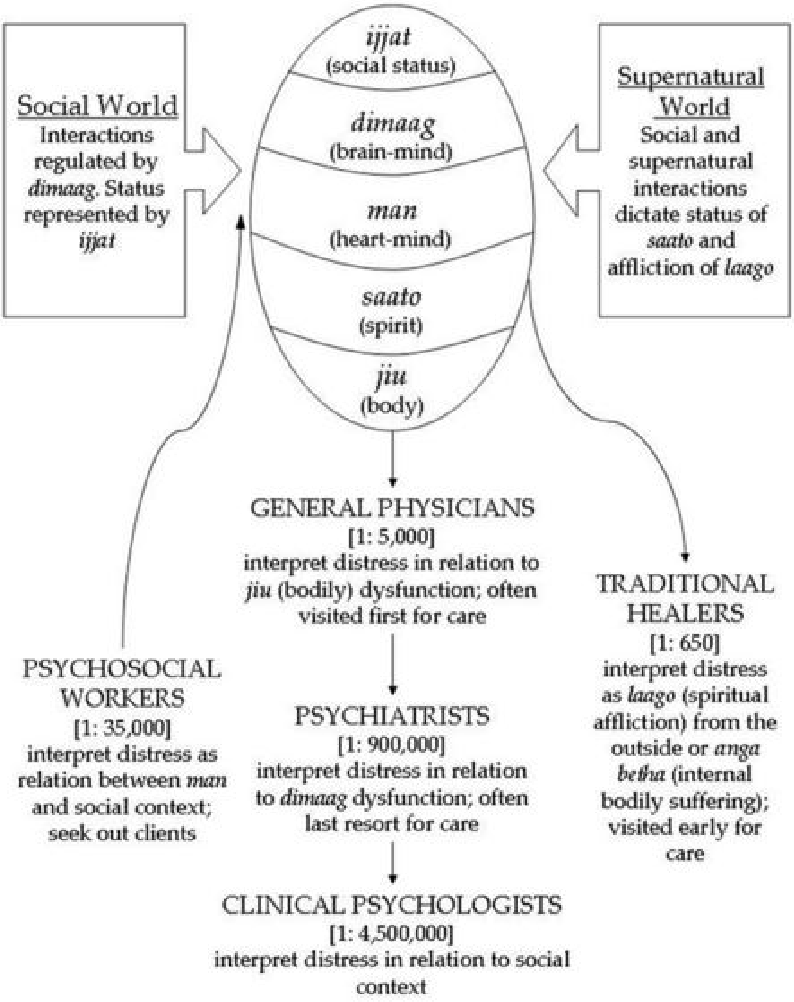

Figure 1 - Nepali Mind-Body Divisions & Treatment-Seeking Behavior[1]

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[1] Figure is open access: from Kohrt, B. A., & Harper, I. (2008). Navigating diagnoses: understanding mind-body relations, mental health, and stigma in Nepal. *Cult Med Psychiatry*, *32*(4), 462-491. doi:10.1007/s11013-008-9110-6

3.5.3 Prevalence of Suicide & Associated Risk Factors

According to the Center for Disease Control and Prevention (CDC), suicide was the 10th leading cause of death in United States (US) in 2013 (CDC, 2015). The current age-standardized suicide rate in the general US population is 12.6 per 100,000 (CDC, 2015). In comparison, resettled Bhutanese-Nepali refugees living in the US suffer disproportionately from this public health problem with an age-adjusted suicide rate of 24.4 per 100,000 (CDC, 2013). A similar rate of suicide was reported among the Bhutanese while in Nepali refugee camps at 20.7 per 100,000 (Schinina et al., 2011). This indicates that certain suicide-related risk factors are not dependent on geography and may be unique to the refugee experience.

Poor mental health is one of the largest risk factors for suicide. Approximately 90% of people who commit suicide have some type of mental disorder (Cavanagh, Carson, Sharpe, & Lawrie, 2003). Various studies support this trend within resettled Bhutanese-Nepali communities throughout the US, with depression, posttraumatic stress disorder (PTSD), distress, and anxiety all being associated with suicidal ideation in this population (CDC, 2013; Ellis et al., 2015; Schinina et al., 2011; Vonnahme et al., 2014). According to Schinina et al. (2011), 37.5% of the individuals who committed suicide in the refugee camps suffered from major depression. In a retrospective study of suicide cases that occurred in the US from 2008 to 2011, 60% had symptoms suggestive of depression (Hagaman et al., 2016). In addition to the presence of a mental disorder, other risk factors for suicide in this population include substance abuse, family conflict, shifts in familial roles into non-traditional providers, feelings of shame and loneliness, and general post-migration difficulties (CDC, 2013; Ellis et al., 2015; Hagaman et al., 2016; Schinina et al., 2011).

Overall suicidal ideation in this population has consistently been found to be 3% across several studies, with depression serving as the single biggest risk factor (CDC, 2013; Ellis et al., 2015; Vonnahme et al., 2014). However, due to religious reasons, suicide is illegal in Nepal and carries a great deal of stigma (Schinina et al., 2011). Because of the stigma associated with suicide in Nepalese culture and studies reporting suicidal ideation all relied on self-report, the true extent of suicidal ideation among Bhutanese-Nepali refugees is thought to be much higher. In fact, most reported suicides occurred impulsively (Schinina et al., 2011) with only one case ever talking about suicide prior to taking their own life (Hagaman et al., 2016).

3.5.4 Risk Factors for Mental Disorders

According to a recent report, mental health is one of the top health priorities that remains to be addressed among Bhutanese-Nepali refugees (US Department of Health and Human Services et al., 2014). Despite the higher frequency of suicide and mental health disorders in this community, less than 4% have been formally diagnosed (Vonnahme et al., 2014). Among the refugees who attempted suicide in the camps, none were ever referred to mental health services (Schinina et al., 2011). This high rate of undiagnosed mental disorders is due to a variety of factors, including the lack of a mandated mental health inventory during post-arrival health screenings, stigmatization of mental health disorders, and unfamiliarity with available mental and behavioral health services.

Post-migration difficulties are frequently cited as potential determinants of poor mental health in refugees. Common problems include language barriers, lack of employment opportunities, break down in traditional social roles, family conflicts, lack of social support, and difficulty accessing health services (Ellis et al., 2015; Kumar et al., 2014; Vonnahme et al., 2014). For Bhutanese-Nepali refugees living in Pittsburgh, transportation is a significant barrier that prevents people from seeking healthcare. In addition, previous exposure to trauma, specifically torture, has been associated with higher frequencies of depression, PTSD, anxiety, and somatoform disorders (CDC, 2013; Shrestha et al., 1998; Tol et al., 2007; Van Ommeren, de Jong, et al., 2001). Co-morbidity of mental disorders, chronic diseases, and alcohol/substance abuse are also common in this population (CDC, 2013; Ellis et al., 2015; Kumar et al., 2014; Schinina et al., 2011; Vonnahme et al., 2014).

3.6 CLASSIFICATION OF MENTAL DISORDERS IN THE DSM-V

The Diagnostic and Statistical Manual of Mental Disorders (DSM) is a commonly recognized "diagnostic classification system for psychiatrists, other physicians, and other mental health professionals that [describes] the essential features of the full range of mental disorders" (American PsychiatricAPA, 2013b). The American Psychiatric Association (APA) first published the DSM in 1952 and is now in the Fifth Edition (DSM-V). Two classes of disorders include depressive disorders and somatic symptom and related disorders.

3.6.1 Depressive Disorders

The DSM-V outlines a variety of depressive disorders, including disruptive mood dysregulation disorder, major depressive disorder, persistent depressive disorder (dysthymia), premenstrual dysphoric disorder, substance/medication-induced depressive disorder, depressive disorder due to another medical condition, other specified depressive disorder, and unspecified depressive disorder (APA, 2013). Feelings of sadness or irritability are common features of all depressive disorders. In addition, many are “accompanied by somatic and cognitive changes [a person’s] capacity to function” (APA, 2013). However, the etiology, duration and persistence of symptoms varies between disorders. Of all depressive disorders major depressive is the most common.

According to the DSM-V, major depressive disorder is “characterized by discrete episodes of at least two weeks’ duration (although most episodes are considerably longer) involving clear-cut changes in affect, cognition, and nuerovegetative functions and inter-episode remissions” (APA, 2013a). Symptoms that occur during an episode include depressed mood, loss of pleasure in daily activities, significant changes in weight, insomnia or hypersomnia, changes in speech or movement, feeling tired or having low energy, feelings of worthlessness or self-guilt, trouble concentrating and recurrent thoughts of death or suicidal ideation. In order to diagnose an individual with major depressive disorder five or more symptoms must occur concurrently during a two-week period, one of which must be either depressed mood or loss of pleasure in daily activities. Furthermore, these symptoms “cause clinically significant distress or impairment in social, occupational, or other important areas of functioning…[and are] not attributable to the physiological effects of a substance or to another medical condition” (APA, 2013a).

3.6.2 Somatic Symptom and Related Disorders

Somatic symptom and other related disorders are a new category of disorders outlined in the DSM-V. A common feature to all of these disorders is “the prominence of somatic symptoms associated with significant distress and impairment” (APA, 2013c). Of these disorders somatic symptom disorder is considered to be the most common. Diagnostic criteria includes the presence of one or more somatic symptom that causes distress and significant impairment excessive thoughts or anxiety concerning the severity of symptoms, and a symptomatic state of six months or longer (APA, 2013c). Physicians are encouraged to specify if the predominant somatic complain is pain, the duration of the somatic complaint, and the level of severity. The symptoms an individual reports may or may not be associated with another medical condition.

3.7 IDIOMS OF DISTRESS

While the DSM-V acknowledges there are cultural differences in the manifestation of common mental disorders, many “researchers recognize that using measurement instruments designed to capture DSM-defined syndromes may result in missing culturally relevant symptoms that are associated with impaired functioning” (Kaiser et al., 2015, p. 171). Rather than attempting to diagnose an individual with a specific disorder using discrete diagnostic criteria, medical professionals need to be open to alternative methods of defining and experiencing mental health. Such an alternative may exist in the theoretical concept of idioms of distress, defined as “socially and culturally resonant means of experiencing and expressing distress in local worlds” (Nichter, 2010, p. 405). Common behaviors that serve as idioms of distress include medicine-taking, use and reframing of biomedical disease nomenclature, use of diagnostic tests, health-care seeking, and changes in consumption patterns (Nichter, 2010). In the DSM-V, cultural idioms of distress are seen as legitimate “ways that cultural groups experience, understand and communicate suffering, behavioral problems or troubling thoughts and emotions” (APA, 2013b). Thus, idioms of distress are locally salient and dependent on the social and cultural milieu in which they are constructed. While these idioms may not always correlate with specific psychological constructs outlined in the DSM-V, they may still serve as a valid way for an individual to communicate potential suffering.

4.0 MATERIALS AND METHODS

4.1 STUDY DESIGN

The purpose of this descriptive study was to determine if Bhutanese-Nepali cultural conceptualizations of mental health correlate to mental disorders classified in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V). The researcher hypothesized that the severity of symptoms associated with common mental disorders would be higher among Bhutanese-Nepali refugees when compared to the general US population or other refugee groups. Mixed-method data collection techniques were utilized, including interviews and a single focus group. A non-randomized sampling method was employed to gather a convenience sample of participants from the Squirrel Hill Health Center (SHHC) and the Bhutanese Community Association of Pittsburgh (BCAP). Interviews consisted of evidence-based Patient Health Questionnaires (PHQs) to measure the severity of depressive and somatic symptoms in patients from SHHC. In addition, a focus group was conducted with members from BCAP to gather more in-depth information about how Bhutanese-Nepali conceptualizations of mental health and well-being are similar or different when compared to standard biomedical perspectives, including disorders and treatments outlined in the DSM-V. This study received approval from the University of Pittsburgh Institutional Review Board on August 6, 2015 (Appendix A).

4.2 PARTICIPANTS

In order to be eligible for the study all subjects had to be over 18 years of age and a Bhutanese-Nepali refugee resettled in Allegheny County. English proficiency was not required to participate. Different inclusion criteria and recruitment methods were established for participation in the interviews and focus group.

4.2.1 Interviews

4.2.1.1 Eligibility

Interview subjects came from a convenience sample of patients from the Squirrel Hill Health Center (SHHC) that fit the symptom inclusion criteria. Prior to the onset of the study the research team met with physicians and psychiatrists at SHHC to discuss symptom inclusion criteria for patients. Because physicians reported patients were presenting with a wide range of physical and mental symptoms, researchers did not set strict symptom inclusion criteria. However, a spectrum of symptoms was developed for potential subjects ranging from mild to severe. Mild cases involved patients reporting unexplained pain, trouble sleeping, somatic complaints, anxiety or grief, and difficulty performing daily tasks. In the most severe cases, patients had attempted suicide or had entered a comatose state and could not function without the full-time supervision of a family member or caregiver. In addition, patients reported symptom onset occurring suddenly upon resettlement in the United States. Thus, any patient that began exhibiting any combination of symptoms along this spectrum after arriving in the United States was eligible to be interviewed.

4.2.1.2 Recruitment

After the meeting with the medical staff at SHHC, doctors at the clinic used the symptom spectrum to create a spreadsheet of potential subjects with their names and level of symptom severity. Upon completing the necessary HIPPA training, researchers worked with a social worker from SHHC to come up with a schedule of the upcoming appointments for each patient from the spreadsheet. Participants could then be recruited in one of two ways. The first involved researchers meeting with subjects at the conclusion of their appointments. All patients that expressed interest in participating provided contact information for researchers to follow-up with them. In the event that researchers could not be present at the conclusion of an appointment, an alternative method involved medical staff providing the eligible subject and their family member with a recruitment packet in both Nepali and English (Appendix B). Patients who wished to participate left their contact information with the physician and gave permission for researchers to follow-up.

Each patient who was contacted via follow-up was briefed in-depth about the purpose of the study and any potential risks and benefits of study participation. A certified medical translator from the clinic assisted the researchers during this process to communicate with households who did not have an English-speaking family member. In the event that a translator from the clinic could not be present the researchers used a conference call to dial out to a professional translator from Language Line. Language Line is a professional service which offers on-demand phone interpretation in the event an in-person translator is unavailable. Interested patients and their families were then provided with informed consent materials

(Appendix C) and arranged a time to meet with researchers to conduct a one to two hour interview at the home of the patient. A total of twenty-six patients were contacted to be potential study participants, and six of those patients consented to be interviewed. The recruitment period for the qualitative interviews took place between August and November of 2015.

4.2.2 Focus Groups

4.2.2.1 Eligibility

Staff members from the Bhutanese Community Association of Pittsburgh (BCAP) referred the research team to multiple BCAP events where potential focus group participants could be reached. Ultimately, subjects were drawn from a convenience sample of individuals attending a support group for Bhutanese-Nepali refugees suffering from mental distress and dealing with post-migration difficulties.

4.2.2.2 Recruitment

A peer support from SHHC, who was also a member of BCAP, served as the initial point of contact between the research team and the community organization. Researchers held a series of stakeholder meetings with the director and support staff to brief them about the purpose of the study. Members of the organization suggested that a weekly support group offered to refugees suffering from mental distress and post-migration difficulties would be a good setting to conduct the focus group. Researchers observed the refugees during the first portion of the session in order to make participants more comfortable and aware of their presence. Activities during the session involved yoga, dancing, meditation, group discussion, and a motivational speech from a respected Nepali leader. Towards the end of the meeting researchers briefed the group about the purpose of the study and focus group. Any individual who was willing to participate was instructed to join the researchers in a private area at the conclusion of the support group activities. Meeting in a private area ensured that the participation of each subject remained confidential from other support group members. A total of five refugees agreed to participate and were provided with informed consent materials. However, only four ended up participating as one subject had to leave early due to time constraints. The focus group lasted for approximately one hour and took place on March 9, 2016.

4.3 INSTRUMENTS

4.3.1 Interviews

4.3.1.1 Patient Health Questionnaires

The first data collection method involved a one to two hour interview session in the homes of consenting patients from SHHC. The first half of the interview involved a series of short surveys to assess the severity of symptoms for depression and somatization. Known as Patient Health Questionnaires (PHQs), these instruments are evidence-based assessment measures that are disorder-specific and correlate closely with symptoms outlined in the DSM-V. Clinicians and researchers typically administer these severity measures “to individuals who have received a diagnosis or who have a clinically significant syndrome that fall short of meeting full criteria for a diagnosis” (American Psychiatric Association, 2013a: para. 5).

PHQs are designed using a Likert scale rating where individuals rate the severity of the symptoms they are experiencing. The severity measure for depression, adapted from the PHQ-9 (Appendix D), asked participants to rate how often they had been bothered by a series of problems over the course of the past week prior to being interviewed. The scale ranged from not at all, several days, more than half the days, to nearly every day. The somatic symptom assessment, adapted from the PHQ-15 (Appendix E), also asked participants to rate the severity of unexplainable pain or physical complaints over the course of the past seven days prior to being interviewed. The scale ranged from not bothered at all, bothered a little, to bothered a lot.

4.3.1.2 Cultural Formulation Interviews

The second half of the interview involved a series of open-ended questions that were aimed at gathering more information concerning cultural conceptualizations of Bhutanese mental health, life back in Bhutan, and post-migration difficulties. Basic demographic questions about age, level of education, marital status, religion, and household characteristics were also included. This semi-structured portion of the interview was adapted from the Cultural Formulation Interview (CFI) found in the DSM-V. Physicians are meant to use the CFI to systematically asses the cultural identity of an individual patient, cultural conceptualizations of distress, psychosocial stressors and cultural features of vulnerability and resilience, and cultural features of the relationship between the individual and the clinician (American Psychiatric Association, 2013b). More specifically, “the CFI focuses on the individual’s experience and social contexts of the clinical problem… [and] follows a person-centered approach to cultural assessment by eliciting information from the individual about his or her own views and those of others in his or her social network” (American Psychiatric Association, 2013b: para. 15). This approach has been field-tested and has been shown to be diagnostically useful and acceptable among clinicians and patients.

4.3.2 Focus Group

Researcher developed a focus group guide with questions that would elicit more in-depth information about how Bhutanese-Nepali refugees conceptualize mental health. Prior to the focus group the organizational director and support group leader from the Bhutanese Community Association of Pittsburgh (BCAP) were given a copy of the focus group guide to ensure that medical concepts could be easily translated into Nepali and would elicit useful information. Their feedback was incorporated into a new version to ensure the questions were well received with the target participants.

4.4 DATA COLLECTION

4.4.1 Interviews

Prior to conducting any interviews with patients in their homes the researchers reviewed all severity measures and the CFI with medical staff from SHHC to ensure they would collect the appropriate outcome variables of interest. In addition, a certified medical translator was contacted to ensure that interview questions could be easily translated and understood in Nepali. Any questions that did not translate well were re-worded so patients would better understand them during the interview. After revisions were made to the interview guide the researchers did a mock interview with a translator and trained them in the appropriate emergency protocols to ensure all interviews were conducted in a consistent and safe manner. The same translator from the clinic was used in most of the interviews. However, in one instance this translator could not be present and a professional translator from Language Line had to be dialed in over the phone. During the PHQ portion of the interview each participant was asked a series of questions that asked them to rate the severity of the symptom they were experiencing. Each question was read aloud to the patient who then provided their answer verbally. Based upon the reported frequency or severity of the symptom in question the researchers transcribed the answers by manually checking off the corresponding rating for each question on the PHQ. All interviews were recorded and paper copies of the survey responses for each subject were kept so they could later be transcribed and analyzed. Interviews took place from October to December of 2015.

4.4.2 Focus Group

During the focus group session refugees were asked questions about differences between common mental disorders in Bhutan and the United States, possible explanatory models for the causes of mental disorders, traditional healing practices, and the high rates of suicide within this population. In addition, information about the refugee experience, difficulties with resettlement, and experiences with the healthcare system in the United States. Because these refugees were members of a support group for individuals suffering from high levels of mental distress, some participants were able to talk about their personal experiences with having a diagnosed mental disorder. Two members from BCAP volunteered to serve as translators. The entire focus group session was recorded so it could later be transcribed and analyzed. The session lasted for approximately one hour and took place on March 9, 2016.

4.5 DATA ANALYSIS

Upon completion of the transcription of the interviews and focus group session transcripts were analyzed for common themes. A theme was identified when more than one participant provided information about a certain topic. For example, while answers may have varied, multiple focus group participants offered information concerning how living with depression affected their daily lives. Thus, the impact of depression on daily life was considered to be a common theme. Most of these themes correlated with a question asked using the focus group guide (Appendix F) and explored culturally-specific definitions of mental health and elements of the refugee experience. Researchers read the transcripts and identified potential themes independently. If both researchers identified a theme in common after independent analysis, the theme was considered to be significant.

Quantitative results from the PHQs were input and analyzed using SPSS to discern the severity of mental disorders within the study sample. In particular, the researcher identified the number of patients who screened positive for depression and somatic disorders. The level of symptom severity for each disorder was used to determine the level of somatization and depression in each participant. The researcher further explored the relationship between these two disorders and what was unique about their manifestation in of the population. This was determined by analyzing themes found in the focus group and interviews in an attempt to identify potential idioms of distress that explain how Bhutanese-Nepali refugees potentially manifest depression and mental distress through somatization. Ultimately, data analysis revealed a greater understanding of how the somatization of depression may be an expression of a cultural idiom of distress and how Nepali mind-body divisions influence the way refugees explain the etiology of their mental and physical health conditions.

5.0 RESULTS

5.1 INTERVIEWS

5.1.1 Patient Demographics

A total of six individuals were interviewed in their homes for this portion of the study. All subjects were established patients at the Squirrel Hill Health Center and were receiving regular primary and psychiatric care. Three (50%) of the participants interviewed were male, and three (50%) were female. The mean age of participants was 58.83 years old, with ages ranging from 44 years to 67 years. The average age of male participants was 64 years old, while the average age of female participants was 53.67 years old. The average length of time spent in the United States was 5.33 years and ranged from 3 to 7 years. All participants were born in Bhutan. None of the participants received a formal education while living in Bhutan. A few subjects did report attending language classes to learn English upon arriving in the United States; however, none of the subjects interviewed could speak English, so all had to communicate with researchers through an interpreter. All subjects were farmers back in Bhutan and were unemployed at the time of the interview. In addition, all participants identified with the Hindu religious tradition. Five of the subjects were married, and one woman was a widow. All of the participants lived with at least one family member, with the household size ranging from two to eight members.

5.1.2 Personal Health Questionnaires

5.1.2.1 Prevalence of Somatic Symptoms

Raw PHQ-15 somatic symptom scores for the participants ranged from 15 to 22 with a mean score of 19.33. These results indicate that all six (100%) participants scored high on the somatic symptom severity scale. All participants reported experiencing the same cluster of symptoms: back pain; pain in their arms, legs, or joints; headaches; dizziness; shortness of breath; and trouble sleeping. However, the level of severity for each symptom varied between participants. While all symptoms differed in their reported levels of severity, it should be noted that every symptom was reported to be bothersome to at least one participant.

Table 1 - Raw Scores for Somatic Symptoms (PHQ-15)

	Participant 1	*Participant 2*	*Participant 3*	*Participant 4*	*Participant 5*	*Participant 6*
Stomach Pain	2	2	2	0	0	2
Back pain	2	2	2	2	1	2
Pain in arms, legs or joints	2	2	2	2	1	1
Headaches	1	2	2	2	1	2
Chest pain	1	2	2	2	1	0
Dizziness	1	1	2	2	1	1
Faint spells	0	0	0	1	1	1
Heart racing	2	0	2	1	1	1
Shortness of breath	1	1	2	1	1	1
Constipation or diarrhea	2	1	1	0	2	0
Nausea, gas or indigestion	2	2	0	1	0	0
Feeling tired or low energy	2	2	0	2	2	2
Trouble sleeping	1	1	2	2	1	1
Total Score	21	21	22	21	15	16

5.1.2.2 Prevalence of Depressive Symptoms

Total raw PHQ-9 depressive symptom scores for participants ranged from 9 to 20 with a mean score of 15.33. One (16.7%) participant had a mild level of depressive symptom severity, two (33.3%) had moderate, two (33.3%) had moderately severe, and one (16.7%) had severe. The one participant who had mild symptom severity was male, and the one participant who had severe symptom severity was female. An equal number of males and females had moderate (16.7% male; 16.7% female) and moderately severe (16.7% male; 16.7% female) levels of symptom severity.

Results indicate that the most severe symptoms for participants include: feeling tired or having low energy; feeling down, depressed or hopeless; and irregular sleep patterns. These symptoms did not occur in isolation, as the same three participants reported experiencing all three problems nearly every day. In addition, all participants reported having irregular sleeping patterns and having a poor appetite or overeating; although, the level of severity for each symptom varied between participants. Three participants reported having thoughts that they were better off dead in the week prior to being interviewed.

Table 2 - Raw Scores for Depressive Symptoms (PHQ-9)

	Participant 1	*Participant 2*	*Participant 3*	*Participant 4*	*Participant 5*	*Participant 6*
Loss of interest	1	2	1	2	0	2
Feeling down, depressed or hopeless	3	3	1	3	0	3
Irregular sleep patterns	3	1	2	3	1	3
Poor appetite or overeating	3	3	1	1	3	1
Trouble Concentrating	3	0	1	1	3	3
Feelings of failure	3	2	1	3	3	0
Changes in speech or movement	0	0	2	1	0	3
Suicidal thoughts	1	0	0	0	1	1
Feeling tired or low energy	3	2	0	3	3	3
Total Score	20	13	9	17	14	19

5.2 FOCUS GROUP

5.2.1 Focus Group Demographics

A total of four individuals participated in the focus group. Two (50%) participants were male and two (50%) were female. All participants were members of BCAP and attend weekly meetings for a local refugee support group. Participants enrolled in the support group to share their struggles with mental health issues with other refugees as a healthy way to cope with their disorder. Each participant stated that they had been diagnosed with depression upon resettling in the United States.

5.2.2 Common Themes

During the focus group session the participants shared their experiences with the American healthcare system and living with depression. While the level of severity varied among participants, common themes emerged throughout the discussion. These themes included the unique manifestation of depressive symptoms in Bhutanese-Nepali refugees, how depression affects daily life, differences between mental health in Nepal and the US, and common treatments for mental disorders. In addition, participants shared their experiences about life in the refugee camps and resettlement in the US.

5.2.2.1 Manifestation of Depression

Participants reported a wide range of physical and mental symptoms associated with their depression. Pain was a common complaint among both men and women. Specifically, one woman stated she had migraines, while another experienced “a lot of back pain” (Refugee woman, personal communication, March 9, 2016). In addition, multiple participants discussed having sleep problems.

However, most of the symptoms reported were of a mental nature. Trouble concentrating and forgetfulness were common symptoms. One man stated that he did not “have concentration” (Refugee man, personal communication, March 9, 2016), while one woman reported that she “cannot remember what [she] said in the last sentence” (Refugee woman, personal communication, March 9, 2016). Other common mental symptoms included feelings of isolation and a lack of interest in socialization. “I stay at home in the room by myself. I don’t like to go out. I don’t like to talk to people” (Refugee man, personal communication, March 9, 2016). However, despite these feelings of loneliness, one participant wished he felt differently. “I try but I am unable to really talk to other people…I want to be alright by talking to other people and expressing how I feel (Refugee man, personal communication, March 9, 2016). When asked to describe the general effects depression had on the mind the man who believed he had the most severe depression stated “I have the feeling of movement all over my brain. It’s not physical. It’s like a moment when you’re out of balance. I’m thinking constantly because of the movement” (Refugee man, personal communication, March 9, 2016). In the worst cases, refugees reported individuals with depression in the community becoming suicidal.

The time of symptom onset varied between participants. While one man stated he started having problems upon resettlement in the United States four to five years ago, one woman had been struggling for the past seventeen years beginning in the refugee camps in Nepal. However, her symptoms had become the most severe in the past three years after she arrived in the US. In addition, the condition of participants were constantly fluctuating, with some going away and eventually coming back. One man expressed his fear that he would never recover from his condition. “I don’t know if it’s going to last forever. And that’s hurting me…I’m struggling…I’m pretty scared that the depression will stay forever. That it will never go away” (Refugee man, personal communication, 2016). In addition to fear, many participants expressed frustration over the severity of their condition. “[I] shouldn’t be depressed. [I have my] friends and family that love [me. I have] it good” (Refugee man, personal communication, 2016).

5.2.2.2 Causes of Depression

When asked about the possible causes of depression participants provided a wide range of explanations. Coming to the United States has posed a series of difficulties that have contributed to poor mental health outcomes for many in the refugee community.

> There are a lot of problems in the community. People are alone…They have different habits in their country [Bhutan]. And so when they come here [to the United States] they don’t have any friends or relatives to talk to. And some people they don’t even speak English. There is difficulty in doing various things. They don’t understand anything. That they have to go to the bank. If they have to go to the hospital. And they feel like ‘What kind of country is this? I don’t understand anything.’ So they are going to be depressed. So there are many reasons. For some people they aren’t able to work because of the language. So these are the things that cause problems. (Refugee man, personal communication, March 9, 2016)

Thus, language barriers, difficulty acquiring unemployment, inability to access healthcare, and an overall unfamiliarity with American culture are common post-migration difficulties that may be potential risk factors for developing depression. Another man shared how the loss of community and social support result from resettlement in a new country. “Back in Nepal it was easy. Everyone could be together…mingling with communities all around. Everyone was friendly with everyone else. Here it is very different. So coming from somewhere that is not the same. I think that’s why most of [us] are having problems” (Refugee man, personal communication, March 9, 2016).

Participants also discussed what they believed to be the explicit causes of the negative thoughts and feelings associated with their depression. According to one woman, pain in the head was the result of “bad thoughts and stress…It just happens. You just think of all the pressure and tension that you have and you have bad thoughts. That’s what develops into depression” (Refugee woman, personal communication, March 9, 2016). Others reported that the cause was “something physical or chemicals in the brain” (Refugee man and woman, personal communication, March 9, 2016). Personal loss and struggle were also stated to be potential sources of feelings of sadness or stress. “My divorce and dead mother. I was about to get a master’s degree in science. My mom had cancer. I moved to California and it was very expensive. This took a big toll on me” (Refugee man, personal communication, March 9, 2016).

5.2.2.3 Effects of Depression on Daily Life

Participants commonly discussed how depression had a significant impact on their day-to-day functioning. “It affects everything. We are not able to go to people and talk to them. Be friendly. Enjoy our life. I feel like my life is in a dark hole where there is not light” (Refugee man, personal communication, March 9, 2016). Overall, participants felt that because of their depression they were unable to interact and socialize with others. As a result, many reported having difficulty maintaining healthy relationships with friends and family members. In addition, multiple participants reported an inability to work. For one man that was able to obtain employment, going back to work actually made his depression worse. “I cannot do anything in this state. I try to but I have no patience" (Refugee man, personal communication, March 9, 2016).

5.2.2.4 Experiences with Healthcare in the United States

All participants reported that they had been diagnosed with depression upon arriving in the United States. Common barriers to seeking out healthcare services including trouble with transportation and lack of health insurance. When asked where patients go to receive treatment for mental health issues, all reported seeking help from a hospital or clinic. However, despite the fact that many sought out medical treatment, many participants disagreed with their doctors about the diagnosis of depression. In the words of one woman, "the doctor diagnosed [me] with depression. But [I] said [I don't] have depression" (Refugee woman, personal communication, March 9, 2016). Another man stated

> when I go to the doctor they say I'm okay. I can speak nicely. I am physically healthy. And they're not able to diagnose it. You should not have a moment like that if you have depression. So I don't know if it's depression. (Refugee man, personal communication, March 9, 2016)

In fact, one man felt that "because the doctor says he has depression that he has depression." (Refugee man, personal communication, March 9, 2016).

Despite their disagreement with the diagnosis of depression, all participants reported complying with the treatment advice of their doctors. According to one translator present during the focus group session, "most people in the community take some kind of medicine" (Translator, personal communication, March 9, 2016). However, for many participants the medication they are prescribed are not having the desired effects and their symptoms persist. In fact, one participant believed that "the medication is messing up with [our] heads" (Refugee woman, personal communication, March 9, 2016). Another participant stated that "I have been going to see counselling…And they advise me to exercise to get the hormone serotonin up in my brain. The medication help together. So I've been doing what they tell me. I'm not feeling better though, and I want to" (Refugee man, personal communication, March 9, 2016).

5.2.2.5 Mental Health in Nepal

In addition to their experiences with healthcare in the United States participants discussed the differences with practicing medicine in Nepal. One participation described the lack of medical services throughout the country. "There is nothing. There are not a lot of doctors. And people could not pay money to go to doctor." (Refugee man, personal communication, March 9, 2016).

Participants also described how the Nepali conceptualize mental health. "In Nepal it's very religious. Some people just go crazy. It's mental. It's in their head that they're sick" (Refugee man, personal communication, March 9, 2016). When asked to describe common mental problems people experience in Nepal it was reported that "very few people have depression. It's a mental problem. Just plain crazy is how they say it (Refugee man, personal communication, March 9, 2016). However, none of the participants could identify concrete characteristics that differentiate depression from being "just plain crazy". In fact, when asked about the differences between "going crazy" and depression, it was reported to be the "same thing. [But] people don't know they have depression over there because they don't check for it." (Refugee man, personal communication, March 9, 2016). Participants described how there is no word for "depression" in the Nepali language. Yet despite linguistic differences "there is depression [in Nepal] but people don't know they have it. And then they come here [to the US] and they come to know it as depression" (Refugee man, personal communication, March 9, 2016).

While the focus group participants saw similarities between depression and being “just plain crazy” in Nepal, many reported that people from Nepal have different ways of explaining the etiology of mental illness. “In Nepal the same thing [depression] might happen but they will think it’s because of some ghost or something bad happened to them. And they need something religious to free them to get better” (Refugee woman, personal communication, March 9, 2016). Thus, religion and spirituality are closely linked to health in Nepalese culture. This relationship also has an impact on the type of treatments people seek for their medical needs.

“For something like that where people believe that something is affecting them, ghosts or whatever, there is…I don’t know how to phrase it other than a witch doctor” (Refugee man, personal communication, March 9, 2016). Known as a *dahmi*, many individuals seek out this type of traditional healer when a spiritual cause is attributed to their medical condition. “He’s kind of like an exorcist…If you believe the *dahmi* will work, it will. It depends on who is asking for help and who is helping them. If you believe they’re going to do will work it most of the time works. Like a placebo effect” (Refugee man, personal communication, March 9, 2016). These beliefs are still pervasive after resettling in the US, and is an important aspect of the Bhutanese-Nepali cultural identity. “For kids they try to use the witch doctor. Because it’s tradition. They need to keep it alive” (Refugee man, personal communication, March 9, 2016).

While seeking out treatment from a *dahmi* is a common practice, having a mental disorder carries a great deal of stigma. “In our society people look down on you if you have something wrong with you. They don’t support you. They think ‘He’s not going to do anything in life.’ And they neglect you. And that just adds on to the problems he already has” (Refugee man, personal communication, March 9, 2016). When asked about if there is any support in the community if it known an individual has a mental disorder one man stated “Yeah if I know people, I will not talk to them. If they know me and listen that I have this type of depression, they will judge me. And they I will have even more depression" (Refugee man, personal communication, March 9, 2016). There is even greater pressure for people who are well known throughout the community.

> There are a lot of people that know me. I live with 8,000 people in refugee camp. And of 8,000 people 5,000 people know me. I was a teacher. And I live in the community. So in the heart I have that. And they all heard it. So that is also a problem. (Refugee man, personal communication, March 9, 2016).

However, despite this reported stigma surrounding poor mental health in the community, participants felt comfortable sharing their experiences with depression with one another. This was because all participants belonged to the same support group for Bhutanese-Nepali refugees suffering from mental distress. "He's my friend and he knows. But I can say to him because I think he might have the same thing as me" (Refugee man, personal communication, March 9, 2016).

5.2.2.6 Treatment for Depression

As aforementioned, all participants reported being prescribed medications for depression. While a large number of community members do take medications, some also report seeking treatment from traditional healers. However, participants felt that these treatments alone could not effectively treat their symptoms. In addition, participants sought alternative treatment through practicing yoga or. One woman stated that "She does yoga. She's all about yoga. That's what she does to help…Drinks a lot of water" (Refugee woman, personal communication, March 9, 2016). Another participant described that because many Bhutanese-Nepalese are very religious, "they pray sometimes if they get sick and it makes them feel better' (Refugee man, personal communication, March 9, 2016).

Despite the fear of stigma, social support was still an important strategy for coping with depression. "It is very necessary to have the support of other friends and family with this type of disease. Instead of telling 'He has this thing here, this thing there.' They say 'Why do you think negative? Try to be good'" (Refugee man, personal communication, March 9, 2016). In addition to receiving support from friends and family, the following quotes demonstrate how participants affirmed the need to share their experiences to help others struggling with depression:

> He said that he has a neighbor with depression. And he noticed from the outside…the neighbor didn't socialize with anyone or come to his house or anything. He decided that it would be better to go to her and help her. He started involving her sons and then eventually she started talking. She's doing better. (Refugee man, personal communication, March 9, 2016)
>
> It is very hard to think positive. So if I get away from this type of thing and if I get cured then I will work with others with depression. I feel like I need to help them. Because I know how hard it is. That life is hard. It's really, really hard. (Refugee man, personal communication, March 9, 2016)

Participants also reported that having a space to gather and be together as a community as an important element of social support. "[I] think that the library is a great place to go. And if…there were more Nepali books as well as English more people that are depressed could read. [I like] the fact that everyone can go there to learn and be together" (Refugee man, personal communication, March 9, 2016).

5.2.2.7 The Refugee Experience

A final common theme that emerged throughout the focus group session was elements of the refugee experience, especially differences between lives in Bhutan, Nepal and the United States.

> Life is pretty different between Bhutan, Nepal and the United States. They have a different system there. We don't have care. We used to ride a bike to do the small jobs. And we have agriculture. In Bhutan we had our own land and we grew for ourselves. And then we eat that and sell the rest. With that way of living we have to work for six months and then we don't have to work for six months. So the life is pretty different. Very different here. You have to go to work for other people. And work for other companies. So that's the difference. And in Nepal it was the same thing as Bhutan. But we are Bhutanese and refugees in Nepal. And we have to live in camps for 19 to 20 years. And we struggled there. It was hard getting something. Life is tough there. But we are many people. (Refugee man, personal communication, March 9, 2016).

Thus, while the ways of life differ significantly between countries, the identity of Bhutanese-Nepali refugees are not dependent on geography and instead have found meaning in the larger Bhutanese-Nepali community. However, some participants expressed nostalgia for their old way of life. "In Nepal we were together. Lots of friends and family. Everybody was there. It was better. You could struggle together" (Refugee man, personal communication, March 9, 2016).

In addition experiencing a loss of their former way of life, participants were exposed to a variety of traumas fleeing Bhutan and living in the refugee camp. While one female participant was too young to remember leaving for Nepal, another female stated how "she had to leave in the night, like pronto, as a kid. Her friends got taken by the army" (Refugee woman, personal communication, March 9, 2016).

6.0 DISCUSSION

Bhutanese-Nepali refugees living in Allegheny County suffer from a high level of somatic symptom severity. In addition, although there was a wide range in symptom severity, all participants experienced depressive symptoms. Even more significant is the fact that five participants experienced both a loss of pleasure in daily activities and depressed mood, which are both key elements of major depressive disorder outlined in the DSM-V. These findings suggest that Bhutanese-Nepali refugees suffer from a dual burden of depressive and somatic symptoms, indicating a potential relationship between depression and somatization in this population. These findings support previous research that demonstrates Bhutanese-Nepali refugees with a mental disorder are likely to present with somatic complaints (Ellis et al., 2015; Hoge et al., 2006; Shrestha et al., 1998; Van Ommeren, de Jong, et al., 2001; Van Ommeren, Sharma, et al., 2001; Vonnahme et al., 2014). This is a phenomenon that is not unique to the Bhutanese-Nepali, as other individuals belonging to other Asian cultures, including the Chinese (Kleinman, 1982; Kung & Lu, 2008) and the Vietnamese (Dinh, Yamada, & Yee, 2009), have a tendency to express physiological distress in the form of somatic complaints. However, the ways in which the Bhutanese-Nepali conceptualize mental health are unique from other groups, which is influenced by differences in mind-body divisions.

6.1 ROLE OF MIND BODY DIVISIONS

Participants in the focus group reported how in Nepal there is no differentiation between mental disorders as there are in western biomedicine. Rather, any person who is perceived to have a mental illness is considered to be "just plain crazy". This term carries a great deal of social stigma due to the association between the dysfunction of the *dimaag* (brain-mind) and the subsequent loss of daily functioning and *ijjat* (social status). This is a reality for refugees struggling with depression in Allegheny County, as "people look down on you if you have something wrong with you. They don't support you. They think 'He's not going to do anything in life.' And they neglect you. And that just adds on to the problems he already has" (Refugee man, personal communication, March 9, 2016). An individual with a mental disorder is perceived by others to have difficulty functioning in society. As a result, the stigmatization of mental disorders results in a lack of support from the larger community and a sense of rejection in the depressed individual. This creates a vicious cycle wherein the stigmatization of mental disorders and the subsequent lack of social support may increase the severity of depressive symptoms and further impede a depressed individual from engaging with their community or seeking treatment. This process then reinforces the idea in Nepali culture that individuals with a damaged *dimaag* cannot be productive members of society. Thus, mind-body divisions that are unique to Nepali culture play a central role in determining the poor mental health outcomes of certain Bhutanese-Nepali refugees.

6.2 ROLE OF IDIOMS OF DISTRESS

In the Nepali language there is no word that is equivalent to the English word for “depression”. As aforementioned, individuals with a mental health issue in Nepal are labeled as “just plain crazy”. However, participants could not identify concrete differences between “depression” and being “just plain crazy”, and were described to be the “same thing. People don’t know they have depression over there because they don’t check for it.” (Refugee man, personal communication, March 9, 2016). While Nepalese general physicians and psychiatrists are aware of depression and other mental disorders, many diagnose their patients with another condition simply to avoid social stigma (Kohrt & Harper, 2008). “There is depression [in Nepal] but people don’t know they have it. And then they come here [to the US] and they come to know it as depression” (Refugee man, personal communication, March 9, 2016).

Thus, it is not until being resettled in the US do most Bhutanese-Nepali refugees become familiar with the word “depression”. But even after being formally diagnosed, many participants disagreed with the diagnosis their physicians had given them. Participants could easily communicate their experiences to researchers, including somatic complaints, feelings of isolation, thinking too much, and trouble concentrating. In contrast, participants had difficulty identifying a term that adequately described their level of distress and resorted to using the word “depression” because it was the language used by their doctors. Thus, there is an evident disconnect between the lived experience of the participants struggling with their mental health and the language available to them to adequately convey the meaning of that experience to their physicians and other English speakers.

Despite the inability to effectively communicate their distress to physicians, individuals comply with taking the medications prescribed to them. However, many participants described how these medications were ineffective at treating their symptoms. As a result, many participants sought out alternative forms of treatment, including yoga, prayer, and traditional healers (*dhamis*). This behavior of seeking treatment from both traditional healers and general practitioners is also common within the pluralistic medical system in Nepal.

> Distress may be expressed through the seeking of healthcare within a pluralistic health-care arena as well as the evaluation of care received as being effective or ineffective above and beyond the diagnosis. Searching for a practitioner and diagnosis from an alternative health-care system may constitute a rejection of the way in which a person's state of distress was diagnosed and treated by the mainstream system previously and an expression of agency in the face of distress. (Nichter, 2010, p. 406)

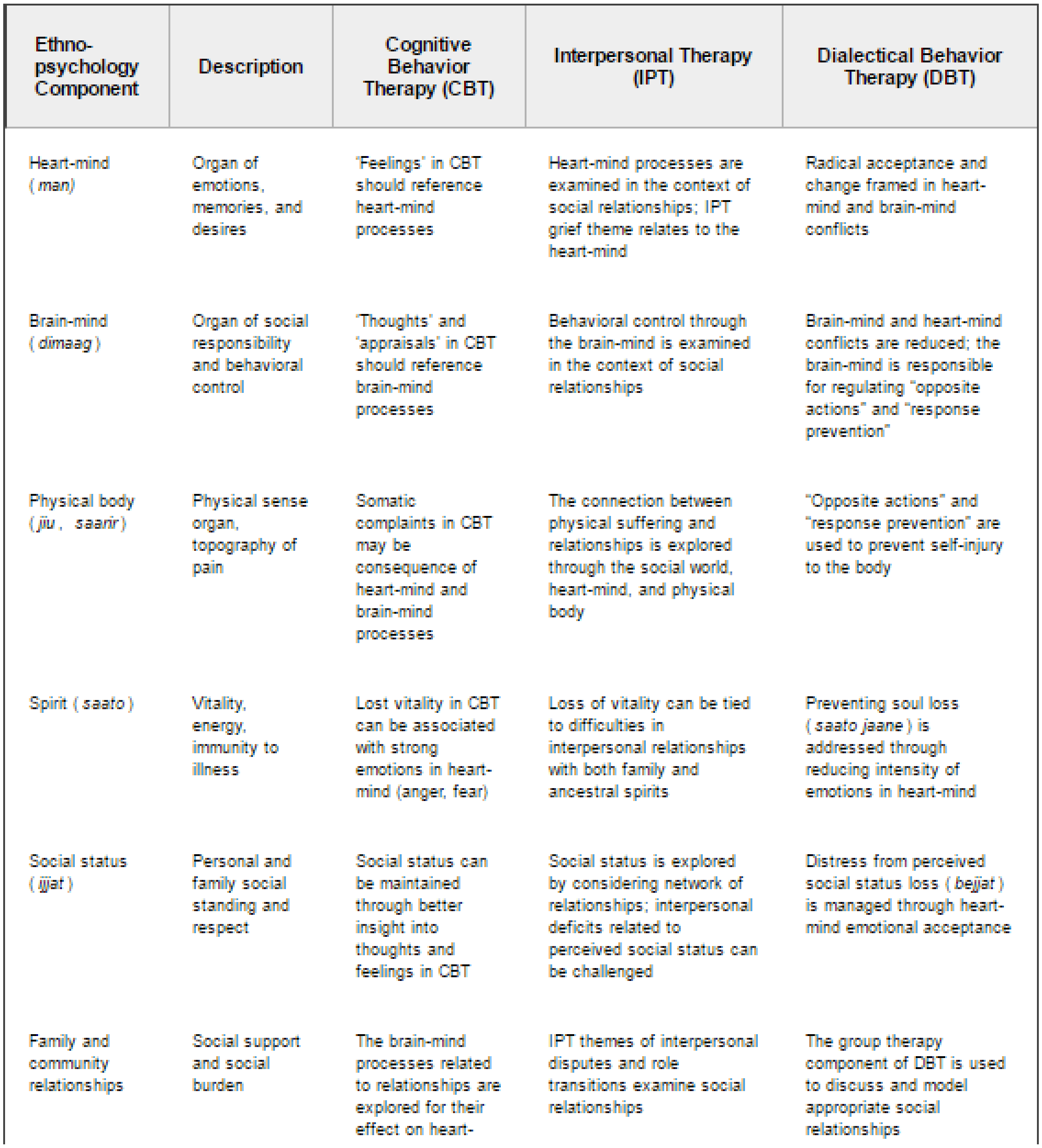
Thus, idioms of distress can not only be linguistic phrases that convey a deeper meaning of social of physical distress, but they can also take the form of specific behaviors. Because of the lack of a linguistic idiom in the Nepali language that has a semantic corollary with the world "depression", participants expressed difficulty and frustration about being able effectively communicate their distress to their physicians. Seeking treatment from an alternative source (i.e. *dhamis*) may serve as a behavioral idiom of distress that demonstrates an individual's rejection of the depression diagnosis in the "mainstream" US healthcare system.

6.3 IMPLICATIONS OR MENTAL HEALTH PROFESSIONALS

These results demonstrate that Bhutanese-Nepali conceptualizations of mental health are highly complex and differ from the western biomedical perspective. Many of these differences are rooted in culturally dependent mind-body divisions that influence how individuals experience mental health and seek out treatment. Because of these differences in the ways mental health is perceived and experienced, many diagnostic and assessment tools used in western medical practice fail to adequately capture the symptomology and cultural nuances of mental health in Bhutanese-Nepali refugees. Further problems arise from linguistic differences which result in a miscommunication between the physician and the patient and opportunities for appropriate treatment are missed.

In order to overcome the misdiagnosis and mistreatment of mental disorders in this population, physicians and mental health professionals need to incorporate Nepali ethnopsychology into their everyday practice (Figure 5-1). Mind-body divisions can occur at all stages along the continuum of care, from the first uptake of the patient into the healthcare system all the way through diagnosis and treatment. For example, a physician may encounter a patient expressing a wide variety of somatic complaints. The physicians should consider that these complaints may have a deeper meaning than the physical sensation and may be an idiom of distress the patient is using to communicate physiological or social suffering. Because there is no linguistic corollary for “depression” in Nepali and a diagnosis of a mental disorder could be highly stigmatizing, the patient uses these idioms to describe their experiences in an alternative way. The physician thus should probe beyond a simple check lists of symptoms and ask the patient about the problem within the context of Nepali mind-body divisions. Thus “an effective therapist also acts as an ethnographer. Taking on the role of the Other, rather than seeing the patient or client as Other, leads to elicitation of individual ethnopsychologies, rather than imposing biomedical models” (Kohrt et al., 2012).

Mental health practitioners can also apply Nepali ethnopsychology to treatment options. Traditional biomedical approaches, including prescribing medication and different types of therapy, are not mutually exclusive from traditional methods of treatment. In fact, participants reported the highest success of treatment for their condition when a holistic approach was taken and included both western and Nepali treatment options. These approaches included a combination of medication, group therapy, yoga, prayer, seeking a traditional healer, and other cultural activities (i.e. massage, drinking tea, and gardening). Nepali mind-body divisions and idioms of distress can thus be incorporated into these treatment plans that can be individualized to address the health needs of every patient in a culturally-appropriate and meaningful way.



Ethno-psychology Component	Description	Cognitive Behavior Therapy (CBT)	Interpersonal Therapy (IPT)	Dialectical Behavior Therapy (DBT)
Heart-mind (*man)*	Organ of emotions, memories, and desires	'Feelings' in CBT should reference heart-mind processes	Heart-mind processes are examined in the context of social relationships; IPT grief theme relates to the heart-mind	Radical acceptance and change framed in heart-mind and brain-mind conflicts
Brain-mind (*dimaag*)	Organ of social responsibility and behavioral control	'Thoughts' and 'appraisals' in CBT should reference brain-mind processes	Behavioral control through the brain-mind is examined in the context of social relationships	Brain-mind and heart-mind conflicts are reduced; the brain-mind is responsible for regulating "opposite actions" and "response prevention"
Physical body (*jiu* , *saarir*)	Physical sense organ, topography of pain	Somatic complaints in CBT may be consequence of heart-mind and brain-mind processes	The connection between physical suffering and relationships is explored through the social world, heart-mind, and physical body	"Opposite actions" and "response prevention" are used to prevent self-injury to the body
Spirit (*saato*)	Vitality, energy, immunity to illness	Lost vitality in CBT can be associated with strong emotions in heart-mind (anger, fear)	Loss of vitality can be tied to difficulties in interpersonal relationships with both family and ancestral spirits	Preventing soul loss (*saato jaane*) is addressed through reducing intensity of emotions in heart-mind
Social status (*ijjat*)	Personal and family social standing and respect	Social status can be maintained through better insight into thoughts and feelings in CBT	Social status is explored by considering network of relationships; interpersonal deficits related to perceived social status can be challenged	Distress from perceived social status loss (*bejjat*) is managed through heart-mind emotional acceptance
Family and community relationships	Social support and social burden	The brain-mind processes related to relationships are explored for their effect on heart-	IPT themes of interpersonal disputes and role transitions examine social relationships	The group therapy component of DBT is used to discuss and model appropriate social relationships

Figure 2 - Components of Nepali Ethnopsychology in Therapy Modalities[2]

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[2] Figure is open access: from Kohrt, B. A., Maharjan, S. M., Timsina, D., & Griffith, J. L. (2012). Applying Nepali Ethnopsychology to Psychotherapy for the Treatment of Mental Illness and Prevention of Suicide Among Bhutanese Refugees. *Annals of Anthropological Practice, 36*(1), 88-112.

6.4 LIMITATIONS

A major limitation of this study was the small sample size (n=6) for the patient interviews. In addition, participants were drawn from a convenience sample of patients and community members from SHHC and BCAP resulting in selection bias. Thus, the results may not be truly representative of the mental health needs of Bhutanese-Nepali refugees living in Allegheny County. In addition, even though researchers were present during the interviews, the instruments used still relied on self-report of symptoms and their severity. Because mental disorders are highly stigmatized in the Bhutanese-Nepali community, participants may have underreported the severity of certain symptoms, particularly suicidal ideation. This has been found in other research where refugees who committed suicide did not express or communicate suicidal tendencies prior to taking their life (CDC, 2013; Ellis et al., 2015; Hagaman et al., 2016; Schinina et al., 2011). Furthermore, at least one family member was present during all interviews which may also influence how participants responded to questions.

Because many refugees lack health insurance and receiving treatment for mental health holds a great deal of social stigma, the number of Bhutanese-Nepali refugees suffering from a mental disorder may be significantly higher than this study revealed. While these results may prove insightful to the mental health outcomes of Bhutanese-Nepali refugees living in Allegheny County, these results are not generalizable to other refugee populations. Finally, because the instruments used are tested in mostly western populations, the PHQs may not adequately capture the symptomatology of mental disorders in the Bhutanese-Nepali community or other non-western populations.

7.0 FUTURE DIRECTIONS

This research demonstrates that Bhutanese-Nepali refugees living in Allegheny County have a high burden of mental disorders in their community, a local phenomenon that mirrors trends occurring within this resettled population throughout the US. Furthermore, findings offer qualitative support that Bhutanese-Nepali cultural conceptualizations of mental health do in fact differ from those of standard biomedical practice. However, further research is needed to expand on these findings and employ a larger sample size so appropriate statistical analysis can be conducted. While findings suggest that levels of somatization are high in this population, research should be conducted to explore whether somatization is more common among depressed Bhutanese-Nepali refugees than in depressed patients from the US and other refugee groups. Future studies should attempt to develop screening materials that incorporate Bhutanese-Nepali ethnopsychology and test their validity to capture idioms for distress rather than specific mental disorders in this population. Furthermore, interventions should seek to incorporate Nepali ethnopsychology into practice, including therapy models and alternative treatments, and tests whether awareness and application of these models lead to better mental health outcomes in this population. Only through additional research and changes in current medical practice of mental refugee health will the health of Bhutanese-Nepali refugees begin to improve.

APPENDIX A

IRB APPROVAL

The following document is a memorandum from the University of Pittsburgh Institutional Review Board (IRB) stating the approval of the study on August 6, 2015. The study was considered to be a minimal risk to participants.

University of Pittsburgh
Institutional Review Board

3500 Fifth Avenue
Pittsburgh, PA 15213
(412) 383-1480
(412) 383-1508 (fax)
http://www.irb.pitt.edu

Memorandum

To: Alexandra Nowalk
From: IRB Office
Date: 8/6/2015
IRB#: PRO15050150
Subject: Bhutanese-Nepali Community Research Study

The University of Pittsburgh Institutional Review Board reviewed and approved the above referenced study by the expedited review procedure authorized under 45 CFR 46.110 and 21 CFR 56.110. Your research study was approved under:

45 CFR 46.110.(6)
45 CFR 46.110.(7)

The risk level designation is Minimal Risk.

Approval Date: 8/6/2015
Expiration Date: 8/5/2018

This study meets the criteria for an extended approval period of three years. **In the event that any type of federal funding is obtained during this interval, a modification must be submitted immediately so the IRB can reassess the approval period.**

For studies being conducted in UPMC facilities, no clinical activities can be undertaken by investigators until they have received approval from the UPMC Fiscal Review Office.

Please note that it is the investigator's responsibility to report to the IRB any unanticipated problems involving risks to subjects or others [see 45 CFR 46.103(b)(5) and 21 CFR 56.108(b)]. Refer to the IRB Policy and Procedure Manual regarding the reporting requirements for unanticipated problems which include, but are not limited to, adverse events. If you have any questions about this process, please contact the Adverse Events Coordinator at 412-383-1480.

Please be advised that your research study may be audited periodically by the University of Pittsburgh Research Conduct and Compliance Office.

APPENDIX B

RECRUITMENT LETTER

मिति[DATE]:

प्रिय श्री / सुश्री (थर) (Dear [Mr. / Ms. LAST NAME]),

पिट्सबर्ग विश्वविद्यालय सार्वजनिक स्वास्थ्य ग्रेजुएट स्कूल (Graduate School of Public Health at the University of Pittsburgh) देखि स्नातक विद्यार्थीहरूले स्कुईर्रेल हिल स्वास्थ्य केन्द्र (Squirrel Hill Health Center) बाट गरेको अध्ययन सम्बन्धि म तपाई हरुलाई जानकारी दिरहेको छु| एक हेरविचार प्रदायक भएकोले, म मेरा बिरामीहरुको उपचारमा, र अधिक राम्रो उपाचालाई बुझ्न वा फेलापार्न का लागिगरिने अनुसन्धानलाई अघि बढाउनमा संलग्न छु|
I am writing to tell you about a study being conducted at the Squirrel Hill Health Center by graduate students from the Graduate School of Public Health at the University of Pittsburgh. As a care provider, I am involved in treating my patients and promoting research in order to understand and find better ways to treat medical conditions.

मेरो सहकर्मी, आलेक्सान्द्रा नोवाल्क र अलेक्सान्दार कोवालिक, विश्वविद्यालय संकाय सदस्य डाक्टर स्टेवें अल्बेर्ट को पर्यवेक्षण अन्तर्गत पुनर्बास भएका भूटानी शरणार्थीहरुका मानसिक स्वास्थ्य परिणाम र संस्कृति अध्ययन गर्दै छन्| म आफै यस अध्यनको सदस्य हैन, तरपनि, म आफनो बिरामीहरु र उनीहरुका परिवार सदस्यहरुलाई, यदि उनीहरु रुचि हुनुहुन्छ भने, यो अध्यन बारे जानकारी दिन चाहन्छु| अध्ययन सहभागिता छोटो समय १- २ घण्टा को कुराकानीमा समावेश हुनेछ| यो अध्यन तपाइको घरै बाट क्लिनिक देखि अनुवादकको सहयोगमा हुनेछ|
My colleagues, Alexandra Nowalk and Alexander Kovalik, are studying mental health outcomes and culture among resettled Bhutanese refugees under the supervision of university faculty member, Dr. Steven Albert. I am not a member of their research team, however, I am contacting some of my patients and their family members to let them know about the research in case they might be interested in learning more. Study participation will involve a short, 1-2 hours conversation with researchers in your home with the assistance of a translator from the clinic.

तपाईले यो बुझ्नु ररुरी छ कि, यो पत्रले तपाईलाई अध्ययनमा सहभागी हुनैपर्छ भनेको होइन। सहभागी हुनु नहुनु तपाईंमै भर पर्छ र यो तपाईंको सहभागी स्वैच्छिक कार्य हुनेछ। तपाई यसमा सहभागी हुनुभएन भने पनि तपाईंको स्कुरेल्ल हिल्ल हेल्थ सेन्टर संग भएको नाता लाई केही असर पार्ने छैन।
It is important to know that this letter is not to tell you to join this study. It is your decision. Your participation is voluntary. Whether or not you participate in this study will have no effect on your relationship with Squirrel Hill Health Center as a patient.

यदी तपाईंलाई यस अध्ययनको बारेमा अज जानकारी लिन मन छ भने, यो फोरम भरेर मलाई स्कुरेल्ल हिल्ल हेल्थ सेन्टर पठाइदिनु होला । तपाईंको डाक्टर भएको नाताले, म तपाईंको अनुमति अनुसार तपाईबारे जानकारी खोज कार्यका व्याक्तीत्वहरुलाई मात्र दिनेछु। त्यस पछि उनीहरुले तपाईलाई सम्पर्क गर्ने छन्।

तपाईलाई सहभागी हुन मन भए, अनि आफै अध्यानकर्तालाई सम्पर्क गर्ने चाहानु हुन्छ भने, तल दिएका फोन य ईमेल मार्फत सम्पर्ग गर्न सक्नु हुन्छ ।
If you are interested in learning more about this study, please fill out the enclosed form with your contact information and return it to me at the Squirrel Hill Health Center. As your physician, I will only share this information with the researchers with your permission who will then contact you with further information about the study. If you still wish to participate, but wish to contact the research team on your own, you can do so via telephone or email.You do not have to respond if you are not interested in this study. If you do not respond, no one will contact you.

यस अनुसन्धानमा भाग लिन मन नभए, तपाईले कसैलाई पनि सम्पर्क गर्नु पर्दैन। यदि तपाईले यो पत्रको जवाफ दिनु भएन भने, तपाईलाई कसैले पनि सम्पर्क गर्ने छैन ।
You do not have to respond if you are not interested in this study. If you do not respond, no one will contact you.

आफ्नो विचार को लागि धन्यवाद।
Thank you for your consideration.

आलेक्ष कोवालिक Alex Kovalik (216) 544-7118 alk173@pitt.edu
आलेक्सान्द्रा नोवाल्क Alexandra Nowalk (704) 363-2928
aan20@pitt.edu

सच्चारुपले,
Sincerely,

पुनर्बासी भूटानीबारे सामाजिक अनुसनधान
RESETTLED BHUTANESE COMMUNITY RESEARCH STUDY

अनुसन्धानमा सहभागी हुन मन भए, कृपया यो फारम पूरा गरि आफ्नो डाक्टरलाई स्कुरेल्ल हिल्ल हेल्थ सेन्टर पठाइदिनु होला। Please complete this form and return to your physician at the Squirrel Hill Health Center

☐ मलाई यस अध्ययन बारेमा अज्ज धरै कुरा जान्न मन छ। निम्न जानकारी उपयोगगरि मलाई सम्पर्क गर्नुहोला। I am interested in learning more about this study. Please contact me using the following information:

नाम(Name): ____

टेलिफोन (Telephone(s)): ____

कल गर्नका लागि सर्वश्रेष्ठ दिन र समय (Best time and day to call):_________________

ईमेल (Email): ________________________________@___________________

APPENDIX C

INFORMED CONSENT

पुर्व मन्जुरीनामा INFORMED CONSENT FORM

पुनर्बासी भूटानीबारे सामाजिक अनुसनधान Resettled Bhutanese Community Research Study

भाग लिनको लागि निमन्त्रणा INVITATION TO PARTICIPATE

तनाव,मनःस्थिति र स्वास्थ्य का बारेमा भुटानीहरुका कस्तो सोचाई छ भन्ने बिसयमा जानकारी लिनकालागि तपाईहरुलाई हार्दिक निमन्त्रण छ|

You are invited to take part in a research study that investigates how resettled Bhutanese think about stress, mood and health.

बिसय चयनका आधार BASIS FOR SUBJECT SELECTION

यदि तपाई या तपाईका कोहि अन्य परिकारका सदस्य लामो समय देखि दुखित या अस्पष्टीकृत दुखाई अनुभव गर्नु हुदैछ भने, र १८ वर्ष उमेर का भए, यस अध्यनमा भाग लिन तपाई योग्य हुनुहुन्छ|

You are eligible to take part in this study if you or a family member experiences long periods of sadness or unexplained pain, and are older than the age of 18.

यस अध्यनका उद्देश्य PURPOSE OF THIS STUDY

यस अध्यनको उद्देश्य चाही पुनर्बास भएका भूटानी शरणार्थीहरुका सोच तनाव, मनःस्थिति र स्वास्थ्य का बारेमा मानसिक विकार को निदान सांख्यिकीय म्यानुअल (DSM-5) संग मिल्दो-जुल्दो छ या छैन भन्ने हो| यो DSM-5 एउटा यस्तो स्रोत हो जो संयुक्त राज्य अमेरिका र अन्य देशहरुले सिमित मानसिक स्वास्थ्यका चिन्ह र लक्षण पहिचान गर्न प्रयोग गर्छन| यो एउटा महत्त्वपूर्ण अनुसन्धानहो किनभने अमेरिकामा बस्दै आएका भूटानी शरणार्थीहरुका मानसिक स्वास्थ्यका समस्या अन्य आबादी भन्दा बढी भएको हुन सक्छ| पुनर्बास भएका भूटानी शरणार्थीहरु गहिरो दुःख, भावनात्मक तनावपूर्ण प्रतिक्रियाहरु, र अस्पष्टीकृत दुखाइ बाट पिडित हुन् कि भनि अनुसन्धन गर्न यो बिषय छानिएको हो|

The purpose of this study is to determine if the ways resettled Bhutanese refugees think about stress, mood and health are similar to classifications of the Diagnostic Statistical Manual of Mental Disorders (DSM-V). The DSM-V is a source used by the United States and many other countries that uses signs and symptoms to identify symptoms of poor mental health. This is an important investigation because the number of resettled Bhutanese refugees experiencing mental health problems in the United States may be higher than other populations. This study has been created to identify if deep sadness, emotionally stressful responses, and unexplained pain are seen in resettled Bhutanese refugees.

प्रक्रिया PROCEDURE

सहभागीहरु अनुसन्धानकर्ता र अनुवादक संग बसी कुरा गर्छन| सहभागीका रुपमा, तपाईले आफना दुःख, भावनात्मक तनाव, र दुखाइ सम्बन्धित धेरै प्रश्नहरुको जवाफ दिनु पर्ने हुन्छ| अनुसन्धानकर्ता ले स्वास्थ्य संग कस्तो सम्बन्ध छ भनि जान्नका लागि संस्कृति र धर्मका बारेमा सरल प्रश्नहरु सोदनेछन्| प्रत्येक सहभागी संग एक वा दुई घण्टा भन्दा बढी कुराकानी हुने छैन| दोस्रो अन्तरबार्ता परिवारको एक स्वस्थ सदस्य संग हुनेछ| सहभागी को दुःख, भावनात्मक तनाव, र दुखाइ बारे सो परिवारका स्वस्थ सदस्य बाट उसैगरी जानकारी लिईने छ| आकडा संकलन भएपछि सहभागीलाई एउटा छोटो सारांश दिहिनेछ र त्यसपछि अन्तरबार्ता टुंगिनेछ|

Subjects will begin by sitting down and talking with the researchers and a translator. As a subject, you will answer several questions relating to your experiences with sadness, emotional stress, and pain. The researchers will also ask simple questions about culture and religion to see how they relate to health. The conversation for each subject should take no longer than one or two hours. A second interview will take place with a healthy family member; the healthy subject will undergo a similar interview to gain information on sadness, emotional stress, and pain of their family member. After the data collection has been completed subjects will receive a short summary of the study and the interview will conclude.

दोबारा अन्तरबार्ता हुनेछैन तर यदि सहभागी संग कुनै थप जानकारी वा प्रश्न भए अनुसन्धानकर्ता संग सम्पर्ग राख्न सक्नेछन्|

Their will be no follow up after the interview process, but the subjects may contact the investigators at any time if they have any further questions.

संभावित जोखिम POTENTIAL RISK

अन्तरबार्ताका प्रश्नहरुले अप्रिय सम्झनाहरु ल्याउन सक्छन र सहभागीले दु:खका अनुभव बारे कुराकानी गर्नु पर्ने पनि हुन सक्छ| यो अन्तरबार्ताको दौरानमा पुराना अप्रिया दुघटना, दुखी सम्झनाहरु अनुभव हुन सक्छ| अझ गोप्यतको उल्लंघन हुने संभावना उत्पन्न पनि हुन सक्छ।

Interview questions may bring back unpleasant memories, and subjects may be asked about sad experiences. During the interviews, subjects may experience unhappy memories, and sadness. In addition, a breach of confidentiality could potentially occur.

जोखिम कम गर्नको लागि हरेक प्रयास गरिनेछ।

Every effort will be made to minimize all possible risks.

संभावित लाभ र क्षतिपूर्ति POTENTIAL BENEFITS and COMPENSATION

भुटानीहरुमा तनाव, मन:स्थिति र स्वास्थ्य बारे राम्रो समजदारी र सुधार अनि व्यक्तिगत हेरविचारनै संभावित लाभ हुन| यो कुरा तपाइले बुज्नु जरुरि छ कि यो अध्ययनमा तपाइको सहभागिता हुदा तपाइको अवस्थामा न सुधार वा न खराब हुनेछ| यो प्रक्रियामा सहभागी हुदा कुनै प्रकारको आर्थिक लाभ हुनेछैन|

Potential benefits include improved understanding of resettled Bhutanese views of stress, mood and health for better understanding and improved individual care. It is important to understand that your participation in this study will not offer a cure and that your condition will not improve or worsen by participating in this study. There will be no money offered for participating in this study.

सहभागिता गर्ने विकल्प ALTERNATIVES TO PARTICIPATION

सहभागिता हुने अन्य कुनै तरिका छैन| There are no other ways to participate.

गोपनीयता GUARANTEE OF CONFIDENTIALITY

यो साक्षात्कार प्रक्रियाद्वारा संकलित सम्पूर्ण आकडा तथा जानकारीहरु पिट्सबर्ग ग्रेजुएट विश्वविद्यालय (University of Pittsburgh Graduate School of Public Health) को एक सुरक्षित स्थानमा या शोधकर्ताको घर कार्यालयमा राखिने छ| आकडा कम्पुटरमा संकेत शब्द (पासवर्ड) लगाई सुरक्षित रुपमा राखिने छ, अनि तल उल्लेखित अनुसन्धानकर्ता र कार्यालय लाई मात्रै उपलब्ध गराईने छ|

All data collected during the interview process will be kept in a secure location at the University of Pittsburgh Graduate School of Public Health or researchers' home offices . Data will be loaded to a computer and will be password protected, and made available only to the following researchers & offices:

- आलेक्सान्द्रा नोवाल्क – प्राथमिक अनुसनधानकर्ता Alexandra Nowalk – Primary Investigator
- आलेक्ष कोवालिक – सह -अनुसनधानकर्ता Alex Kovalik – Co-Investigator
- डाक्टर स्तेवें अल्बेर्ट –शिक्षक सल्लाहकार Dr. Steven Albert – Faculty Advisor
- पिट्सबर्ग विश्वविद्यालय अनुसन्धान आचार र अनुपालन कार्यालय The University of Pittsburgh Research Conduct & Compliance Office

त्यसका सातसाते, पहिचान फोरिएका डटा भविस्यमा गएर नया अनुसनधानकर्ताको खोज कार्यका लागि पनि उपलब्द गराइन सकिने छ। सहभागी को व्यक्तिगत जानकारी एवं परिचय सुरक्षित राख्न को लागि सबै रेकर्डिङहरु नष्ट गरिन्छ| पिट्सबर्ग विश्वविद्यालयको नीति अनुसार, सबै अनुसन्धान गरिएका कुराहरु यस अनुसन्धानको अन्तिम प्रतिवेदन वा प्रकाशन भएको सात वर्ष सम्म जोगाएर राख्नु पर्नेहुन्छ।

In addition, de-identified data may be shared with secondary investigators in future studies. Safety measures are in place to protect subjects who are audio recorded by destroying all recordings that identify subjects. In compliance with University of Pittsburgh policies all research records must be maintained for at least 7 years following final reporting or publication of this project.

सहभागिता देखि इन्कार WITHDRAWAL FROM PARTICIPATION

यस अध्ययन मा तपाइको सहभागिता आफ्नै इच्छाअनुसार हो, र तपाइको वर्तमान वा भविष्यको सम्बन्ध पिट्सबर्ग विश्वविद्यालय वा स्कुईर्रेल हिल स्वास्थ्य क्लिनिक संग कुनै असर पर्ने छैन| तपाई सहभाग हुदैगर्दा पनि, सहभागी देखि छुट लिन सक्नु हुनेछ|

Your participation in this study is voluntary, and will not affect your present or future relationship with The University of Pittsburgh or the Squirrel Hill Health Clinic. If you decide to participate, you are then free to withdraw your consent and to stop participating at any time.

कुनै प्रश्न भए IF YOU HAVE QUESTIONS

सहभागीले यस प्रक्रियाबारे कुनै प्रश्नहरु सोध्न सक्नुहुनेछ| यदि प्रश्नहरु पछि भविस्यमा आए, तल निम्नलिखित व्याक्तिसंग सम्पर्क राखु सक्नु हुनेछ| अध्ययन बारेका सबै प्रश्नहरुको जवाफ मिल्नेछ| तथापि, अध्ययन पूरा नभएसम्म, अध्यानकर्ताले तपाइको उत्तर प्रभावित नहोस भनिकन तपाइको प्रश्न को जवाफ केहि समय पछि दिनसक्नु हुनेछ| यो कुरा तपाइले बुज्नु जरुरि छ कि, यदि कुनै समस्या, चिन्ता, या प्रस्न भए; कुराहरुको जानकारी लिन; केहि कुरा भन्नुपर्ने छ भने; अथवा तपाई यस करार्यमा भाग लिएको बेला कुनै अवस्थाको बारेमा कुरा राखु छ भने, तपाइले यस आईआरबी कार्यालय को मानव विषय संरक्षण अधिवक्ता, पिट्सबर्ग विश्वविद्यालय (१-८६६-२१२-२६६८) मा सम्पर्ग पनि गर्न सक्नुहुन्छ |

If you have any questions about the procedures in which you will participate, please ask. If you have questions later, please feel free to contact the people listed below. All questions about the study will be answered. However, the investigator may choose to wait to answer your questions until you have completed the study, to ensure that your answers will not be affected by your knowledge of the research. Understand that you may contact the Human Subjects Protection Advocate of the IRB Office, University of Pittsburgh (1-866-212-2668) to discuss problems, concerns, and questions; obtain information; offer input; or discuss situations that occurred during your participation.

तपाईं आफ्नो स्वेच्छाले भाग लिन वा नलिन निर्णय दिनुहुदैछ। उक्त प्रस्तुति पढी र बुझीकन आफ्नो हस्ताक्षर गरि भाग लिन मन्जुरी दिनुहुदैछ| तपाईंको हस्ताक्षरले यो पनि जनाऊछ कि तपाई अध्यनकर्ता

संग यस प्रक्रिया बारे कुरा-कानी गर्ने मौका पाउनु भएकोछ, र सम्पूर्ण प्रश्न को उत्तर तपाइको सहमति अनुसार भएकोछ| तपाईंलाई यस मन्जुरी पत्रको एक प्रतिलिपि मिल्नेछ|

You are voluntarily making a decision whether or not to participate. Your signature says that you have decided to participate, having read and understood the information presented. Your signature also states that you have had an chance to talk about this study with the researchers, and that you have had all your questions answered to your liking. You will be given a copy of this consent form.

____   ______________________

सहभागी को हस्ताक्षर Signature of participant   मिति (Date)

____

सहभागिको पुरा नाम   Printed name of participant

____   ______________________

अध्यनकर्तको हस्ताक्षर Investigator Signature   मिति (Date)

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APPENDIX D

SOMATIC SYMPTOMS (PHQ-15)

LEVEL 2—Somatic Symptom—Adult Patient*

*Adapted from the Patient Health Questionnaire Physical Symptoms (PHQ-15)

Name: ____________________ **Age:** ____ **Sex:** ☐ **Male** ☐ **Female** **Date:**____________

If the measure is being completed by an informant, what is your relationship with the individual receiving care? ____________

In a typical week, approximately how much time do you spend with the individual receiving care? ____________ hours/week

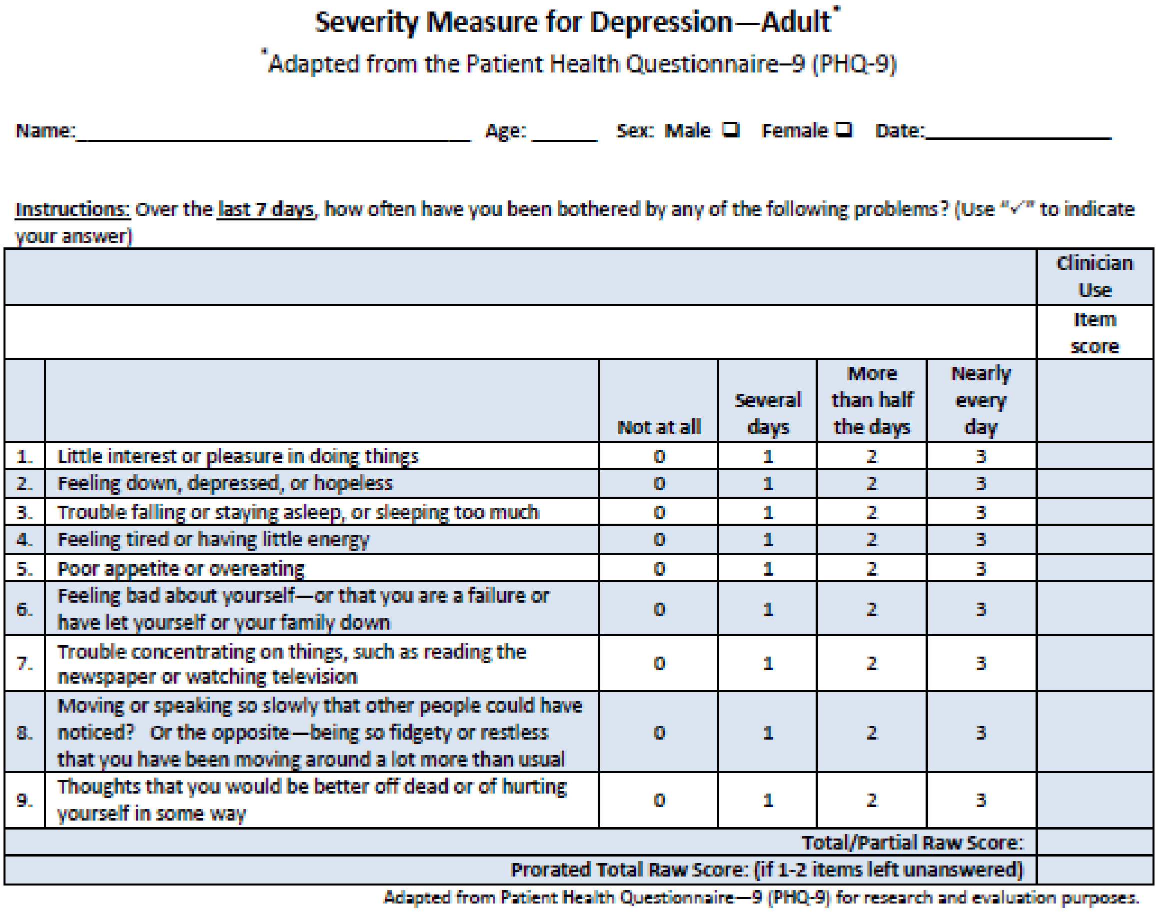
Instructions: On the DSM-5 Level 1 cross-cutting questionnaire that you just completed, you indicated that *during the past 2 weeks* you (the individual receiving care) have been bothered by "unexplained aches and pains", and/or "feeling that your illnesses are not being taken seriously enough" at a mild or greater level of severity. The questions below ask about these feelings in more detail and especially how often you (the individual receiving care) have been bothered by a list of symptoms **during the past 7 days.** **Please respond to each item by marking (✓ or x) one box per row.**

					Clinician Use
During the past 7 days, how much have you been bothered by any of the following problems?					**Item Score**
		Not bothered at all (0)	**Bothered a little (1)**	**Bothered a lot (2)**	
1.	Stomach pain	☐	☐	☐	
2.	Back pain	☐	☐	☐	
3.	Pain in your arms, legs, or joints (knees, hips, etc.)	☐	☐	☐	
4.	Menstrual cramps or other problems with your periods *WOMEN ONLY*	☐	☐	☐	
5.	Headaches	☐	☐	☐	
6.	Chest pain	☐	☐	☐	
7.	Dizziness	☐	☐	☐	
8.	Fainting spells	☐	☐	☐	
9.	Feeling your heart pound or race	☐	☐	☐	
10.	Shortness of breath	☐	☐	☐	
11.	Pain or problems during sexual intercourse	☐	☐	☐	
12.	Constipation, loose bowels, or diarrhea	☐	☐	☐	
13.	Nausea, gas, or indigestion	☐	☐	☐	
14.	Feeling tired or having low energy	☐	☐	☐	
15.	Trouble sleeping	☐	☐	☐	
Total/Partial Raw Score:					
Prorated Total Raw Score: (if 1-3 items left unanswered)					

Adapted from Physical Symptoms (PHQ-15) for research and evaluation purposes.

APPENDIX E

DEPRESSIVE SYMPTOMS (PHQ-9)



Severity Measure for Depression—Adult*

*Adapted from the Patient Health Questionnaire–9 (PHQ-9)

Name:______________________________ **Age:** ______ **Sex: Male** ☐ **Female** ☐ **Date:**________________

Instructions: Over the **last 7 days**, how often have you been bothered by any of the following problems? (Use "✓" to indicate your answer)

						Clinician Use
						Item score
		Not at all	**Several days**	**More than half the days**	**Nearly every day**	
1.	Little interest or pleasure in doing things	0	1	2	3	
2.	Feeling down, depressed, or hopeless	0	1	2	3	
3.	Trouble falling or staying asleep, or sleeping too much	0	1	2	3	
4.	Feeling tired or having little energy	0	1	2	3	
5.	Poor appetite or overeating	0	1	2	3	
6.	Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3	
7.	Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3	
8.	Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3	
9.	Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3	
					Total/Partial Raw Score:	
					Prorated Total Raw Score: (if 1-2 items left unanswered)	

Adapted from Patient Health Questionnaire—9 (PHQ-9) for research and evaluation purposes.

APPENDIX F

FOCUS GROUP GUIDE

Bhutanese-Nepali Community Research Study Focus Group Guide

Consent Process

Consent forms will be distributed and reviewed by the research team prior to the focus group. Each subject will be given the chance to ask any questions they may have, and state any concerns about the research prior to signing their consent form.

Introduction:

1. Welcome

   Introduce the research team, and pass around the Sign-In Sheet with a few quick demographic questions (age, gender) around to the group while you are introducing the focus group.

   Review the following:

   - Background of the research team and the goals of the research
   - What we will do with this information
   - Why we asked you to participate

2. Explanation of the process

   Ask the group if anyone has participated in a focus group before.

   Logistics

   - Focus group will last about one hour
   - Feel free to move around
   - Locate the bathroom? Exits?
   - Help yourself to refreshments

   Ground Rules

   - Everyone should participate.
   - Information provided in the focus group will be kept confidential

- Stay with the group and please don’t have side conversations
- Turn off or silence cellphones
- Have fun

Ask the group if there are any questions before we get started

3. **Turn on Tape Recorder**

4. Introductions
    - Begin with personal introductions

Questions:

1. Let’s start the discussion by talking about what mental health is. What are some of the aspects of mental health that you can identify?

2. What places do people go to for physical or mental health issues?

3. What activities change the degree or level of mental illness?

4. Are their different degrees of mental health, or different types?

5. If you know someone that is mentally ill is there anything that you can do? If so, what?

6. What aspects of mental illness affect an individual?

7. What suggestions do you have to improve the life of those living with mental illness?

8. What are some different types of mental illness in your culture? Can you describe them? How are they different?

9. How are spirituality and mental health linked?

10. What types of things can you do to treat or heal someone with mental illness? Are there any traditional practices in your culture?

11. There has been a very high rate of suicide in this community compared to other refugees. Why do you think this is? What are your opinions?

12. How has coming to the United States changed things for you and your family? What are the challenges?

13. What was life like for you and your family in Bhutan and Nepal?

Probes for Discussion:

- *Culture*
    - *Relationships, religion, spiritual life*
- *Safety & Health protection*
    - *Protective measures (e.g., yoga)*
- *Working conditions*
    - *Hours, wage, resources*
- *Opportunity, achievement, growth*
    - *Advancement, further education, responsibility*
- *Supervision*
- *Is there a sense of ownership of the outcomes here?*
    - *Work content, responsibility*
- *Standards of living*
    - *Cost of living*
    - *Housing*
    - *Electricity*
    - *Water*
    - *Transportation*
- *Education for children*
- *Work/home balance*

Conclude focus group

- Thank participants for coming and sharing their opinions

Materials for focus groups

- Sign-in sheet
- Consent forms (one copy for participants, one copy for the team)
- Name tags
- Focus Group Discussion Guide for Facilitator
- 1 recording device
- Notebook for note-taking
- Refreshments

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