Effects of health literacy and activation on U.S. Bhutanese refugees' health outcomes

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I intend to submit a copy of my Health Science Scholars thesis to the Texas ScholarWorks (TSW) Repository. For more information on the TSW, please visit https://repositories.lib.utexas.edu/.

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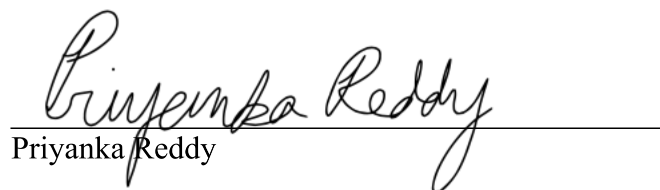

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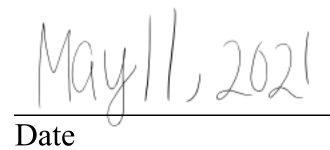

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Abstract

Refugee populations who have sought permanent asylum in the United States are often ill-equipped with necessary tools and precursors for navigating the U.S. healthcare system. For Bhutanese refugees in particular, their relocation experiences are distinguished by violent refugee camps, separation from their families, and severe discrimination. As a consequence of such trauma, many refugees have developed mental illnesses, such as depression and PTSD. These are paired with staggering physical health disparities in nutritional serum levels, chronic health conditions, and women's health. Barriers in health education, language and communication, and motivation to participate in their own health care are components of Bhutanese refugees' lower health literacy in the U.S., contributing to their inability to receive culturally competent care. The absence of health literacy interventions is scarcely acknowledged in the medical field. The primary objective of this thesis is to review surveys and interview data collected from existing studies analyzing refugee experiences of barriers in health literacy, that caused disparities in their health outcomes. Preliminary analysis indicates refugees lack the skills and confidence to engage in health care interactions and preventative measures due to a history of discomfort enduring stigmatization of their unique relocation experiences and insensitivity to their low health literacy from U.S. providers. I identify the most successful solutions practiced in small groups from this literature such as the use of help-seeking and social networks and cultural competency education modules for providers, and propose a plan for future research on this method to improve healthcare outcomes for this population.

Key Terms: refugee, health literacy, culturally competent care, health outcomes, healthcare

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Introduction

As of 2020, the United Nations High Commissioner for Refugees (UNHCR) reports that there are nearly 26 million refugees worldwide who have been forcibly removed from their homes. They often travel from their life of persecution and trauma to resettle in the United States and cope with the inequities presented to asylum seekers. Many refugees must bear unforeseen consequences of their relocation, including financial instability, mental health stressors, PTSD, and others, all without a social support system (Byrow et al., 2020, p. 1). They bear the weight of juggling the repercussions of a traumatic relocation journey and various factors hindering a positive and productive start in the U.S. Refugees face perhaps one of the most troubling lifestyle changes: adapting to a new healthcare system. The healthcare experience for Bhutanese refugees in America is characterized by challenges of communication barriers, education gaps, and the refugees' lack of proactivity regarding their health (Chao & Kang, 2020; Byrow et al., 2020). These issues are exacerbated by the complexities of the U.S. healthcare system. In particular, its lack of inclusivity in the field for populations such as refugees, specifically the adult demographic within this population (Chao & Kang, 2020). The resettled residents often come with no prior history with the English language or U.S. standards of medicine. Bearing these difficulties, the refugees are thrown headfirst into an industry poorly-equipped with supportive community programs or health care workers who are comfortable and knowledgeable of their culture (Chao & Kang, 2020).

Support services for refugees in the U.S. are scarce, lacking the appropriate cultural attention and competency to address the needs of refugees from countries with vastly different customs. While there have been refugees seeking safety in Western countries for years, policies

and programs have yet to address the psychological needs of displaced persons. Mental health has been one of the hardest challenges to provide catered care towards for refugees (Byrow et al., 2020, p. 2). There are difficulties in identifying and understanding the unique experiences of Bhutanese refugees causing their health complaints. However, providers and specialists in the field, regardless of their vast expertise, have no training in treating a wide range of demographics. Refugees from various origins enter doctors' offices to address their specific needs (Sullivan, 2009). This has not only been demanding in the scope of mental health, but for general health care professionals who are not aware of certain chronic health conditions Bhutanese typically present, including arthritis, tuberculosis, allergies, and high blood pressure among others (Misra et al., 2016). With limited linguistic capabilities and education coming to the U.S., refugees face a great deal of trouble navigating their health experiences and the same challenges are puzzling for providers as well (Chao & Kang, 2020, p. 259). As a result, health literacy, the ability to comprehend health information and use it to manage one's health in their day to day lives, has become more of a pressing public health objective for researchers, specifically when it is at the intersection of culture.

In this thesis, I will be focusing on the Bhutanese refugee populations in Dallas and Fort Worth, Texas. According to the Centers for Disease Control and Prevention (CDC) (2021), between 2008 and 2012, Texas was home to 9.9% of more than 49,000 resettled Bhutanese refugees, having the second highest number among the fifty states behind Pennsylvania. They arrived in Dallas and Fort Worth (DFW) in several hundreds each year, representing one of the most prevalent refugee populations in this metroplex (New American Economy Research Fund, 2019). After volunteering with these communities for many years since high school, I have empathized with their stories. Witnessing and experiencing the inefficiencies in health care

delivery itself when navigating a language barrier was something I had seen persist for all five years of working with the refugees. The research done for this thesis has elucidated the importance of filling that gap in health literacy. In addition, in attempts to seek out risk factors to Bhutanese refugees' health specifically in the DFW metroplex, there is a lack of literature on the region. To balance this need, I have gathered data from various states with densely populated cities with Bhutanese refugees, such as New York, Pennsylvania, Ohio, Georgia, and Texas (CDC, 2021).

The cultural differences specific to Bhutanese refugees will be thoroughly explained later in this thesis, but addressing the needs of a population, rather than generalizing healthcare to fit all refugees in the U.S., is a key component of cultural competency development. The necessity to cater community programs, whether they be public or private, to Bhutanese refugees is always increasing because of how large of an origin country Bhutan is for refugees (Chao & Kang, 2020, p. 259). Their origin stories are quite different to many other refugee populations, as they faced a plentiful amount of persecution and confinement along their journey, and the U.S. was one of five countries for refugees to escape to as a part of a UNHCR resettlement program beginning in 2007 (Roka, 2017). From many studies that have completed longitudinal ethnographies and interviews with Bhutanese refugees in America, trends have formed in their participation in health care and what types of solutions have been most effective. Barriers in health education, language and communication, and motivation to participate in their own health care are all components of Bhutanese refugees' lower health literacy in the U.S. Persistent health disparities form as a result. Comfort and confidence in a refugee's own health can be rebuilt through community interventions (Dubus & Davis, 2018). This thesis proposes the use of help-seeking and social networks, along with cultural competency plans for all types of providers, to

engage both the Bhutanese refugee patient and their provider in improved and productive health interactions.

First, the thesis begins with a background on Bhutanese refugees' origin stories and what their most adverse stages of coming overseas to live in the U.S. and specifically Texas have been. Then, the focal causes of health disparities among this population are presented while defining key concepts essential to understanding those causes, health literacy and health activation. Then an unstructured literature review begins by discussing the several physical and mental health trends that are common among Bhutanese refugees. Sectioned by type of poor health outcome, the review will analyze a compilation of surveys and interviews from previous studies of the refugee responses to questions regarding their health. The findings of these chosen studies display how Bhutanese refugees' low health literacy and activation has facilitated these health disparities. This is followed by a section of testimonies from providers and other health care workers from refugee camps that have implemented different types of solutions. Continuing from that is a discussion of community health practices and what they provided when integrated into refugee networks, with support from successful attempts and studies that use community health integration as a part of their solutions to refugee health care access. Studies are further explored, noting cultural competency and its necessity in healthcare provider training. Next, the overall limitations of the thesis are explained. To conclude, I discuss future directions, to analyze the types of programs and research that could prove successful, based on previous studies with similar groups of Bhutanese refugees.

Background

Bhutanese Resettlement

Bhutan is a small South Asian country positioned between China's southern border and India's northern border. The country is populated by four distinct ethnicities, and the one of interest for this study are the *Lhotshampas*, or Nepali Bhutanese from the south of Bhutan. Originally, *Lhotshampas* were Nepalese residents brought to Bhutan by the Bhutanese government to clear the trees from the country's southernmost jungle in the 1890s. Eventually, the Nepalese settled there and became official citizens by 1958 (Roka, 2017). Over the next thirty years, the Nepalese population in Bhutan grew to 45% of the country's entire population, involving themselves in political and cultural spaces in the country and drawing negative attention from the Bhutanese government, according to the Human Rights Watch (2003). As a result of the growing ethnic prevalence of the Nepalese, the Bhutanese government answered with intolerance of their linguistic and cultural expression. In return, the Nepalese minorities protested to defend the key features of their identity, but to no avail as the Bhutanese government was only angered. The regime escalated the torturous conditions for the *Lhotshampas* and suppressed their retaliatory acts. Eventually, the government forcibly removed the minority group from Bhutan, causing 100,000 *Lhotshampas* to find refuge elsewhere. As India refused to take them in, the *Lhotshampas* were brought to Nepal as refugees. This sequence of events prompted the United Nations to intervene in 1992 and set up refugee camps in Eastern Nepal (Roka, 2017). However, their journey was met with more adversity in these camps.

In Nepal, the refugees were given false hope of safety in refugee camps. The premise of these camps were that they would provide a safe haven for the refugees to escape extremism and

corruption by the Bhutanese government. However, a lack of oversight and hands-on attention by the United Nations to combat similar prejudices in Nepal caused the same scale of distress for these refugees (Tol et al., 2010). The camps did not give them a chance at economic resurgence or any form of mental solace as they were put through similar torture methods and exposure to diseases, both physical and mental. Nepal has had a long, arduous history with political violence, resulting in torture and many cases of insurgency at the local and state level stemming from Maoist insurgency. From February 13th, 1996 onwards, corruption has plagued Nepal as this date marks when Maoist rebels attacked five Nepalese districts and their development banks, inciting what was called the "People's War" (Tol et al., 2010). As regimes were in conflict during the years when the Bhutanese Nepali were in refugee camps, the refugees suffered resource manipulation in terms of health services, education, social networks, and child development practices. For example, when the refugees approached medical facilities, they would be randomly detained by police officers without justification, causing an overall decrease in refugees seeking medical attention (Tol et al., 2010, p. 39). Many of these services were partitioned unequally between urban and rural areas, widening the gap between the wealthy and poor and allowing the Maoist forces to grow stronger. As a result, the refugees were not able to escape the discrimination from officials passing through or stationed in the areas of the camps. Maoist rebels employed drastic measures of violence and unrest against the *Lhotshampas* in the camps, leaving their standard of living in camps on par with the restrictive lifestyle *Lhotshampas* faced in Bhutan (Tol et al., 2010).

In 2007, after twenty years of suffering these under these conditions, the UNHCR was able to establish a resettlement program for Bhutanese refugees to seek shelter in several participating Western countries, one of which was the United States. Starting in 2008 and until

2015, there were 80,413 relocated Bhutanese refugees to various major cities in the U.S. In that time frame, 3,538 refugees relocated amongst Dallas and Fort Worth, Texas, not accounting the several hundred settled in DFW suburbs as well (New American Economy Research Fund, 2019). The process of a refugee arriving in the U.S. begins with Voluntary Agencies (VOLAGs) from state and local governments supplying the refugees with eight months' worth of food, housing, and financial stability (Roka, 2017). VOLAGs would also aid in providing welfare resources to the Bhutanese refugees such as educating them about governmental programs providing food, healthcare coverage, and educational tools such as SNAP, WIC, Medicaid, and ELS classes. Extended support past the eight-month period would be offered in select states, such as Wisconsin; however, very few Bhutanese resettled in these areas and the assistance was aimed towards those with severe disabilities. Monetary assistance was the key driver for many refugees and after the eight months, they were forced to find sustainable living and employment arrangements on their own, many of which required proficiency in the English language and U.S. citizenship. The primary source of information, tools, and social support for Bhutanese refugees after living in the U.S. for about ten years, are community Bhutanese Nepali organizations, promoting help-seeking behaviors and emphasizing the social wellbeing of the refugees (Dubus & Davis, 2018). These particular community-based interventions are unprecedented in the levels of motivation and participation they evoke in refugees, and they are significant in the proposed future directions discussed later in this thesis.

Bhutanese refugees' livelihoods in America have been characterized by many gaps in their welfare and specifically, their mental wellbeing. Their journey has been marked by a causal relationship between enduring torturous violence and mental disorder symptoms (Tol et al., 2010). As noted by the horrid history of Bhutanese asylum seeking, defined by discriminatory

prosecution and violence in Bhutan, stripping of resources and torturous conditions in Nepal, and adjustment stressors once arriving to the U.S., there have been many refugees who, to this day, cannot rid their minds of the trauma and strife endured during those years. One of the most unique experiences that the Bhutanese have had is the long-term toll on their mental health caused by such violent and torturous conditions from the Bhutanese government or forces in Nepalese refugee camps. To discuss the Bhutanese refugee healthcare experience in the U.S., one should not disregard the mental health component and how it has been addressed.

Before delving into those presentations in Bhutanese refugee communities, it is necessary to understand how both mental and physical health disparities form to begin with. The concepts of health literacy and health activation need to be addressed first to understand the core causes of those disparities.

Defining Healthcare Barriers of Interest

Health Literacy

Health literacy is defined in many functional ways. At its core and how it will be used for the bulk of this review follows this definition: it is the basic skills needed to understand health information and apply it to daily practices in order to maintain one's health (Chao & Kang, 2020, p. 260). Another study defines it more holistically, as a measure of how to utilize healthcare's many moving parts, adapting to a new system, paired with the motivation to use, understand, and apply health directives, and abilities to speak and read the language used in health interventions. These factors are all what makes up one's comprehensive health literacy (CHL) (Wångdahl et al., 2018). Most refugees crossing seas to settle in America are starting anew with educational

disadvantages they had faced in their home countries. Attempting to apply this limited knowledge, which is already much different to the learning practices in the U.S., is extremely difficult for refugees. Therefore, refugees have no tools and little aid in understanding how accessing health care works as these health education gaps are scarcely recognized among the healthcare field.

The U.S. Institute of Medicine (2004) adds that health literacy is "mediated by education, culture, and language," the key word being culture. The ability for asylum seekers to apply their native country's health tools and normalcies to a healthcare system that is novel to them is near impossible without comparing and contrasting cultural practices. The impact of culture on health literacy is tremendous due to many cultural beliefs, especially in developing countries, directly impacting one's health, both physical and mental. There are several spiritual, religious, and familial considerations that are overlooked when determining why Bhutanese refugee health literacy, from the perspective of U.S. health care workers, is circumstantially lower (Dubus & Davis, 2018). Many refugees do not feel comfortable in their health literacy, which is inherently affected by the way providers address the cultural background of the Bhutanese Nepali (Dubus & Davis, 2018). After discussing the disparaged health outcomes of this population, the significance of introducing and maintaining cultural competency plans in those communities is addressed.

Another concern that interrupts a smooth visit at the doctor's office is the language barrier. The considerations that prove most important in delivering health care to Bhutanese refugee populations who have resettled are their backgrounds involving health care interactions and what practices they are normalized to. Most of the refugees in their adult age have traveled into the U.S. with minimal education due to their history as primarily farmers (Tol et al., 2010).

To apply that to a Western world of more advanced and modern medicine, there is a need to understand the English language at the most simple proficiency. Most of the learned practices for those trying to comprehend modern medicine as a shift from traditional medicine requires the ability to read and write the common language used in medical literature and doctor's offices and hospitals (Chao & Kang, 2020, p. 262). In addition to the linguistic gap, most of the cultural customs built in Bhutanese behaviors have to do with oral delivery of information, while the U.S. has been accustomed to using text in healthcare. Health literacy becomes an issue of not only lacking the linguistic proficiency in English, but also missing key educational facts about the refugees' medical needs through reading and writing (Chao & Kang, 2020, p. 267).

Changing a lifestyle habit against one's will can be quite difficult. For the Bhutanese refugees, it hinders their ability to access health care and more heavily, impacts their confidence in health care interactions for the future. Without the necessary implementations of translation services and dialect experts to help with converting written materials to the appropriate language, refugees are lost as patients and providers may also feel helpless because they lack training for situations like these (Chao & Kang, 2020, p. 260). While many refugees from larger countries of origin readily have access to interpretation services, Bhutanese translation services are hinged upon members of the refugee community volunteering their services if they are part of the few who are bilingual (Dubus & Davis, 2018). Therefore, this large linguistic gap between patients and providers requires more research and attention. Refugees have suffered the consequences of poor health, physically, emotionally, and mentally, for several years without any advocacy and attempts at progress (Byrow et al., 2020, p. 2). This feeling of unimportance and inferiority can take a toll on the refugee experience, already having to battle the difficulties of acculturation and seeking stability in an economic, familial, and social sense. Due to this, refugees lack the

confidence and motivation to step into the realm of healthcare seeking in the first place. Help-seeking behaviors have been dangerously low in refugee communities because of the negative stigmas and perceptions of their culture and status (Byrow et al., 2020, p. 2). Coming from lower castes in Nepal and a lifelong of discrimination from native Bhutanese people, their mental health is already severely debilitated, but as in many South Asian cultures, speaking about mental health concerns is not commonplace. The refugees are discouraged to express their mental disorders and they are pushed aside as negative aspects of the refugees' personalities, always to be kept hidden. These sentiments, paired with feeling unable to speak to health care professionals or even begin asking questions because they lack the knowledge of the U.S. healthcare system, are factors contributing to their low confidence in health maintenance. By under-utilizing the health services that are available to them, however useful or attentive they may be, refugees lack what is called health activation.

Health Activation

Health activation is a quantified score used in many health interaction studies to measure a patient's "health care self-efficacy" (Yun et al., 2016, p. 528). This term is focused on the lack of confidence refugees have in facing health care scenarios. Language and communication barriers weigh heavily on refugees' reasoning for forgoing or missing care and appointments. In interviews with a Bhutanese refugee population in Philadelphia, the oldest and most feeble members of the community reported the lowest activation levels. These refugees described their "age, lack of education, or health problems" (Yun et al., 2016, p. 533) or even illiteracy as causes for their lower activation. In conjunction, the older refugees reported higher confidence through "on-going exposure and social modelling" (Yun et al., 2016, p. 533), to be discussed later in the thesis. The ones requiring help in accessing their health care needs often relied on friends and

family to navigate them and would rarely seek professional assistance, not necessarily due to financial reasons, but rather the stigma and unfamiliarity factors that come with approaching someone new and seemingly uninformed on the Bhutanese healthcare experience. Fear clouds much of these refugees' mindsets as they think about entering a hospital or doctor's office, enduring sentiments of helplessness and shame for their lack of understanding and proficiency of the U.S. health system (Byrow et al., 2020, p. 18).

Bhutanese Refugee Health Outcomes

In understanding the implications of health literacy and health activation levels among Bhutanese refugees in the U.S., analysis of their most common, disparate health outcomes is necessary. All of the outcomes discussed later have determinants related to health literacy and health activation. Linguistically-bound, socially-bound, and culturally-bound health literacy all impact the refugees' ability to receive care in an effective manner, while their motivation to seek care is diminished by literacy factors as well as the absence of community-based programs and culturally-sensitive providers. Upon arriving in the U.S., the refugees were screened for various serum levels pertaining to their nutrition, such as vitamin B12, and abnormal numbers were gathered (Cuffe et al., 2014). Data from specific communities in Texas and Ohio highlights a multitude of chronic health conditions, such as abnormal blood pressure, diabetes, asthma, cancer, etc. that Bhutanese refugees suffer from, as well as a lack of engagement in proper health behaviors, such as exercise (Misra et al., 2016). Finally, focus on mental health has become more common because of distinctly higher rates of suicide, depression, anxiety, PTSD, and other psychiatric disorders in Bhutanese refugee communities in the U.S. (Griffiths & Loy, 2019; Schultz, 2017). To analyze these distinct health outcomes, a literature review was conducted and

the studies chosen each focused on a particular Bhutanese refugee community in the U.S. First, the criteria and methodology for choosing these studies is described to elucidate their critical elements that were utilized in the literature review.

Study Selection

To initially locate studies on the Bhutanese refugees in the U.S. that had specifically focused on healthcare, a search was done on Academic Search Complete using the key words Bhutanese, refugees, healthcare, barriers, health literacy, health activation, and United States, among others. The results yielded approximately 20 to 30 studies that had studied explicitly Bhutanese refugees or a mixture of refugee populations, in which Bhutanese were one of them. After reading the abstracts and discussions of these articles, many were excluded based on irrelevance to the specific healthcare barriers of literacy and activation. This left 15 studies to analyze and review for this thesis. All of these included unique perspectives on conducting interviews with Bhutanese refugees and targeted specific complaints regarding health care. Some had a holistic approach to identify the most common health outcomes and others honed in a particular ailment such as vitamin B12 (Cuffe et al., 2014). In addition to providing raw data, the studies performed specialized interventions crafted by researchers themselves. A few of the key methods and results from these solutions to improve health literacy and activation for the refugees were chosen as part of the proposed research for this topic in the future. While most of these articles discussed social and community networks as avenues for help-seeking, some were more articulate than others in how to implement certain solutions.

The purpose of the following section is to gather the most significant findings from these 15 articles that support this thesis' primary research objective: to understand how and why health literacy and activation engender health barriers amongst Bhutanese refugees in the U.S. After

understanding the prevalent themes that hinder refugees from accessing health care, case studies and their research on solutions are utilized to filter those with the most potential to benefit Bhutanese refugees in all U.S. communities. By reviewing a multitude of studies, it is easier to identify the most common complaints from refugees. After finding that information, which was identified to be factors within health literacy and health activation, appropriate solutions can be researched to specifically target those health barriers. Conducting a literature review as such is necessary to establish a starting point towards reform in this niche and underrepresented issue within healthcare in the U.S.

Chronic Health Conditions

In an assessment performed by Misra et al. (2016), the health literacy and common behaviors of adult Bhutanese refugees in Houston, TX were analyzed. A group of 100 Bhutanese refugees were given a 60-question survey translated into Nepali, as many of the participants were not proficient in the English language. Through conducting such interviews, the researchers found important features of the Bhutanese refugees' livelihoods or knowledge of U.S. healthcare that are likely causing persistent health barriers and chronic health conditions. Firstly, the situation in Nepali refugee camps is jarring as the knowledge the participants had of their own medical conditions was low (Misra et al., 2016, p. 1427). Second, the camps were notorious for diagnosing chronic health conditions insufficiently, excluding many refugees that should have been diagnosed (Misra et al., 2016, p. 1427). As many of the participants were already beginning at a low educational level in the U.S., they faced disadvantages in their health care experiences, such as going to a primary care physician's office or being able to communicate to health care workers about their insurance plan, etc. This study elucidates several physical health disparities

among Bhutanese refugees, particularly chronic health conditions, magnifying the health barriers they face that cause these outcomes.

A holistic overview of each participant's health status was taken through conducting these interviews. The surveys consisted of questions following themes of demographics, physical activity, and chronic health conditions. Before distributing the surveys to refugees, the reliability and validity of the study was confirmed by using the Behavioral Risk Factor Surveillance System (BRFSS) to formulate the questionnaire (Misra et al., 2016, p. 1425). One particular question from the study's survey had the purpose of identifying any chronic health conditions the refugees might have. The researchers phrased it as "Has a doctor, nurse, or other health professions ever told you that you had any of the following health conditions/problems?," (Misra et al., 2016, p. 1425). "High blood pressure, dizziness, and arthritis" (Misra et al., 2016, p. 1426) were the three most common chronic health conditions that the refugees complained of. Additional health concerns among the survey participants included "tuberculosis, ulcers, problems related to eyes, allergies, gynecological problems" (Misra et al., 2016, p. 1426), though they were less common. After asking about chronic health concerns, the survey asked the refugees about their health behaviors, which could be classified as determinants of these concerns.

The reported results found that the refugees had little experience as civilians in their home country as was reflected in their day to day habits and health practices. Their days were spent living in fear and torturous refugee camps for a decade. Most refugees were not aware of any of the conditions they had until arriving to the U.S. because of misappropriated health services in the refugee camps they traveled from. Therefore, their everyday activities in their new home rarely include paying attention to their health, which either perpetuate or cause the aforementioned chronic health conditions (Misra et al., 2016).

Help-seeking behaviors were also evaluated through the survey. While 70% of participants mentioned seeking care at a public clinic in Houston, only one third of them physically visited due to having no knowledge of the locations of county and city clinics accessible to them (Misra et al., 2016, p. 1427). As displayed by the refugees' actions, their health activation is suggested to be quite low. This paired with the low health literacy of Bhutanese refugees fosters a discouraging outlook on healthcare and hinders proper navigation of the already limited health care available to the refugee population. Further exacerbation of these chronic health issues requires programming to both educate and motivate the refugees on healthy living.

After recognizing that chronic disease prevalence in other refugee populations was high, Kumar et al. (2013) reviewed adult Bhutanese refugees' medical chart data from a population that resettled in Atlanta, GA at the Grady Refugee Clinic (GRC) (2013) to examine whether this particular refugee group was affected similarly. The study embarked on this research because of the scarcity in analyzing chronic diseases, which are often risk factors in morbidity and mortality data, in Bhutanese refugees. The GRC's reports from a few years prior to the study show that the refugees lifestyle underwent a large shift from actively farming in Bhutan to a sedentary way of living in Nepalese refugee camps (Kumar et al., 2013). The sedentary lifestyle was perpetuated once resettling in the U.S. because of a lack of structure in programs to educate refugees in healthy behaviors, such as seeking help or even preventing a worse chronic disease burden.

Kumar et al. (2013) found alarming health disparities in terms of chronic diseases among participants ranging from 18 to 84 years old with a median age of 41 (n=66). The focus was to determine the prevalence of non-infectious diseases within the population and 59% reported having at least one chronic disease (Kumar et al., 2013). These diseases included being

overweight, obesity, hypertension, diabetes, and vitamin B12 deficiency, which will be discussed later with nutritional health outcomes. With more than half of this sample presenting such poor such health outcomes, change in how health is addressed for Bhutanese refugees upon arrival is necessary. More cultural awareness and education on how the refugees lived previously in refugee camps would give an idea to providers on the refugees' medical history. In addition, improving the refugees' literacy directly by introducing healthy habits can help curb the appearance of health disparities in this population.

Nutritional Health

With their often-changing lifestyle, being ejected from their home of Bhutan and subsequently relocating to the U.S. from Nepalese refugee camps, Bhutanese refugees have had anything but a consistent lifestyle. Their physical activity and nutrition was particularly affected by these circumstances (Misra et al., 2016). The most drastic and detrimental impacts to the refugees' health behaviors were accumulated in the refugee camps. They lived an extremely sedentary life and were given few vegetables and excessive amounts of rice for each meal (Kumar et al., 2013). As a result, the refugees continued those behaviors, which had become habits, in the U.S. with no awareness that their behaviors perpetuated their poor nutrition. Without a source of health information or nutritional advice, refugee communities continued their unhealthy food consumption and rarely engaged in physical exercise (Misra et al., 2016).

In the study introduced during the discussion of chronic health diseases, physical and nutrition related behaviors were surveyed in the Houston population (Misra et al, 2016). Out of the respondents, 20% reported daily consumption of soda, more than 50% consumed fried foods, and 60% did not weigh themselves regularly (Misra et al., 2016). Additionally, 41% of respondents noted exercising aerobically for about half an hour each day (Misra et al., 2016).

These results and identified health behaviors showcase the prominence of health barriers within the Bhutanese refugee population. If health literacy and activation were addressed upon their arrival to the U.S., these results would not present as consistently because of increased health education, cultural sensitivity, and overall awareness of the resettlement history of the refugee group. Further analysis of Bhutanese communities in Texas underscore these barriers, specifically in the city of Austin.

Starting in 2008, the CDC screened Bhutanese refugees arriving in the United States for their serum Vitamin B12 levels as a part of routine medical examinations done on all refugee arrivals. According to the National Institutes of Health in 2021, "vitamin B12 is required for the development, myelination, and function of the central nervous system; healthy red blood cell formation; and DNA synthesis." The normal source of this vitamin is food, but with improper diets or difficulties with absorption, vitamin B12 deficiency can develop. This issue can eventually become a symptom for cancer, cardiovascular disease, or cognitive disfunction (National Institutes of Health, 2021). In 2014, Cuffe et al. analyzes a particular Austin-Travis County clinic in Texas that presented vitamin B12 serum deficiencies. The cause of the lower serum concentrations is not specific to one barrier, but rather a range of possibilities from a poor food supply in the refugees' previous camps to financial instability during the resettlement process. Although routine medical examinations have been common practice for the CDC, their work to identify and plan interventions for certain disparities is not commonplace. The findings from 2008 to 2012 show increased B12 concentrations likely due to CDC recommendations to improve refugee access to appropriate foods and their acknowledgement of the Bhutanese lack of knowledge of how to monitor or maintain vitamin levels. The health disparity from this study demonstrates the lower health literacy that Bhutanese refugees arrive in the U.S. with. The

causes are likely their low nutritional education and because dietary advice was rarely provided in the Nepalese refugee camps. Low health education in the refugees history is the main factor of health literacy identified by this study. As a result, the Bhutanese refugees suffer from vitamin deficiencies, one of many poor health outcomes for this population.

To uncover these deficiencies, the CDC conducted a nutritional assessment comprised of 49 refugee participants over the age of 18 years. The refugees' pre-intervention serum levels were measured and they ranged from approximately 138 to 718 pg/mL, while the normal goal is a range of 203 to 900 pg/mL (Cuffe et al., 2014). These levels indicated that Bhutanese refugees in the U.S. had lower than normal vitamin B12. Their post-intervention measurements were completed after CDC recommendations for taking oral vitamin B12 supplements and receiving nutritional counseling were implemented among these enrollees. More specifically, surveys regarding dietary habits and food intake were administered along with nutritional advice to increase consumption of red meat and eggs, as they are foods rich in vitamin B12. Among the screened individuals, only four reported awareness of the benefits and necessity of vitamin B12. Nevertheless, post-intervention serum concentrations of vitamin B12 increased from a median of 344 pg/mL to 402 pg/mL and 58% of enrollees reached a serum level falling in the range of 129 to 1,746 pg/mL (normal range = 203–900 pg/mL) (Cuffe et al., 2014). Their overall vitamin B12 levels were raised significantly and the results correlate with an improved diet and overall knowledge about vitamin B12 among the participants.

A similar study and recommendation was given to Bhutanese refugees arriving in Minnesota in 2010 who were deficient in the same vitamin. Nutritional screenings were ongoing by the CDC for every new arrival of refugees. After analyzing levels over two years, B12 deficiency decreased overall after implementing CDC suggested interventions and only 17%

were deficient in 2012 compared to 28% of the sample population who displayed deficiency in 2011 (Cuffe et al., 2014).

These CDC findings confirm the presence of a physical health disparity among Bhutanese refugees arriving in the United States. Further work between the CDC and local refugee health programs may continue the upward trend in B12 concentrations and lead to unearthing more disparities in the Bhutanese population. Collaboration between community programs and governmental agencies will be discussed when exploring potential solutions for tackling low health literacy. Any method of increasing access to health information and learning about nutritional recommendations would dramatically improve Bhutanese health literacy. These interventions could prevent low vitamin levels from escalating into alarming disorders, such as hematologic and neurologic problems that could be caused from untreated vitamin B12 deficiencies.

Women's Health

In addition to pinpointing health conditions that develop after relocating, it is imperative for the providers treating refugees to be aware of the preexisting health trends for specific populations and countries. Many noticeable health outcomes are specific to a certain part of the population, such as women. In 2014, Bhatta et al. studied health data from Bhutanese women in a refugee community in northeast Ohio from the ages of 18 to 65 (n=120). Long-term health conditions were uncovered through a Nepali-language questionnaire administered to 120 women in the community and potential risk factors were hypothesized as the source of these conditions perpetuating for years. A variety of statistics were gathered such as the mean demographics and socioeconomic status of each woman, as well as health conditions and behaviors the women reported from before and after resettling in Ohio (Bhatta et al., 2014). In terms of demographics,

73.3% of the participants practiced the Hindu religion, 50% reported having no schooling, and only 48.3% could speak English while 49.3% could read English. A substantial amount, 26.9%, of the women reported never seeing the physician since arriving in the U.S., suggesting that primary health care services are being underutilized by these women (Bhatta et al., 2014). Factors at the patient-level barring discourse between these refugee patients and providers are likely in line with the cultural, educational, and linguistic backgrounds reported of these women. Amplified health literacy issues in Bhutanese refugee women steers them away from seeing providers, a trait of low health activation.

After gathering the data from all 120 questionnaires, certain health conditions were found amongst all or most of the reports. In order of prevalence, the Bhutanese refugee women reported having hypertension, overweight/obesity, asthma, diabetes, heart disease, and cancer (Bhatta et al., 2014). As mentioned before, the ages of this population are quite young (45 years old or younger), predicting that these health conditions will only worsen as the women's time in the U.S. and age increases. Seeing as these reports were taken from women who had lived in the U.S. for two years or less, it seems advisable for communities to counteract the chronic disease burden upon Bhutanese refugees' arrival in the U.S. (Bhatta et al., 2014). Although the self-reports from the women are jarring, assessing their BMIs displayed dramatic results in terms of indicating chronic illnesses. For example, 7.8% of the women self-reported being overweight or obesity, however, the compiled BMI data of the participants revealed that over 50% of the women were either overweight or obese based on waist and hip measurements. This extremely large variance could be attributed to a multitude of delivery discrepancies. Health literacy barriers in language and communication, as well as low awareness of the health history of this specific cohort by providers, are likely contributors to these health outcomes.

In the case of Bhutan, the country is one of the leaders in cervical cancer prevalence in women. A study by Haworth et al. (2014) conducted in Omaha, Nebraska surveyed 42 women from the Bhutanese refugee community in the city. The template for this study was the Health Belief Model (HBM), which is well versed in questions that aim to explain health behaviors while understanding the degree of knowledge one has about a certain disease (Glanz et al., 2008). An important feature of the study was the initial pilot testing done with only five women who were asked to complete the survey first to determine if it contained culturally competent wording and communicative information (Haworth et al., 2014). As cervical cancer as a topic can be quite confusing and involve scientific jargon for even the common English speaking native in the U.S., questions were made simple and primarily concerned topics about Pap tests and general health preventative measures that the participants were taking at the time.

The results of the study were clear in showing how knowledgeable the Bhutanese refugee women were on cervical health and measures that should be taken to protect their personal health. "Only 22.2 % of the study participants reported having ever heard of a Pap test, with 13.9 % reporting ever having one" (Haworth et al., 2014, p. 6). The main theme of the results, as explained by the conductors of the study, was that the majority of the women were not even aware of cervical cancer or HPV. Even more alarming was the lack of preventative care practices and knowledge about screenings. Coming from a vastly different culture and health system in Bhutan and Nepal, with negative stigmas around open discussion on women's health concerns, these women have little to no basis of understanding how to maintain these aspects of their health (Haworth et al., 2014). Preventative care education and delivery of information with linguistic sensitivity seems prudent to improving health literacy in approaching women's health issues for refugees. In addition, inclusion of cultural competency framework for providers would

give them a better idea of how detailed or privately to speak to the refugee women about these topics in order to maintain comfort and approachability.

Mental Health

Several discrepancies between adult Bhutanese refugees and an average U.S. adult lie in their mental health status. In a study by Griffiths and Loy (2019) centered on Bhutanese refugee integration, 270 refugees from Virginia were interviewed on several aspects of their overall livelihoods, focusing on education, employment, income, and health. Amongst the physical repercussions that come along with relocating from a demanding life in refugee camps and a discriminatory country, many of the refugees' mental hurdles were emphasized in the analysis of the study's results. Many refugees complained of the stigma that is linked with the issue of mental illness in the Bhutanese community. Without much social support and heavy cultural disconnect, Bhutanese refugees have experienced hardship in receiving mental health care, leading to the refugee group having one of the highest suicide rates in the U.S. (Griffiths & Loy, 2019, p. 1221). The researchers extended their analysis to identify the main disadvantages that result from poor health, which are fewer employment opportunities, financial instability from the high costs of health insurance, and low levels of social integration. From these findings, Griffiths and Loy pinpoint the "one-size-fits-all refugee resettlement approach" (p. 1226) as deficient in aiding refugees from low educational backgrounds, such as the Bhutanese.

Researchers have used several quantification methods to understand the scope of how debilitated Bhutanese mental health has become. Among a group of 226 Bhutanese adults in Western Massachusetts, personal interviews were administered in order to gauge certain scores about the refugees' current mental health states. A test for anxiety and depression was used with a scale to compare Bhutanese refugee scores against refugees' scores relocated from other

countries. With the Hopkins Symptom Checklist-25 (Derogatis et al., 1974), there was consistent reports of both factors determined by two individual scales. Next, using the 25-item Wagnild and Young's Resilience Scale (Wagnild, 2009), resilience was measured by constructing a score that includes one's reliance on themselves, their independence, ability to use resources, willingness to persevere, adaptability, etc. The refugees scored low on resilience in the results obtained from using this model. It was found from several trends and previous outcomes that lower scorers on resilience tend to score high on anxiety and depression (Poudel-Tandukar et al., 2019, p. 499). Next, the style of how the participants cope was measured with a 32-item Coping Strategies Inventory-Short Form (Poudel-Tandukar et al., 2019, p. 499). The test was less consistent and the researchers did not analyze the scores on their own, but rather as confounding factors of anxiety, depression, and resilience. Nevertheless, the coping style of these refugees fell in line with the inverse relationship between the previous two measures that were studied. These results align with their low interest in seeking help for mental health disorders, attributing many of their hesitations to the previously introduced stigmas in their culture.

Community-Based Interventions

In attempts to resolve the disparities within Bhutanese refugee populations in dense cities in the U.S., community centers and leaders have collaborated with social workers to address the areas lacking sufficient understanding of the refugee experience. Specifically, experiences barring refugees from having confidence in approaching health facilities and providers have been addressed (Dubus & Davis, 2018). These areas include linguistic adjustments and cultural specificities that affect the quality and comfortability of health services the refugees receive. The

efforts taken by community centers have been analyzed in several studies, each with a slightly different approach to bridging the challenges between health services and Bhutanese refugee patients. I analyze the studies' methodologies for implementing community-health programs and pinpoint the aspects of each that have the potential to be fine-tuned. With the combination of these community response tactics, Bhutanese refugees not only in the DFW area, but across the country, may break the cycle of poor health outcomes driven by low health literacy and activation.

In 2018, Dubus and Davis conducted a study interviewing fifteen workers in community-health centers from six states in the New England region of the U.S. The workers consisted of 12 social workers, 1 psychologist, 1 psychiatrist, and 1 program manager who all served refugees from Bhutan, Bosnia, Burundi, Burma, Cambodia, Congo, Djibouti, Eritrea, Iraq, Nepal, Somalia, and Sudan (Dubus & Davis, 2018, p. 877). By conducting semi-structured interviews with each community center's representative participant, each center's collection of resources, refugee demographics, training practices, and strategies for confronting linguistic and cultural issues were understood.

The three themes common to all fifteen interviews were client engagement, interpreter collaborations, and focus on cultural competence (Dubus & Davis, 2018). The client engagement component was further explained as providing a comprehensive increase in access to health services while simultaneously utilizing the services available to their maximum potential. These practices became common in all of these centers because the Office for Refugees and Immigrants would rarely update the centers on the medical histories of the refugees arriving to the sites, which would change every few months (Dubus & Davis, 2018). Having a sense of the health background of the refugees would at the least give providers a sense of the clinical practices and

services that would need to be employed at the centers. However, with only a couple weeks' notice of new refugee arrivals, there was an emphasis on the need for engaging with each refugee to assess their particular needs. The participants described the services in their centers as supplemental assistance by offering English classes, work experience opportunities, and constructive mental health help, all being tailored to the particular needs of their refugee populations.

Another benefit found of these centers is the type of providers making up the majority of their employee base, which consists of primarily social workers (Dubus & Davis, 2018). Many Bhutanese refugees do not receive any opportunities to speak with a social worker from resettlement agencies, and as some participants of this study note, collaboration of multiple health care workers is crucial to gaining a full picture of a refugee's health status. In addition, as a result of effective use of client engagement, participants have attributed an influx of interpreter volunteerism to the rapport built between the refugees and clinicians (Dubus & Davis, 2018). As refugees are further integrated into the daily ongoings of these community centers, relationships between the social workers of the centers and the refugees are strengthened and the refugees start to offer their unique perspectives on what their community requires to become self-sufficient. As a result, refugees in this position feel empowered to contribute in any way to fill gaps in their communities, such as by interpreting for the social workers and other clinicians. Specifically in accessing the community centers' health resources, interpreters were available for multiple languages and Dubus and Davis (2018) note that one participant even explained,

> "The health center spends half a million dollars a year on what are called enabling services: interpretation and transportation."

As a result of more spending allocated towards interpretation, they were offered at an increased rate, which one participant noted was an impetus for better quality interactions between clients and health providers.

The participants were in agreement about the utilization of interpretation as a method of bringing down the barrier of language and communication in assessing various health presentations from refugees. However, the participants differed in their views of the extent of interpreter involvement within conversations. Dubus and Davis (2018) present a particular participant's concern of having in-person interpretation versus the ease of phone interpretation:

> "Some of the cultures are a very close-knit group and they don't want this person to know their personal business, like our Nepali interpreter knows a lot of our Nepali patients, so they don't want him to know their business. They want their family member [to interpret]."

Out of the various cultures the community centers interact with, the Bhutanese Nepali culture requires interpretation to be used in a way that does not impede client engagement, discussed earlier. Therefore, as will be discussed later as a future directive, spending funds and energy on interpreters is essential, however, for Bhutanese refugees, an approach to keep the privacy solely between the provider and patient is to use phone interpretation. As a result, the refugees feel their health needs are addressed appropriately and they are not hesitant to speak about their concerns in a medical office setting. The components of client engagement and collaborating with interpreters are intertwined and contribute to the cultural competency of the social workers and providers within these community centers. Full assessment of a culture and how tight-knit they are, as seen with the case of interpreter involvement, is important in making operational

decisions on how to best cater health services to the refugees. Thus, cultural competence training will be a key component proposed later in this thesis.

During a refugee's transition from refugee camps to communities in the U.S., there is eight-month grace period when refugees receive economic support from resettlement agencies after arriving to the U.S. Many studies have assessed outcomes dependent on how refugees are affected during this time. As Griffiths and Loy's (2019) findings exhibit, "tier 1" or "primary integration outcomes" tend to be exclusively studied. These include outcomes involving employment, income, education, language, and health. After collecting information from interviews done with 55 Bhutanese refugee households in the coastal region of Virginia (n=270), Griffiths and Loy (2019) analyzed their data in these five areas. While these broad categories serve as initial focal points in conducting research on disparities within the Bhutanese refugee community, the researchers found that Bhutanese refugee social integration and mobility was stagnant or even declining. These outcomes have been attributed to a lack of attention on the population's social capital, their network to build social and economic relationships and community development opportunities (Griffiths & Loy, 2019, p. 1226).

The data collected from these refugees in Virginia showcased outcomes consistent with those of a one-size-fits-all resettlement strategy for refugees (Griffiths & Loy, 2019). Refugees arriving with low education and skills into resettlement agencies require more effective allocation of medical and economic services to improve the health literacy and overall social capital of the community. The study recommends further research on integration efforts that could include the US State Department's resources and combining them with community centers and resettlement agencies' current processes. The US State Department, along with the Office of Refugee Resettlement, could provide specific regional data that better determines what the

Bhutanese refugee population's needs are, in terms of which health conditions are presented and how much they rely on social networks to improve participation in health care interactions (Griffiths & Loy, 2019). Noting a population successful in welcoming Bhutanese refugee communities, Griffiths and Loy (2019) point to an Akron, Ohio community that has seen a smooth transition from resettlement to integration into society.

The Bhutanese Nepali in Akron, Ohio are made up of individuals that suffered in refugee camps in Nepal for up to seventeen years (Schultz, 2017). Many of the prominent members of their community recognized the debilitating effects of their resettlement journey on the members' mental health, citing the highest suicide rate amongst various refugee populations and running at twice the rate of the general population in 2012 (Schultz, 2017). Many community leaders in Akron spent time in creating programs, such as one named "Stop Suicide," to remove the stigma and barrier against coming together and openly discussing mental health topics with those who are facing similar ailments. Biweekly mental health gatherings along with empowering classes to teach refugees ways to integrate themselves into the city of Akron economically were part of the factors leading the community to success in addressing various disparities. In terms of health, the mental health of the community was uplifted and health literacy levels increased as a result of programs spent on learning to read and write in English, thus helping with understanding health information and promotional materials (Schultz, 2017).

While analyzing the most successful program implementations in raising health literacy among Bhutanese refugees, it is just as vital to ensure their higher literacy is employed through actions representing higher health activation. The study conducted by Yun et al. in 2018 was unique in its methodology to improve help-seeking behaviors among Bhutanese refugees in Philadelphia, using a "Health Focal Points" (HFPs) model to mimic programs in Nepali refugee

camps in the late 1990s. Members of the communities in these camps were trained to become health educators or community health workers, yet due to their lack of oversight and rampant abuse of power, these programs failed in Nepal. Yun et al. crafted a similar program for the Philadelphia Bhutanese, where a group of 14 volunteers, between the ages of 18 and 34, worked about two hours per week in clinics and community health centers, and these volunteers were the HFPs. The success of implementing these HFP programs were measured and analyzed in a few ways.

Many clients in the refugee population in Philadelphia struggled in health care navigation because of old age, illiteracy, and stigmas of others perceiving the refugees to be weak when asking for help. As a result, the refugees avoided interactions that involved speaking to administrative workers or anyone who did not speak Nepali, and they relied on proxies, or people from their community who were usually younger to have those conversations or do tasks for them (Yun et al., 2018). Although some programs would be available for the refugees with lower health literacy to become educated on navigating health care in the U.S., their confounding factors of memory problems and illiteracy created difficulties in learning and retaining new information (Yun et al., 2018). Thus, introducing more young community members and children that had years of English-speaking education and experience to assist with health care navigation proved extremely beneficial to the community. Elders would actively seek helpers and in this particular study, they would ask HFPs for help in managing their health needs. Levels of patient activations among clients in this study, which were jarringly low to begin with, grew drastically after introducing the HFP program and building a social support system for refugees to gain confidence from in accessing health care. Using a Patient Activation Measure (PAM), data prior to starting the program reported 68.6% of participants had the lowest level of activation and few

(5.7%) reported the highest level of activation. After the program, however, activation at the lowest level was reported by one-third of participants while another one-third reported having the highest level of activation (Yun et al., 2018). For a culture of close-knit community networks comprised of altruistic and dependable people, Bhutanese refugees benefitted greatly from the HFP program and through a formal structure supplemented by larger organizations or agencies, there is potential to produce higher health activation levels among this population (Yun et al., 2018).

As demonstrated by the previous studies, much of the capabilities of community-health integration by community centers or leaders of Bhutanese refugee populations depend on availability of resources. Furthermore, when those resources are available, the most efficient utilization of them in improving the health conditions of Bhutanese refugees can be difficult to achieve. Misra et al. (2016) identifies, in their Houston-based needs assessment, the most prevalent chronic health conditions and risk factors for Bhutanese refugees, followed by their recommendations for interventions from governmental agencies and community organizations. With an extensive range of abilities from local, state, and federal agencies, there are vast opportunities to add to existing community programs. Specific improvements can be made English language proficiency, mental and physical health wellness, and chronic disease management among the Bhutanese population. Policymakers are noted as key to inciting change on small and large scales for refugee populations due to the knowledge and vast resources they have to engender positive changes for the community (Misra et al., 2016). In addition, non-governmental organizations based on community integration are well-versed in connecting refugees to each other through social networking, as well as providing comprehensive resource lists to them of local public health services and eligibility for various welfare and insurance

programs (Misra et al., 2016). Using local agencies in collaboration with community programs has tremendous potential in aiding Bhutanese refugees' health literacy through modes of education as well as promoting health activation by building help-seeking and social networks.

Addressing Cultural Competency Among Providers

Barriers facing refugees having much to do with their low health literacy, language and communication gaps, and differences between U.S. and Bhutanese healthcare systems can be broken down through community-based interventions, mentioned above. However, a separate need for culturally appropriate and competent care administered by providers and nurses has been highlighted in Bhutanese refugee populations in the U.S. Many of the previously cited studies, in addition to interviewing Bhutanese refugees, interviewed the providers and social workers who had interacted with those refugees on multiple occasions, telling their experiences with difficulties tailoring care to the refugees dependent on their culture. Lack of knowledge on the background of how health is perceived and taken care of in specific cultures creates wide gaps in comfort between Bhutanese refugee patients and their providers, which the interviews demonstrated. A holistic solution to improve health literacy and activation among refugees relies on including cultural competency plans among providers in community health centers and free clinics where the refugees frequent. Plans of this nature can include hiring bi-cultural staff, preparing and educating all providers about the history of the refugees they are providing health services to, and understanding the scope of trauma endured by the population, especially for mental health care workers. As mentioned before, detailed care practices such as assessing whether a translator should be in-person or on the phone or ensuring comfort for female patients

by scheduling female-only providers for them can impact the refugees tremendously. Religious beliefs are also important considerations in how health is treated in the daily lives of Bhutanese refugees, and contributes to their overall health literacy and activation depending on the responses of providers (Chao & Kang, 2020).

Many determinants of aforementioned health outcomes are associated with the customs Bhutanese refugees practice in their everyday ongoings. For example, several participants of Chao and Kang's study in 2020 are used to treating health issues with traditional medicine, including using medicinal and herbal plant remedies when they are sick, rather than actively seeing a physician. The refugees' historical experiences in Nepalese refugee camps were characterized by accessing medical services as a rare privilege used in only "the worst situations" (Chao & Kang, 2020). In addition, common American forms of exercise are unknown to the Bhutanese, as working in farms and fields was the only form of physical activity they were exposed to. One refugee in Chao and Kang's (2020) study commented on their sentiments about the Bhutanese mindset on health maintenance differed from that of Americans, and what they would have appreciated from providers' treating them:

> "Khar indicated Bhutanese adults expected 'culturally responsive doctors,' who could 'understand what problems we faced in the camp' and treated them as human beings rather than 'broken machines' in primary care interactions."

Several differences in culture often go unnoticed, but even more common is the complete ignorance of culturally competent care. As a result of insensitive responses to culture, Bhutanese refugees lose confidence in their health literacy and consequently their health activation sharply declines.

A common complaint in the realm of cultural competency inclusion among providers is that most community centers are working with constantly-changing groups of different countries, ethnicities, and religions. Much more time and training than these providers have is required to effectively learn the most appropriate and conscientious ways to interact with each group (Dubus & Davis, 2018). One participant of Dubus and Davis' (2018) study notes:

> "We're not familiar with any of our cultures. When I first came on board, I would spend an unbelievable amount of time before I met with a family researching that culture, but there's so many cultures that we work with that it's one of those things were I probably do less."

To combat this issue, many participants found that cognitive behavioral therapy (CBT) was effective regardless of cultural differences (Dubus & Davis, 2018). Offering this practice with mindfulness teachings was a way to begin treating the mental health disorders, such as depression and anxiety, that almost every single refugee would present. After initiating CBT, providers learned the refugee's cultural customs in treating the health symptoms that were presented and combined those Bhutanese beliefs with CBT to help the refugee feel at home. Other participants took a different approach to implementing cultural competence, by changing health centers' appointment times to various drop-in time blocks throughout the week. Bhutanese refugees had difficulty understanding the concept of appointments so to prevent no-shows, clients could come to the health center during the drop-in periods on an as-needed basis (Dubus & Davis, 2018). Making minor structural adjustments are significant to how refugees perceive their culture is being accounted for during their health care experiences.

Refugee health was recognized years ago as an area that needed more attention towards cultural practices in healthcare. In 2007, students at Jefferson Medical College (JMC) formed a

student organization called Refugee Health Partners (RHP), whose mission was "to [promote] refugee health in Philadelphia" (Weissman et al., 2012). Their secondary work, to providing care to underserved refugee populations, was educating medical students on cross-cultural communication and how to elevate confidence in talking to foreign-born patients. During their work with local refugee communities, RHP built culturally aware practices and trusting relationships with refugees that allowed open communication and health activation from refugee populations to increase. Examples of culturally-sensitive strategies that were notably successful were researching PTSD symptoms within refugee communities and differentiating between whether they suffered from PTSD or what is known as an adjustment disorder, which is commonly misdiagnosed as PTSD when refugees arrive in the U.S (Weissman et al., 2012). Acknowledging this difference is key in addressing their mental health symptoms specific to resettlement hardships and avoiding unnecessary pharmacological prescriptions (Weissman et al., 2012). For centers on a larger scale to implement practices like these could benefit from a systematic change in training medical students and current providers with cultural awareness and competency programs.

In coordination with teaching students effective culturally-appropriate responses and communication skills, there are other tools that ease the access to immediate health information when refugees first arrive to the U.S., highlighted by the Culture Care Theory. A study completed by Catherine H. Sullivan (2009) explains it:

> "Culture Care Theory is to provide culturally congruent, safe, and meaningful care for clients of diverse cultures" (p. 519).

Community agencies that serve Hmong refugees, hailing from Thailand, and Russian refugees, were consulted by students in a capstone nursing course. They partnered to be able to

design a teaching strategy that included cultural awareness by providers when promoting health prevention services. There were 40 Hmong families represented in the interviews, aided by interpreter services, and the questions aimed to determine what health care needs the refugees required the most while assimilating to a new country. An interesting find was the difference in needs for the Hmong refugees and the Russian ones (Sullivan, 2009, p. 520). In the methods of this study, students repurposed written health promotional materials and developed innovative ways to deliver important health information to the refugees. The worksheets were covered with pictures rather than words, all foreign languages were translated to the appropriate Hmong or Russian languages, role-play was used to demonstrate basic cold weather preparation techniques, visits at doctor's offices, basic oral and hygienic care, germ safety, and infant feeding. Nursing students reported throughout their experiences that they were excited to be learning valuable information about Hmong and Russian cultures. The study provided a framework for teaching providers to engage in the Culture Care Theory as they practice medicine, which can be adapted by providers in refugee community centers working with the Bhutanese.

With Bhutanese refugees entering the U.S. several years ago, addressing cultural competency has been delayed with only a recent eruption of innovative methods in teaching medical students and providers. As providers from each study complain of cultural gaps in their training and skills to empathize with refugees, it is necessary to embed culturally aware medical procedures in the frameworks of clinics and community health centers. Focusing on improving health literacy and health activation among Bhutanese refugees is reliant on shifting medical providers to delivering culturally competent care. Many refugees have particular cultural beliefs that affect how they maintain their health, and those beliefs need to be invited rather than dismissed by health care workers. Increased participation of Bhutanese refugees in their health

care interactions is dependent on how comfortable they are with the health care staff and environment. Otherwise, refugees have little motivation to take care of their physical and mental health, contributing to the poor health outcomes distinguishing this population.

Limitations

The limitations of the literature review conducted in this thesis and the proposed solutions to integrate into Bhutanese communities are primarily based on prioritizing which healthcare barriers need to be dismantled first. One in particular that is not involved with health literacy or activation is the barrier of health insurance. In Mirza et al.'s (2014) study, three broad themes of barriers are identified and analyzed for chronically ill Bhutanese refugees. The first theme is "inadequate health insurance" (Mirza et al., 2014) and within their findings, the U.S. had a pointedly limited eligibility period for enrolling for government-sponsored health insurance as compared to other countries. This was supported by gathering data on the refugee interviewees' length of time having stable health insurance, which was markedly short. As a result of adversities stemming from health insurance accessibility, refugees' health needs are not addressed on a holistic level and population or community-level health disparities could be prevented through policy changes (Mirza et al., 2014). The study recommends education programs for refugees to understand their options under the Affordable Care Act, and with traditional Medicaid versus expanded Medicaid.

In this review of health literacy and activation as factors perpetuating poor health outcomes in Bhutanese communities, discussions of structural barriers such as health insurance availability are excluded. However, literature conducting interviews with refugees directly, as

demonstrated by Mirza et al., has highlighted insurance as a major barrier to effective health care delivery. This potentially challenges this thesis' argument of prioritizing health literacy and health activation for Bhutanese refugees and confusion could ensue about which types of barriers should be focused for research and program development. One could argue that health policy changes should be enacted first, in order to stabilize the Bhutanese refugees' access to healthcare for the months after arriving in the U.S. However, in the methodologies for community-training programs and as well as with cultural competency plans, the refugees can be educated on their insurance options and providing a foundation for their ability to comprehend the daunting U.S. healthcare system. In addition, providers and health care centers can include health promotional materials in their offices and in their communication with patients as a part of cultural competency framework design.

Another limitation of this literature review is its focus solely on Bhutanese refugees in the U.S., rather than offering ideas for a holistic attempt at decreasing health barriers. While a few countries contribute more refugees to the U.S. than Bhutan, such as Myanmar, Iraq and Somalia (New American Economy Research Fund, 2019), the themes of health literacy causing poor outcomes for refugees can be specific to the population because of culture, language, and prior education. Approaching the issue of dismantling low health literacy and activation barriers requires further, country-specific research to cater a solution or program that will undoubtedly be successful. Careful attention to the cultural beliefs of the community, their country's health system in comparison to the U.S., and social behaviors common to the population is necessary to formulate accurate plans and framework in addressing this issue. For the Bhutanese specifically, they were found to avoid in-person interpreters as they valued privacy and as a result of having scarce knowledge about exercise habits and nutritional maintenance, their health outcomes differ

based on the behaviors they practice (Dubus & Davis, 2018; Cuffe et al., 2014). Just as physical health outcomes vary across refugee populations, mental health disorders present differently as well. While CBT is an overarching methodology that can temporarily appease refugee patients, providers must be educated on the refugees' resettlement journey and history of their quality of life in refugee camps (Dubus & Davis, 2018). Various refugee groups in the U.S. have completely different narratives of relocating that could largely impact the problems faced in health care settings. Therefore, I chose to focus on a population that displays unique behaviors and health outcomes as a result of lower levels of health literacy and activation. Doing so invites more specialized research and proposed models that are tailored to the needs of the Bhutanese refugees, leading to a greater probability of improving their health.

Conclusion and Future Directives

The heart of the issue of delivering healthcare to Bhutanese refugees resettled in the U.S. is with health literacy and health activation. Health literacy is confounded by several factors during a transition period such as refugee relocation. Their cultural backgrounds and differences, educational history, language barriers, and overall discrepancies in the familiarity of health systems are the most staggering. The refugees resettling from Bhutan arrive with a torturous and drastically different history than many other refugee groups arriving in the U.S. After being expelled from their homes in Bhutan on the basis of ethnic differences, the Bhutanese Nepali were forced into horrid refugee camps in eastern Nepal, where the bulk of their poor health conditions and behaviors originated. Upon arrival in the U.S., these refugees faced several adjustment obstacles in the realm of healthcare. They struggled to navigate the complex system of the U.S. while enduring mental health disorders that they themselves and providers had no knowledge of treating. Refugees had trouble communicating as they had no knowledge of the English language and faced challenges in learning where and how to see a physician. These issues are some of many that make up low health literacy, causing severe health outcomes such as hypertension, diabetes, and obesity, to name the chronic illnesses. In conjunction with health literacy, health activation is low among Bhutanese refugees due to unaddressed mental stigmas, poor cultural competency in health centers, and hardships faced during communication between refugees and providers. Without addressing the issues listed, the refugees' health conditions can develop into long-term illnesses with irreversible, potentially life-threatening effects (Misra et

al., 2016; Griffiths & Loy, 2019). Health disparities in this population have the potential to be corrected with the aforementioned programs and further research.

After analyzing several researched methods of decreasing health disparities in Bhutanese refugees in the U.S., I propose future studies are conducted that explore the integration of training programs in community centers that teach refugees to read and speak in English at a basic level, while educating them on healthy behaviors related to physical activity and dietary habits. In communities where the population is older and less able to retain new learned information, proxies are introduced. Proxies are trained to communicate for the elderly refugees to health care providers and effectively deliver information, diagnoses, and recommendations back to the refugees. This strategy can be modeled after the Health Focal Points introduced in Yun et al.'s study in 2018. These programs will need to be tweaked and undergo longitudinal studies in order to be determined as successful, which will be measured based on how often the refugees visit their primary care physician and the quality of their interactions in terms of communication with providers and comprehending health recommendations. Following the example of Akron, Ohio's Bhutanese refugee community studied by Shultz et al. in 2017, improving health activation and comfort for refugees could be facilitated by community discussions focused on mental health.

To address the cultural component of health literacy and activation, I propose immediate training programs be implemented into medical school curricula. Tackling the overdue issue of absent cultural awareness and sensitivity can be as simple as equipping providers, specifically future physicians, with the tools to use in their interactions with populations with distinctly different cultures. Understanding how to navigate different languages without deterring from productive medical visits and having basic knowledge on how to encourage healthy lifestyle

changes that are traditional in various cultures could be the first few steps. The overall emphasis of taking steps to understand a refugee's background, which can be easily included in a community health center's framework, should increase across the board. Ensuring that all steps have been taken and considered to create the most comfortable setting for refugee patients is a large aspect of cultural competency to be employed. In making these proposed changes, after extensive research on their efficacies, Bhutanese refugees can experience a decrease in poor health care outcomes determined by low health literacy and health activation.

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Author Biography

Priyanka was born in Monroe, Louisiana and shortly after, moved to Texas where she grew up. While attending Carroll Senior High School in Southlake, TX, Priyanka started her work with the Bhutanese refugee population in Dallas and Fort Worth. Each year since, she has volunteered time to conducting free health fairs, mammogram screenings, nutritional information sessions, and more programs catered to this population. Her passion towards enacting meaningful change in healthcare delivery for these refugees has only grown over time. After graduating high school, Priyanka attended the University of Texas at Austin as a part of the Health Science Scholars program in the College of Natural Sciences. Majoring in Biology, minoring in Health Communication, and pursuing a certificate in Business of Healthcare have given her a breadth of courses to take regarding the intersection of health and social factors, sparking her interest in health literacy and activation. Outside of coursework, Priyanka was President of She's the First UT Chapter, a counselor at Camp Kesem, a member of Osier Laboratory at Dell Medical School, and a Texas Sweetheart active member. In her free time, Priyanka loves hiking, playing board games, having picnics at Zilker park, and discovering new food spots around Austin with her friends.

Priyanka's next steps after graduating in May of 2021 include applying to medical schools and spending her gap year working as a medical assistant at a dermatology clinic. She hopes to continue advocating for minority populations suffering from health disparities in the U.S. and as an aspiring physician, she would like to mold the state of medicine into a more inviting and sensitive space to those facing circumstantial barriers to health.