Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:	
Navit Robkin	4/10/12

Mental Health and Suicide Among Women in Jumla, Nepal: A Qualitative Exploration

By

Navit Robkin MPH

Hubert Department of Global Health

	[Chair's signature]
Dabney Evans	
Committee Chair	
	[Member's signature]
Brandon Kohrt	
Committee Member	

Mental Health and Suicide Among Women in Jumla, Nepal: A Qualitative Exploration

By

Navit Robkin

B.A. Washington University in St. Louis 2005

Dabney Evans, PhD, MPH

An abstract of
a thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in the Hubert Department of Global Health
2012

Abstract

Mental Health and Suicide Among Women in Jumla, Nepal: A Qualitative Exploration By Navit Robkin

Despite an increased awareness of the growing burden of disease attributable to mental health issues, mental health and suicide remain low priorities in most low and middle-income countries (LMIC). A recent study from Nepal found that suicide was the leading cause of death among women of childbearing age. While researchers have demonstrated a strong relationship between mental health disorders and suicide in upper income countries, this association is weaker in LMIC, where many suggest cultural stressors play a more significant role in suicidal behavior. The current study explored how different cultural stressors affect mental health and lead to suicidal ideation/behavior among women in Nepal. Women were selected to participate in in-depth interviews based on previous participation in a related mental health study. They were asked about their general mental well being, daily lives, and attitudes toward suicide. Six dominant themes emerged as most relevant to the women's lives and views on suicide: 1) mental health issues (including depression/sadness and anxiety/worry); 2) economics; 3) education; 4) domestic issues (including domestic strife and alcohol abuse and love vs. arranged/captured marriage); 5) differential gender impacts (including personal attitudes and community response toward child gender and male vs. female work balance); and 6) suicide (including reasons for committing suicide, impulsivity in suicide, speculation of family involvement in suicide, and reactions toward suicide). This study suggests that cultural stressors negatively impact female mental health and eventual suicidal ideation and/or decision to attempt suicide. These cultural stressors are related to differential gender impacts of modernization that lead to repression of women and shifts in male roles in society. The study also suggests that most suicides are committed impulsively. without true intention to die. Interventions for mental health issues and suicide in Nepal should address cultural stressors such as domestic violence, alcoholism, and women's access to income and education. Particular emphasis should be placed on incorporating men into intervention planning and dissemination. Additionally, findings about the role of impulsive behavior in suicide suggest that those with suicidal ideation would best be treated with Dialectical Behavior Therapy, which uses techniques that would be familiar to the local community.

Mental Health and Suicide Among Women in Jumla, Nepal: A Qualitative Exploration

By

Navit Robkin

B.A. Washington University in St. Louis 2005

Dabney Evans, PhD, MPH

A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University in partial fulfillment of the requirements for the degree of Master of Public Health in the Hubert Department of Global Health 2012

Acknowledgements

This thesis would not have been possible without the help of several individuals who gave of their time and expertise to guide, advise, and encourage me through the process.

I owe my deepest gratitude to my supervisor, Brandon Kohrt. His unceasing support, mentorship, and faith in me from the initial to the final levels of the project enabled me to develop an understanding of the subject and bring the thesis to fruition. I am heartily thankful to my thesis advisor, Dabney Evans, whose encouragement and guidance directed me through the thesis process. Her academic and personal support made this often grueling undertaking a pleasure.

I am indebted to my many research colleagues who supported me in the field: Anita Patel, Nanda Raj Acharya, Silu Shrestha, and Sujen Man. Without their assistance, this research project would not have been possible. Finally, I want to thank my family. My husband Ori was endlessly patient and encouraging. He pushed me to explore new aspects of the research and had more faith in me than I could have had for myself. And finally I am indebted (emotionally and fiscally) to my parents, Judy and Shai. Their guidance, through explicit encouragement and modeling, allowed me to explore the world of social justice and globalism.

Table of Contents

1. Chapter 1: Introduction	1
Background on Nepal	4
Background on the People's War in Nepal	6
2. Chapter 2: Comprehensive Review of the Literature	8
Mental Health and Suicide in Lower and Middle Income Countries	12
Mental Health and Suicide in Asia	15
Mental Health and Suicide in Nepal	25
Current Study	31
3. Chapter 3: Methods	33
2000 Study	33
2007 Study	33
Current Study (2011)	34
4. Chapter 4: Results	41
Case Studies of Suicidal Ideation.	41
In-Depth Interviews	46
Mental Health Issues	48
Depression/sadness	48
Anxiety/worry	51
Economics	53
Education	55
Domestic Issues	58
Domestic strife and alcohol abuse	58

Love vs. arranged/captured marriages	62
Differential Gender Impact.	66
Personal attitudes & community response toward child	gender66
Male vs. female work balance	69
Suicide	72
Reasons for committing suicide	73
Impulsivity in suicide	77
Speculation of family involvement in suicide	79
Reactions toward suicide	80
5. Chapter 4: Discussion/Conclusion/Recommendations	82
Discussion	82
Strengths/Limitations.	94
Conclusion.	94
Implications/Recommendations	95
6. References	98
7. Appendix	
Acronyms	116
Glossary	117
8. Tables and Figures	
Figure 1. Map of Nepal.	5
Table 1. Main and sub-themes identified in in-depth interviews	46
Table 2. Characteristics of Women in Case Studies/In-depth Interviews	47
Figure 2. The effects of societal factors on female mental health and suicion	le in Jumla,

Nepal92

Chapter 1: Introduction

The global burden of disease attributable to neuropsychiatric disorders has risen dramatically in the past decade and is expected to continue to rise, with the greatest increases expected in developing countries (Patel, Saraceno, & Kleinman, 2006).

Neuropsychiatric disorders account for 1.2 million deaths every year (Mathers & Loncar, 2006). However, suicidal behavior is not included under neuropsychiatric disorders, and therefore, the actual burden of disease ascribed to mental health conditions may be greater than documented. Yearly, more than one million people commit suicide (Peden, McGee, & Krug, 2002), with most suicides occurring in lower and middle-income countries (LMIC) (Patel, 2007).

The impact of mental health conditions, medically, economically, and socially, is immense. Mental health conditions can greatly affect the physical health of an individual as well as those around them. The physical health impacts of a mental health disorder are of particular severity in resource poor settings, where clinicians and funding for mental health care are sparse. Economically, mental health conditions extract a great expense to society, costing individuals and governments trillions of dollars in care and loss of productivity (Bloom et al., 2011). Socially, mental health conditions greatly impact quality of life for the affected individual and family/friends.

In general, women are more likely to suffer from mental health disorders compared to men (Shidhaye & Patel, 2010). In fact, studies have shown that the link between mental health disorders and suicide may be stronger in females than in males (Qin, Agerbo, Westergard-Nielsen, Eriksson, & Mortensen, 2000). Additionally, while more men commit suicide in upper income countries, in LMIC, female suicides often

outnumber male suicides (Mayer & Ziaian, 2002; World Health Organization, 1999). Theories suggest this may be due to gender inequality, class disparities, poverty, and domestic issues.

The mental health and suicide situation in Asia is of particular gravity. Suicide in Asia accounts for approximately 60% of the world's suicides (Beautrais, 2006). Although some studies have found a link between mental health conditions and suicide in Asia, this link is thought to be weaker in the region than in other parts of the world. Rather, cultural factors (such as residence, marriage, and socio-economic status) and stressors (such as economics and patriarchal society) are hypothesized to play a larger role in suicidal behavior in Asia (Vijayakumar & Rajkumar, 1999). It is theorized that the impact of modernization on traditional societies may be leading to the increase in mental health disorders and suicidal behaviors. Modernization may lead to instability within the society and change traditional roles within the family. This has been found to be especially relevant in rural areas, which often do not benefit from the advantageous aspects of economic growth. Women may suffer more, with their traditional roles remaining firm in the face of a changing society (Pradhan, Poudel, Thomas, & Barnett, 2010). Additionally, there has been a dramatic increase in alcohol abuse, and subsequent domestic violence, among men as a result of modernization in Asia (Patel, 2007).

The mental health situation in Nepal is reflective of the greater mental health state in Asia and other LMIC. Nepal experienced a civil war from 2001-2006, affecting thousands of individuals and having a sizeable mental health toll. The alarming mental health situation in Nepal, especially among women, was highlighted by findings from the Nepal Maternal Mortality and Morbidity (MMM) Survey (2008/2009) which found that

suicide was the leading cause of death amongst women of reproductive age (15-49) in Nepal. Previous studies have also found a high burden of anxiety and depression among Nepali women.

To ensure the complete health of an individual and of a community, it is vital to address mental health issues and the reasons for the increases in suicidal behavior. This study explores how different cultural factors and stressors affect mental health and subsequently lead to suicidal behavior and ideation among women. This study has wide-reaching policy, clinical, and public health practice applications. By gaining a better understanding of how women are affected by their environments, local and state governments can begin to address issues of structural inequality that may affect female mental health. Through a deeper understanding of women's situations, researchers and clinicians can begin to address the growing mental health needs in LMIC among women and reduce rising suicide rates. Interventions can then be constructed that address the particular situations of women in LMIC and confront deep seeded cultural issues, which lead to mental health problems and suicidal behavior. This can drastically shift the focus from an individual, medicalized approach to mental health to a public mental health approach which views the individual as part of a larger ecological system.

No research has yet to consider why there has been an increase in suicides among women in Nepal. Without such knowledge, clinicians and researchers are unable to move forward with addressing the mental health challenges in Nepal. While some studies have looked at cultural stressors that impact female mental health in Nepal, this research needs to be reevaluated in light of the recent findings from the Nepal MMM 2008/2009. By examining the impacts of cultural factors and stressors on women and exploring the

attitudes and beliefs of women about suicide, one can begin to understand how women in LMIC are emotionally affected by their environments. Through a more complex understanding, culturally appropriate and relevant interventions can be designed that address the situation head on. Filling in this knowledge gap and using this knowledge to address the needs of women in LMIC can drastically improve the situation of women in LMIC.

This study attempts to fill in the knowledge gap through a qualitative exploration of the roles of cultural factors on female mental health and suicide in Nepal. The goals of the study were to consider; a) how the roles of different sociocultural factors (such as marital relationships, social supports, and female roles in society) effect women's mental health, b) women's beliefs and attitudes about suicide, and c) contributing factors toward committing suicide. The results from these three research goals provide a detailed depiction of the situation for women in Nepal and can shed light on the situation of women in other LMIC.

Background on Nepal

Nepal is a South Asian country located between China and India (see figure 1). The southern region of the country is primarily flat river plains, with the central region containing hilly areas and the northern region made up of the Himalayan mountains. The highest point within the country is Mount Everest, standing at 8,850 meters. In the summer monsoon season, the country is often plagued by flooding, landslides, and severe thunderstorms, hindering development and transportation throughout the region.

Figure 1. Map of Nepal



Source: (United Nations Development Programme, 2010)

Nepal's population of approximately 29 million (as of July 2011) (Central Intelligence Agency, 2011) falls mostly between the ages of 15-64 (61.1% of the population), with a median age of 21.6 years. As of 2011, the birth rate is 22.17 births per 1,000 population (Central Intelligence Agency, 2011). Life expectancy at birth is 68.8 years, putting it 157th in the world in terms of life expectancy (United Nations Development Programme, 2011c). The mean years of schooling of adults is 3.2 years, with a 60.3% adult literacy rate.

Nepal ranked 157 out of 169 countries on the human development index (HDI) (United Nations Development Programme, 2011b) and almost a fourth of the population of Nepal lives below the poverty line, placing the country amongst the poorest and least

developed countries in the world (Central Intelligence Agency, 2011). While Nepal's HDI has risen over the past thirty years, it still falls below the South Asian regional HDI average.

Additionally, the Gender Inequality Index for Nepal in 2011 was 0.558, placing it 157th out of 187 countries on a composite measure reflecting inequality in achievements between men and women in reproductive health, empowerments, and the labor market (United Nations Development Programme, 2011a). Although research has shown that Nepal has made strides in gender development in recent years, gender disparities still exist, particularly in the realms of education, health, and economic assets (United Nations Population Fund, 2007). In general, women in rural, mountainous regions of Nepal fair worse on gender equality indicators than do women from urban plain regions of Nepal. Additionally, women from the mid-western region of Nepal fair worse than women in other regions of the country (United Nations Population Fund, 2007).

Background on the People's War in Nepal

In 1996, the "People's War" between the Communist Party of Nepal (Maoists) and government security forces began. The goal of the Maoists was to overthrow the Nepali monarchy and establish the "People's Republic of Nepal," with an emphasis on rights for the underserved and peripheral populations of the country (i.e. poor communities, women and ethnic minorities) (Tol et al., 2010). In the early years of the war, violence was primarily limited to targeting police stations and state-run businesses (R. A. Koenig & Kohrt, 2009). However, in 2001, the war took a more violent turn with the massacre of the royal family, thereby instating a new king, King Gyanendra, into

power. Wherein before the massacre, fighting primarily took place between police forces and Maoists, after King Gyanendra's ordination, the Royal Nepal Army began to fight against the Maoists.

In 2006, the government of Nepal and the Maoists signed a comprehensive peace agreement, ending the war and incorporating the Maoists into the government. By the end of the war in 2006, approximately 15,000 people had been killed and an estimated 100,0000 to 150,000 people were internally displaced. During the war, there was widespread use of torture, recruitment of child soldiers, violence, and destruction of infrastructure (Singh, 2004, 2005; Singh, Sharma, Mills, Poudel, & Jimba, 2007; Tol et al., 2007).

The following chapters will present a comprehensive review of the literature on mental health and suicide in LMIC as well as in Nepal specifically, the methodology of the current study, results from the study, and finally, a discussion of the results as well as the public health implications of the findings. With thorough knowledge of the background behind the mental health situation in Nepal and an analysis of the findings from the current study, one can begin to recognize how cultural stressors may affect a woman and lead her to suicidal ideation and behaviors. Equipped with this knowledge, suicide interventions can be designed that not only aid women in Nepal, but help women throughout LMIC.

Chapter 2: Comprehensive Review of the Literature

Until the early 1990's, mental health was not widely acknowledged or accepted as a field within general public health. However, the World Development Report published in 2003 (World Bank, 1993) ushered mental health into the public health field with a new level of importance. The subsequent Global Burden of Disease report, originally published in 1990 and revised in 2004 (World Health Organization, 2008a), further highlighted the importance of mental health within the public health domain. These two seminal reports underlined the impact of mental health disorders on society by comparing health conditions based on global burden of disease using disability-adjusted life years (DALY). The DALY scale calculates the impact of diseases on a unified scale based on "years lost due to premature mortality and years of life lost due to time lived in states of less than full health" (World Health Organization, 2012). The side-by-side comparison of mental health disorders with other health issues exposed the huge burden of disease imposed by mental health disorders throughout the world (Saraceno et al., 2007).

In 2000, the global burden of disease attributable to mental, neurological, and substance use disorders was 12.3%. It is expected to rise to 14.7% by 2020, with even greater increases expected in developing countries (Patel, et al., 2006). These projections may be a gross underestimation of the total burden of disease caused by neuropsychiatric disorders, since death by suicide is categorized as "intentional injury" rather than ascribed to a mental health condition (Prince et al., 2007).

While it took years for mental health to gain acceptance within the public health community, research has consistently shown that mental health is closely linked with other public health issues. Stress and anxiety have been shown to be related to increased

rates of myocardial infarction, with subsequent increases in depression (Penninx et al., 2001). Particularly in resource-poor settings, maternal depression has been associated with poor prenatal care, poor nutrition for the children, an increased risk of child physical health problems, incomplete immunizations, and poor physical health of the mother (Patel, 2007; World Health Organization, 2011). The effect of having a mother with mental health problems extends throughout development, affecting the child physically (through impaired motor development), emotionally (through poor mother-infant attachment), and cognitively (through poor nutrition and child care) (Prince, et al., 2007). In addition, alcohol abuse is a major risk factor for numerous infectious diseases, such as HIV/AIDS and other sexually transmitted diseases (Catalan, 1999). Finally, according to the World Health Organization (WHO), neuropsychiatric disorders account for 1.2 million deaths every year and 1.4% of all years-of-life lost (Mathers & Loncar, 2006).

Differences in socio-economic status (SES) and gender have been shown to lead to differences in mental health disorders. The following demographic and socio-economic factors have been shown to place someone at greater risk of suffering from a mental health disorder: inhabiting a lower socio-economic group, low educational attainment, amassment of debt, or facing acute economic difficulties (Patel, 2007; Shidhaye & Patel, 2010). Males are more likely than females to engage in self-destructive behaviors, such as substance abuse (Li, Page, Martin, & Taylor, 2011) and women are one and half to two times more likely to suffer from common mental disorders (CMDs) compared to men (Shidhaye & Patel, 2010). The Global Burden of Disease Report 2004 found that the burden of depression was 50% higher for females than for males, placing depression as the leading cause of disease burden for women of reproductive age (World

Health Organization, 2008a). Finally, studies have shown that the link between mental health disorders and suicide may be stronger in females than in males (Qin, et al., 2000).

The global suicide rate has risen by 60% in the last 45 years (Pradhan, et al., 2010) and the WHO projects that over the coming decades, suicide will become an even greater contributor to the global burden of disease (Mathers & Loncar, 2006). Currently, over one million people commit suicide each year (Peden, et al., 2002), taking more lives than homicides and wars combined (World Health Organization, 2003). Most individuals commit suicide in their prime productive years, between the ages of 15 and 44 (Prince, et al., 2007), reflecting a high cost to society. Over the next 20 years, neuropsychiatric disorders are expected to result in a loss of \$16.1 trillion US dollars, with "dramatic impacts on productivity and quality of life" (Bloom, et al., 2011).

Research shows that those who attempt suicide once and fail are at an increased risk of subsequent completed suicide (Pradhan, et al., 2010). In addition to completed suicides, there are approximately 10-20 million attempted suicides and 50-120 million people who are affected by the suicide or attempted suicide of a close relative or friend (World Health Organization, 2008b). Although suicide is not categorized with other neuropsychiatric disorders, the association between suicide and mental health disorders has been well established, with over 90% of suicides related to a mental health disorder (Lamichhane, 2010). A systematic review of psychological autopsies conducted by Cavinagh et al (2003) found a median mental disorder prevalence of 91% for suicide completers, with depression and schizophrenia identified as important suicidal risk factors (Cavanagh, Carson, Sharpe, & Lawrie, 2003).

Therefore, to ensure the complete health of an individual and of a community, it is vital to consider mental health within a public health framework. WHO posits that indeed, there can be "no health without mental health" (Prince, et al., 2007). However, despite an increased awareness in the growing burden of disease attributable to mental health diseases, mental health remains a low priority in most low and middle-income countries (LMIC) (Prince, et al., 2007). This gap is critical to address because LMIC disproportionally experience turmoil and political violence, which may result in a high burden of psychosocial and mental health difficulties (Mollica et al., 2004). Studies have found post-traumatic stress disorder (PTSD) rates of up to 50% among children (Sack et al., 1993) and 37% among adults effected by political turmoil (Mollica et al., 1993) and rates of depression of close to 70% among children (Savin, Sack, Clarke, Meas, & Richart, 1996) and adults (Mollica, et al., 1993) affected by political turmoil.

Nepal, located in southern Asia, is one country whose mental health needs have long been under-prioritized and underfunded. Nepal experienced a civil war from 2001-2006, leaving thousands killed and over 100,000 displaced. As in other countries that experienced conflict, the mental health impacts of the war may be immense. Yet, few resources have been dedicated to researching the mental health effects of the war or to offering mental health services to those in need.

The Nepal Maternal Mortality and Morbidity study conducted in 2008/2009 drew attention to the lack of resources directed to mental health and the profound repercussions that this can have on a society. The study found that suicide was the leading cause of death amongst women of reproductive age (15-49) in Nepal. While in 1998 suicide accounted for 10% for all deaths of women of reproductive age, in 2008/2009 16% of all

deaths among women of reproductive age were attributable to suicide. A closer look at mental health and suicide in LMIC and Asia in particular provides a foundation on which to approach the current state of mental health in Nepal.

Mental Health and Suicide in Lower and Middle Income Countries

Eighty percent of the global population lives in LMIC. However, only 6% of the published mental health research has been conducted in LMIC (Patel, 2007). Based on research conducted by Vikram Patel (2007), neuropsychiatric disorders, including depressive disorders, schizophrenia, epilepsy, alcohol and drug use disorders, and anxiety disorders (list not exhaustive), account for 9.8% of the total burden of disease in LMIC (Patel, 2007). If self-inflicted injury is added to the category of "neuropsychiatric disorders", the proportion increases to 11.1%.

An estimated 86% of worldwide suicides come from LMIC (Prince, et al., 2007), accounting for 1.5% of all deaths in LMIC (Patel, 2007). Although suicide is a major public health problem in LMIC, it has attracted relatively little epidemiological investigation and existent studies may vastly underestimate the degree to which suicide is a problem (Vijayakumar, Nagaraj, Pirkis, & Whiteford, 2005). Many LMIC do not have a reliable and thorough surveillance and mortality categorization system in place (Bertolote, Fleischmann, Butchart, & Besbelli, 2006; World Health Organization, 2008b) and cultural attitudes toward suicide and fear about prosecution may lead friends and family members of an individual who completed suicide to misrepresent the cause of death (Prasad et al., 2006).

Pesticide Ingestion as a Means of Suicide.

A developing trend worldwide is the use of pesticides to commit suicide.

According to the WHO, the use of pesticides to commit suicide is now the most common method of suicide worldwide (Bertolote, et al., 2006), with an estimated one third of the world's suicides caused by pesticide ingestion (Gunnell, et al., 2007). This estimate may be lower than the reality because it is highly influenced by inaccurate reporting, especially out of India.

While pesticides are gaining momentum as a suicide method of choice worldwide, they are gaining particular traction in LMIC compared to upper income countries (Ajdacic-Gross et al., 2008). For instance, in upper income countries, people turn to relatively non-toxic drugs – such as analgesics, tranquillizers, and antidepressants – in order to intentionally overdose. Because of the low toxicity of these drugs, case fatality rates have been found to be around 0.5% (Gunnell, Do, & Murray, 2004). In contrast, pesticides, a method of overdose common in LMIC, are highly lethal and widely available, resulting in fatality rates between 10-20% (Eddleston, 2000).

The higher case fatality resulting from the ingestion of pesticides is striking given that the majority of individuals who attempt suicide do not intend to die (Gunnell & Eddleston, 2003). Studies have found that many suicides by pesticide ingestion in LMIC are related to impulsivity, stress, and misinformation (Jacob, 2008). For instance, studies from Sri Lanka and Bangladesh have shown that some individuals who attempted suicide by pesticide ingestion do not know the lethality of such substances. These studies showed that some women had the "intention to shock and were unaware that such actions might

cause serious and irreversible damage" (Pradhan, et al., 2010). However, they did not intend to die.

Suicidal impulses are thought to be "short-lived" and preventable if the means of self-harm are not easily available (Gunnell & Eddleston, 2003). For instance, pesticide fatalities have been found to be common among individuals who commit "impulsive acts of self-harm" with "low intent to die" (Gunnell, et al., 2007). Typically, impulsive suicides result from rash reactions to serious negative life events, such as financial losses, relationship difficulties, and interpersonal conflicts (Law & Liu, 2008). The ubiquitous availability of pesticides in LMIC may therefore be influencing regional suicide patterns (World Health Organization, 2008b).

Gender and Suicide.

The gender demographics of suicide in LMIC are distinct from gender demographics of suicides in upper income countries. Whereas suicides amongst men greatly outnumber suicides amongst women in upper income countries, the suicide rate in LMIC is often similar between genders, with female suicides many times outnumbering male suicides (Mayer & Ziaian, 2002; World Health Organization, 1999). There are many theories for why women may commit suicide at equal or higher rates than men in LMIC. One popular theory is that female mental health in LMIC is greatly effected by "the perceived social and economic burden of being female (associated with factors like dowry expectations and reduced earning capacity)" (Vijayakumar, et al., 2005). Others postulate that women in LMIC are highly affected by difficult romantic relationships, resulting from restricted marriage choice and arranged and captured marriages (Lee &

Klienman, 2000). Sometimes women chose suicide when prevented from marrying the man of their choice (Vijayakumar & Thilothammal, 1993).

Surprisingly, several studies have found that high levels of inequality within a country were associated with low overall suicide rates among both men and women. While these findings seem counterintuitive, they may actually explain the high rates of suicide found in some LMIC. Low levels in inequality in LMIC may just equate to mass poverty, with high levels of inequality equating to significant class disparities. On the other hand, in many LMIC, high inequality is often associated with more traditional societies, where poverty, minimization of individual needs, and lack of equality may be internalized (Vijayakumar, et al., 2005), and therefore, individuals may not feel the impulse to attempt suicide.

Mental Health and Suicide in Asia

There are over 300,000 suicide related deaths each year in Asia, accounting for approximately 60% of the world's suicides (Beautrais, 2006). For instance, the suicide rate in China is two to three times higher than the global average (Law & Liu, 2008). A study from south India found that suicide accounted for a quarter of all deaths in boys and up to three-quarters of all deaths in young women (Aaron et al., 2004).

A Chinese psychological autopsy study found that 30% of individuals who died from suicide had high depressive symptom scores (the single most important factor associated with suicide) (Phillips et al., 2002). Yet, the percentage of individuals who completed suicide in China with high depressive scores is lower than found in Europe and the United States. This leads some researchers to postulate that cultural stressors,

rather than depression or other mental health disorders, play a greater role in suicidal risk in Asian countries than they do in Europe and the United States of America (Vijayakumar, et al., 2005).

Peto, 2007; Pradhan, et al., 2010). Studies conducted in Sri Lanka (Jeyaratnam, 1985), found pesticide related suicide to be one of the leading methods of suicide. Pesticide related suicides have been found to be especially concentrated in rural areas of Asia, including rural India and China (Joseph et al., 2003; Phillips, Li, & Zhang, 2002). However, the actual rates of pesticide related suicide are unknown due to underreporting, particularly out of India (Gunnell, et al., 2007).

Suicide is illegal in India, increasing the rate of under-reporting (Gajalakshmi & Peto, 2007; World Health Organization, 2008b). Studies conducted in south India have found that rates of suicide were three to ten times greater than official estimates (Aaron, et al., 2004; Gunnell, et al., 2007; Prasad, et al., 2006) and only about 10 percent of deaths were medically certified (Bhat, 1991). Many deaths, particularly in rural areas, are not registered at all partly because of an inefficient registration system and partly because families fear the social and legal consequences associated with suicide.

Suicide Risk Factors.

Risk factors that have been shown to be associated with suicide in Asia include location of residence, gender, age and socio-economic status (SES). The literature points to rurality as a possible risk factor for suicide in Asian countries. For instance, suicide rates in rural areas of China are three times higher than those rates in urban areas (World

Health Organization, 2008b). Similarly, the suicide rate in rural farming areas in Sri Lanka is more than double that of the country's capital (World Health Organization, 2008b). Comparable findings have come from India, where the suicide rate in rural areas is three times higher than the overall national suicide rate (National Crime Records Bureau, 2000). Many theorists attribute the increased suicide rates in rural areas of Asia to greater access to pesticides. In addition to the high lethality of this method, pesticides may result in death for individuals in rural areas due to lack of effective resuscitation services (Eddleston & Phillips, 2004). Studies have also found that there is a higher risk of suicide in those from lower socio-economic groups compared to those in higher socio-economic groups (Li, et al., 2011).

Age has also been noted as a risk factor for suicide in Asia. High rates of suicide among young adults have been attributed to academic pressures and shame associated with failure (Law & Liu, 2008; World Health Organization, 2008b). Others point to rapid modernization in the developing world as affecting younger people greater, and more selectively, than older individuals. Without mature coping skills, these young individuals crumble in the face of pressures "especially with fewer role models and traditions upon which to rely" (Law & Liu, 2008). All of these potential causes of suicide have been found to be especially germane to young, rural females (Law & Liu, 2008). A study from China found that among individuals younger the 60, rural female suicide rates exceeded rural male rates by an average of 66% (Law & Liu, 2008).

High rates of suicide amongst women, compared to men, have been noted throughout Asia (Gajalakshmi & Peto, 2007). For instance, in China, women exhibited higher lifetime prevalence for suicidal ideation than males (Lee et al., 2007) and women

attempt suicide at a 2.5:1 rate compared to men (Yang et al., 2005). Another study from China found that in individuals younger the 60, female rates exceeded male rates by an average of 26% (Lee, et al., 2007).

Similar to suicides in other LMIC, suicides amongst women in Asia have commonly been attributed to the pervasive patriarchal society that causes women economic and social difficulties (Lee & Klienman, 2000). In these societies, marital status plays a much more important role than it does elsewhere. Studies conducted in both India and Pakistan found a higher incidence of suicide among married compared to single or divorced women (Khan, 2002). Associated factors include early marriage and motherhood, lack of marital choice, infertility or absence of male offspring, and economic dependence (Ali, Israr, Ali, & Janjua, 2009; Kohrt et al., 2009).

Gender and Inequality in Asia.

In recent years, there has been growing interest and concern over the role of oppressive attitudes and discriminatory behaviors towards women in LMIC as major contributors to mental health disorders and suicide. For instance, gender inequality has been shown to contribute to women's risk for depression in LMIC (Ali, et al., 2009). In many patriarchal societies found throughout Asia, women inhabit a second class status, with limited opportunities for independence, upward mobility, employment, and self-worth and self-image unrelated to a male relative or husband (Niaz & Hassan, 2006). Accordingly, they experience financial restrictions and emotional dependence, limiting their life choices. These factors, along with a multitude of other family, social, and work pressures have had a definite impact on women's mental health in Asia. It is vital to be

aware of the far-reaching consequences of violence against women, beyond the immediate personal ramifications. Violence against women is "likely to constrain poverty reduction efforts by reducing women's participation in productive employment... [It also] undermines efforts to improve women's access to education, with violence and the fear of violence contributing to lower school enrollment for girls" (Garcia-Moreno & Watts, 2011).

Women's role in Asian traditional societies is extensively discussed throughout the literature on female mental health. Of particular salience is the customary belief that "girls are born to be fed throughout their lives" and "boys are born to earn and support the whole family" (Niaz & Hassan, 2006). While the birth of boys is greatly celebrated, the birth of girls is often unwelcome (Niaz & Hassan, 2006). In some rural areas of China and India, girl children may even become the victims of infanticide due to their gender (Law & Liu, 2008; Niaz & Hassan, 2006). The mental health effects of this type of gender discrimination are far reaching.

Gender discrimination in Asia has resulted in staggering levels of violence against women. For instance, a study conducted in India found that almost half of all women reported physical violence (Jejeebhoy, 1998). Ample evidence shows an association between domestic violence and mental health issues amongst women (Fischbach & Herbert, 1997). A study from Pakistan found that 34% of women reported being physically abused and of these women, 72% had anxiety or depression (Ali, et al., 2009). Findings from 10 studies published in a WHO report revealed that women who had ever experienced physical or sexual partner violence, or both, reported significantly higher levels of emotional distress and were more likely to have thoughts of suicide or attempt

suicide than women who had never experienced domestic violence (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005).

One of the most frequent factors cited for women committing suicide is conflict with husbands and in-laws. A study conducted in Pakistan emphasized that women who experienced domestic violence from husbands and in-laws had no form of escape, as patriarchal societies view these acts as generally acceptable (Khan, 1998). Therefore, their only form of perceived escape might have been suicide. The social and familial pressures to stay married in an arranged marriage, even in an abusive relationship, appear to increase the risk of depression and suicide in women (Gururaj, Isaac, Isaac, Subbakrishna, & Ranjani, 2004). One study from Pakistan found a positive association between depression and arranged marriage and younger age at marriage (Ali, et al., 2009). Another type of suicide taking place in Asia – deemed "revenge suicide" - occurs when an abused women who is not protected by her support group commits suicide with the intention that others will "take vengeance on the abusive husband" (Khan, 2002).

In a multi-country study looking at domestic violence, there were noticeable differences in the magnitude of violence perpetrated in traditional vs. modernizing societies. There was a higher proportion of violence that quantified as "severe" in more traditional, rural settings that in city settings (Garcia-Moreno, Jansen, Ellsberg, & Watts, 2006). In recent years, however, there appears to be a trend toward modernization in rural areas, leading to mental health strains.

The increasing focus on gender inequality has led to a shift in research priorities in the realm of women's mental health, from a medicalized perspective emphasizing the role of mental illness history, to a societal focus, emphasizing the role of social and

economic stressors on depression and suicidal risk amongst women in LMIC (Maselko & Patel, 2007). For instance, several studies have reported that mental illness is rarely reported as a cause of suicide in Asia. Rather interpersonal problems and domestic violence are more frequently cited as the causes of suicide (Ahmed & Zuberi, 1981; Lee, et al., 2007). A study conducted by Vijaykumar and Rajkumar (1999) actually found evidence to the contrary, citing that 88% of suicides in their case-control study had a lifetime prevalence of a DSM-III-R Axis I disorder in 88% cases (Vijayakumar & Rajkumar, 1999).

A community cohort study conducted in India found that both mental health disorders and SES factors contribute to suicidal risk amongst women, with SES factors serving as a stronger predictor of suicide than mental health disorders. Suicidal risk factors included a baseline diagnosis of mental health disorders, hunger in previous 3 months, current family debt, young age at marriage, and experience of violence and physical illness (Maselko & Patel, 2007).

Modernization in Asia.

The associations between mental health/suicide and modernization have been minimally explored in Asia. Many researchers and theorists assume that development and modernization have a negative effect on mental health. They claim that while modernization has been occurring in the West for hundreds of years, the sudden post-colonial development in LMIC has led to accelerated exposure of individuals to foreign values (Pradhan, et al., 2010). This exposure to foreign values and ways of life may have

"serious implications for individual wellbeing and increases suicidal vulnerability" (Pradhan, et al., 2010).

Vikram Patel (2006) explained that although "developing countries are witnessing social and economic changes at a pace that is unparalleled in history...not everyone has benefited from these changes" (Patel, et al., 2006). Modernization brings along with it economic developments, leading to migration from rural to urban areas and a breakdown of traditional societies. Social networks are often weakened by the dispersion of skilled laborers and household economies are drastically altered. Additionally, modernizing economies are increasingly reliant on international trade, reducing the cost of consumer goods, leading to unemployment of small-scale entrepreneurs and farmers (Patel, et al., 2006), and heavily impacting rural communities.

These rapid economic and social changes resulting from modernization can be linked to increases in suicides in both the developed and the developing worlds. For instance, despite economic growth and prosperity, sudden growth and the resulting instability can increase vulnerability among individuals. This was noted in Russia during the construction of socialism and during the development of capitalism in Europe in the 1800's (Pradhan, et al., 2010). Patel (2007) noted that "the rising tide of suicides and premature mortality in some countries, as seen in the alcohol-related deaths of men in Eastern Europe, the suicides of farmers and weavers in India... and the suicide of young women in rural areas in China, can be at least partly linked to rapid economic and social change" (Patel, 2007).

As noted earlier, individuals who live in rural areas have been found to be at greater risk of committing suicide than individuals who live in urban areas. This may be

explained by the impact of economic development on migration patterns. Individuals move from rural areas to urban centers in search of work, leaving behind less mobile individuals who may be more vulnerable to mental health issues. This migration pattern has been associated with an increased risk of suicide of those remaining in the rural areas, perhaps due to poverty, dilution of social support, isolation, and as mentioned previously, access to pesticides (Vijayakumar et al., 2008; World Health Organization, 2008b). Increased economic polarization between rural and urban areas often comes alongside economic development, as urban areas reap the benefits of development while rural areas are left behind (World Health Organization, 2008b). In contrast to studies that show poorer mental health due to modernization among rural inhabitants, one study found higher levels of psychiatric morbidity in rapidly developing urban areas in western Nepal (Upadhyaya & Pol, 1998). The authors suggest this may be due to weak social structures in the urban environment.

While there is a dearth of research exploring the relationship between modernization and mental health/suicide throughout Asia, some limited research has been conducted in China, which may serve as an example for the region. A common explanation for the high suicide rate found in China is that modernization and rapid economic change have had detrimental effects on society and infrastructure, leading to increased suicide rates. Many factors related to modernization have been implicated in the related high suicide rate, including the "wholesale failure of state-owned companies, massive urbanization by migrant workers, the related breakage and uprooting of rural families, deterioration of family relational networks, intense competition for economic survival, surging divorce rates, resurgence of substance addictions and abuses,

destructive forces related to gambling and prostitution, marketization of the health care system, sky-rocketing health care costs, and an increasing gap between the rich and poor" (Law & Liu, 2008). While these issues may not be as pervasive in other Asian countries, many are emerging as relevant matters throughout the region, particularly in Nepal.

Although working practices have changed rapidly with modernization and the expansion of urban areas, more "rigid social and familial practices" are not changing at the same pace (Pradhan, et al., 2010). For instance, women's traditional domestic roles have not evolved at the same pace as the male workforce and economic development. A study conducted in Taiwan found that while an increasing proportion of Taiwanese women work outside of the home, there has been little change in the gender-based expectations of domestic responsibilities, including childcare (Yeh, Xirasagar, Liu, Li, & Lin, 2008). In traditional societies experiencing transition, women are expected to preserve family and religious traditions in the face of modernization and increased expectations to fulfill roles.

For women who work outside of the home, the combined stresses of managing their household responsibilities with their employment responsibilities may impose considerable psychological and time management stress. For those who remain in the home, the loss of their husband's contribution to household duties may create more stress, which "may interact with cyclical, hormonal mood changes to cause greater suicide propensity relative to the never married and widowed" (Yeh, et al., 2008).

A dramatic increase in alcohol abuse among men has been another unfortunate byproduct of modernization in Asia (Patel, 2007). Husband's alcohol abuse has been shown to increase women's vulnerability to mental health problems (Kohrt, et al., 2009).

It has even been suggested that the increase in female suicides in developing countries is largely affected by husband's alcohol and substance abuse, which may lead to domestic violence. Koenig et al, in a study conducted in Uganda, found that women whose partners drink alcohol on a regular basis are at four times the risk of physical and sexual violence than those women whose partners do not consume alcohol (M. Koenig et al., 2004).

The mental health and suicide profile of LMIC and in particular, Asia, provide a framework in which to approach the current mental health/suicide situation in Nepal.

Many of the issues seen elsewhere in Asia are emerging in Nepal and the mental health situation is in need of increased attention and resources.

Mental Health and Suicide in Nepal

Today, more than 6 million Nepalese - 20% of the total population - have symptoms of mental health disorders (IRIN News, 2010a). Of particular concern is the rise of suicide in Nepali society, particularly amongst women. In less than 10 months in 2010, Nepali police recorded 7,300 cases of suicide (IRIN News, 2010b). More than half of these were women. While the mental health situation in Nepal appears to be in urgent need of redress, as in many other parts of the world, mental health needs have been largely neglected, underreported and underfunded. In an article discussing the mental health system in Nepal, Ram Lal Shreshtha, the director of the Centre for Mental Health and Counseling-Nepal (CMC), stated that the current state of mental health "is a major public health concern and we still do not have a proper mental health care system in place...mental health issues have to be addressed urgently or a lot of lives will be at stake" (IRIN News, 2010a). His statements come 15 years after the government first

formulated its mental health policy in 1996, with little subsequent implementation.

The government of Nepal allocates less than 3% of its national budget to the health sector and only about 1% of the health budget is allocated to mental health (Regmi, Pokharei, Ojha, Pradhan, & Chapagain, 2004). As a result, there is a dearth of nationally representative, reliable, and systematic data on mental health and suicide in Nepal, particularly amongst women. In particular, poor registration systems, legal issues, and cultural beliefs and attitudes toward suicide have led to underreporting and possible misclassification of deaths by suicide. In Nepal, family members of an individual who has completed suicide may be fined and an individual who survives a suicide attempt may be incarcerated. This inhibits many family members from reporting attempted or completed suicides. Therefore, similar to other countries in Asia, there are most likely considerable differences between actual suicide rates and suicide rates collected through independent research and the rates collected by government authorities.

However, two groundbreaking reports, published in 1998 and 2008/2009, employed scientifically rigorous methods to shed light on the growing suicide rate amongst women in Nepal. The Nepal Maternal Mortality and Morbidity (MMM) Study 1998 was based on a prospective surveillance system that identified all deaths of women of reproductive age across three districts of Nepal over one year. The Nepal MMM Study 2008/2009 (Suvedi et al., 2009) used a similar prospective surveillance system and looked at all deaths of women aged 10-50 years across eight districts of Nepal over a one-year period.

Preliminary findings from the MMM Study 2008/2009 found that suicide was the leading cause of death amongst women of reproductive age (15-49) in Nepal, with the

largest suicide rate found amongst women aged 15-24 (between 43% and 60%). While in 1998 suicide accounted for 10% for all deaths of women of reproductive age, in 2008/2009 16% of all deaths among women of reproductive age were attributable to suicide (Suvedi, et al., 2009). Findings from another study conducted in Western Nepal showed that two thirds of suicide cases were found to be female (Subba et al., 2009).

As mentioned previously, there is a strong association between suicide and mental health disorders (Lamichhane, 2010). Of particular interest to the situation in Nepal are findings that suggest that the link between mental health disorders and suicide may be stronger in females than in males (Qin, et al., 2000; World Health Organization, 2008a). A survey conducted in Nepal found that women had a higher psychiatric morbidity than men, with a sex ratio up to 2.8:1 (Wright, Nepal, & Bruce Jones, 1989).

Many of the factors discussed that may predispose a woman to mental health disorders or suicidal behavior are related to the status and treatment of women in Nepal. Although Nepal is signatory to all of the international conventions relating to the rights of women, including the Convention on the Elimination of All Forms of Discrimination against Women (Niaz, 2003; Rule of Law in Armed Conflicts Project, 2011), the reality for women within the country is in sharp contrast to the standards established in the conventions (Niaz, 2003). Women are commonly denied education, choice in marriage, economic independence, and reproductive independence, making them dependent upon their husbands for economic subsistence. Women's activities, such as taking care of their farms or doing home chores, are not considered to have any economic value, giving men full economic power in the relationship.

The denial of basic rights and freedoms to women in Nepal "increas[es] their vulnerability to violence, injury and suicide" (Pradhan, et al., 2010). Arranged marriage, which is highly prevalent throughout Nepal, has been shown to be related to gender based violence (Pradhan, et al., 2010). The Nepal Demographic and Health Survey (NDHS) 2006 found that over 20% of both men and women found wife beating acceptable under certain circumstances (USAID, New ERA, & Ministry of Health and Population, 2006). Once married, relationship difficulties have been shown to increase a women's vulnerability to mental health disorders and suicide. For instance, similar to findings elsewhere in Asia, husband's alcohol consumption, which often leads to domestic violence, has been shown to make women more vulnerable to mental health disorders (Kohrt, et al., 2009). A study conducted in Nepal found that among young married men and women, husband's use of alcohol was the most commonly mentioned factor related to domestic abuse (Puri, Shah, & Tamang, 2010). Husbands were noted as the "predominant contributor" to female suicides (35% of cases) in verbal autopsies conducted for the MMM 2008/2009, with unhappy marriages mentioned in 24% of suicide cases (Pradhan, et al., 2010). While these numbers are staggering, they are likely underestimates, given that the husband was most often the respondent in the verbal autopsy.

Domestic violence by families is "rampant in Nepal" (Dhakal, 2008), comprising about 80% of the total violence perpetrated against women. The actual prevalence of domestic violence is unknown as the majority of cases go unreported. Although other forms of "conflict related trauma," such as rape and displacement, have shown reductions in recent years, the incidence of domestic violence continues to grow (Dhakal, 2008).

The risk factors associated with suicide in Nepal appear to be similar to risk factors seen elsewhere in LMIC and Asia. For instance, the MMM 2008/2009 found that pesticide poisoning was the most common method of suicide (Pradhan, et al., 2010), reflecting findings from other LMIC that access to pesticides may increase suicidal risk. The intensive surveillance system used in the MMM 2008/2009 has shown to be particularly effective at identifying deaths through pesticide ingestion. One study conducted in South Africa compared results from a similar surveillance system to the routine data collected by local authorities and found that local authorities missed 90% of pesticide poisoning cases (London & Bailie, 2001). Resembling findings from other Asian countries, the MMM Study 2008/2009 found that many women who ingested pesticides did so to threaten their husbands and families and often did not fully understand the lethality of their actions. Emergency hospital records from the Nepali city of Pokhara support the MMM 2008/2009 pesticide poisoning findings, with 92% of women brought in for attempted suicide having ingested pesticides (Subba, et al., 2009).

Reflective of the socioeconomic factors that played a role in female suicides elsewhere, the MMM Study 2008/2009 found that 44% of suicide victims of reproductive age had received no schooling or were illiterate (Pradhan, et al., 2010). Interestingly, the End Violence Against Women (EVAW) Baseline Study (2010) reported evidence to the contrary, revealing that the highest percentage of suicides among education groups was among those who had attained the school-leaving certificate (SLC), the highest educational achievement within the survey (Pradhan, et al., 2010). Illiterate respondents were the second highest represented group. Therefore, the data regarding the links between education and suicide are still unknown in the Nepali context.

The role of marriage in society is also likely a significant factor in suicidal behavior amongst women in Nepal. Forced, captured marriage, and arranged marriages are commonplace in Nepal, especially in rural locales and there is high societal pressure to remain married, even if in an abusive relationship. However, unlike trends found elsewhere in Asia, suicide accounted for a higher proportion of deaths among unmarried women (25%) in Nepal than for married women (15%) (Pradhan, et al., 2010).

There is a paucity of research exploring the relationship between modernization and mental health/suicide in Nepal. While nearby countries may serve as an example of the effects of modernization on mental health/suicide, Nepal has not undergone the same extent of modernization as other Asian countries with increasing suicide rates. In these countries, the extreme socio-cultural changes brought on by changes in the political and economic systems have left unstable communities in transition and have disrupted traditional society (Kim & Singh, 2004; Pradhan, et al., 2010). Nepal is similar to these countries to an extent. While working practices have changed rapidly with modernization and the expansion of urban areas in Nepal, more "rigid social and familial practices" have not changed at the same pace (Pradhan, et al., 2010; Yeh, et al., 2008). This leaves women particularly vulnerable and unable to progress in society. Additionally, Nepal has experienced increases in alcohol usage among men, reflective of trends resulting from modernization. This increase has been shown to be directly related to domestic violence, leaving women at risk for developing mental health disorders or contemplating suicide.

Although there are some similarities with other Asian countries, Nepal has been significantly slower in its modernization process than neighboring countries. Its growth

rate of 4.6% (Indexmundi, 2010b) has been significantly slower than most other Asian countries with high suicide rates, in particular compared to neighboring India, with a growth rate of 10.4% (Indexmundi, 2010a). Moreover, Nepal's growth trajectory is fairly uncertain, with times of economic growth followed by political disruption and economic downturns (Pradhan, et al., 2010). Therefore, unlike the extreme shifts of modernization experienced by neighboring countries, Nepal's modernization has largely been limited to urban areas. The country has yet to undergo the same type of massive upheaval seen elsewhere which has affected suicide trends.

Current Study

Little is known about how specific factors interact to contribute to mental health issues and suicide amongst women in Nepal. Previous research has explored the role of caste, child marriage, social supports, marital relationships (Kohrt et al., 2005; Kohrt, et al., 2009; Kohrt & Worthman, 2009), and child soldiering (Kohrt et al., 2008) in female depression and anxiety in Nepal. Research has also explored the roles of pesticide poisoning and rurality in female suicides in Nepal. However, this research needs to be reexamined in light of recent studies exposing the high incidence of suicide amongst women in Nepal. In order to inform the development of a suicide prevention program, more research is needed to understand the factors related to suicide and depression, as well as attitudes toward and perceptions of suicide. Additional research is also needed to determine the association between modernization and mental health states.

Much of the Nepal mental health and suicide research was conducted in Jumla, a remote village in Nepal. In Jumla, women have almost twice the prevalence of mental

health problems compared to men (Kohrt, 2007). Given the high associated morbidity and burden of disease related to mental health issues as well as the relative lack of mental health infrastructure and services available for the community, it is vital to get a better understanding of the processes at hand and what interventions may prove successful. The current study attempts to fill the gaps in the literature and address mental health in light of the latest research findings.

Chapter 3: Methods

This study was conducted to assess the state of mental health amongst women within Jumla, Nepal, in the mid-western region of the country, as an extension of a longitudinal, quantitative study with data points from 2000 (pre-war) and 2007 (post-war). Although both qualitative and quantitative data was collected in 2011, only the qualitative will be analyzed for the purposes of this paper. Background on the foundational studies conducted in 2000 and 2007 provide a basis on which to understand the current study.

2000 Study

In 2000, the Department of Psychiatry at Tribhuvan University Teaching Hospital/Institute of Medicine in Kathmandu granted approval for the initial study to be conducted. In this study, Kohrt et al (Kohrt, et al., 2005) conducted a community epidemiology study evaluating the relationship between culture and somatization, case differences in mental health, and gender differences in mental health (Kohrt & Schreiber, 1999). Participants were recruited through random sampling of one adult per household, with an nth sampling strategy, stratifying for age and gender. All participants were 18 years of age or older and provided consent with a signature or thumbprints if illiterate. No compensation was provided for participants in the study.

2007 Study

For the follow-up study in 2007, the Emory University Institutional Review Board in Atlanta, GA as well as the Nepal Health Research Council approved the study

Hospital/Institute of Medicine in Kathmandu. In this study, Kohrt et al. evaluated case and gender differences in mental health following the Nepal Civil War. They used a census based sampling methodology. The researchers drew maps of each of the communities and based on the census used an nth sampling strategy, stratifying for age to attain a distribution similar to the community gender and age breakdown. Additionally, sampling took into account the subjects who participated in the 2000 study. An attempt was made to contact and resurvey every participant from 2000 in each community while surveying additional individuals (based on the methodology mentioned above) to represent 10% of community size. Any household that participated in the 2000 study was marked so that when new participants were added in 2007 those houses were skipped in the nth household sampling to ensure that no household participated twice.

Current Study (2011)

For the study conducted in 2011, the Emory University Institutional Review Board in Atlanta, GA approved the study protocol. The IRB approval number for this study is IRB00050725.

Sample Population

The study took place in Jumla, Nepal, which is the district and zonal headquarters of the Karnali District. Jumla is in the mid-western mountainous region of Nepal, where the Nepali language originated. The population of Jumla is estimated to be around 69,226 people (Nepal is currently undergoing a census for 2011 and therefore, population

estimates are based on 2001 data) (HMG-CBS, 2003). Transportation in and out of Jumla is restricted to plane and foot. Although a road now connects Jumla with other villages, this road is restricted to tractors and trucks as it is not fully paved and operational. Additionally, during monsoon season, this road often becomes dangerous and impassable. Jumla has one hospital, which currently employs 4 doctors, nine health posts, and 20 sub-health posts (Kohrt & Worthman, 2009).

In the current study, researchers resurveyed a sub-sample from the population surveyed in 2000 and 2007 and conducted in-depth-interviews with a sample of these women. Participants were recruited from the district headquarters and surrounding villages. While the quantitative sampling will be outlined, more focus will be placed on the qualitative sampling methodology for the purposes of this paper.

Quantitative Sampling

Sampling requirements included participation in the 2000 and 2007 surveys. All other sampling requirements were met through participation in the 2000 and 2007 surveys (i.e. minimum and maximum age requirements). In total, 131 women participated in both the studies conducted in 2000 and 2007. For the 2011 study, the research team chose 100 women to resurvey, based on location and availability. Due to economic and time restraints connected with the survey, women located more than 10 miles away were not resurveyed.

Qualitative Sampling

Seven interview participants were chosen based on their Beck Depression

Inventory (BDI) scores from 2007 and 2011. Participants were selected because of a marked increase or decrease of 10 or more points on the BDI since 2007. This sampling frame was used to draw from women with a variety of experiences and mental health outcomes. Four women had scores that increased since 2007 and 3 women had scores that decreased over the time period. Participants also had to be between the ages of 22-60.

In addition to the seven participants interviewed by the investigator, a co-investigator for a co-occurring study interviewed 5 additional women on similar mental health related topics. The co-investigator also included portions from the primary study interview guide related to suicide and general mental health. This co-occurring study used similar sampling methodology (BDI increase over time vs. BDI decrease over time and participation in 2000 and 2007 surveys) as well as the same translator as the primary study. Three women in this sample had increasing BDI scores over time (2000, 2007, and 2011) and two women had decreasing BDI scores over time. Women in the co-occurring study were between the ages of 33-48. Supplemental interviews were added in analysis to get a deeper sense of the concepts underlying suicide in Jumla, an understudied topic.

Research Design

Quantitative Research

As stated earlier, this study was part of a larger longitudinal study with data points in 2000 and 2007. The Beck Depression Inventory (BDI) was used to assess depression.

Qualitative Research

Seven women were chosen from the survey sample to be interviewed based on their BDI scores from 2007 and 2011. Sampling occurred a quarter of the way through completing the quantitative questionnaires due to time constraints. Five additional indepth-interviews were included from a co-occurring study for analysis of suicidal attitudes and beliefs.

Procedures

Quantitative Research

Two research assistants fluent in Nepali conducted the surveys. The primary investigator supervised the first 20 surveys to ensure that the research assistants adhered to proper survey methodology and ethical requirements of the study. After collecting 10 surveys, the research team reviewed the research methodology and ethical requirements. At this point, the research assistants asked any outstanding questions related to the survey and clarified their roles as research assistants. An additional 10 surveys were then collected with supervision from the primary investigator.

If possible, respondents were informed in advance that a research assistant would be coming to conduct a survey. If this was not possible, the research assistant approached the respondent, asking her if she would be willing to complete the survey at that point in time or if there was a better time to return and complete the survey. In most cases, the respondent agreed to participate on the spot.

Before conducting the survey, the research assistant asked to sit in a quiet place with minimal distractions. Often times, this was the rooftop of the woman's house. Once settled, the research assistant introduced the primary goals of the study, explained the documents detailing informed consent, and if the primary investigator was also present, introduced the primary investigator as well. All participants were over the age of 18 and provided consent with a signature or thumbprints if illiterate.

Qualitative Research

Once informed consent was granted, the research assistant requested that the interview be tape recorded, explaining that the purpose of the recording was for transcription only and would only be heard by the research assistant, the primary investigator, and others involved in the study. All women agreed to the use of audio recording. At the close of the interview, each interviewee received a small gift for her participation (a small brush, a few bangles, and a packet of *tikas*). They were also provided with information on how to access local counseling resources.

Quantitative Instrument: Beck Depression Inventory

The Beck Depression Inventory (BDI) was used to assess depressive symptomology within the sample. There are 21 items on the BDI, each item scored 0-3, with 3 indicating high depressive symptomology. There is an instrument range of 0-62.

For the purposes of this study, researchers used a depression cutoff of 17 and above to indicate borderline clinical depression to severe depression and a cut-off of 20 to indicate presence of moderate to severe depression with the need for mental health intervention. Higher total scores indicate more severe depressive symptoms.

The BDI was validated for use in Nepal (Kohrt, Kunz, Koirala, Sharma, & Nepal, 2002). Based on validation, the BDI cut-off of 20 was established to reflect symptom burden at the level requiring intervention and, therefore, the cut-off used within this study does not reflect DSM-IV diagnoses of major depression disorder (MDD).

Limitations and delimitations

All women in the 2011 study also participated in the studies conducted in 2000 and 2007. For the study conducted in 2000 there was a minimal age requirement of 18, leaving the youngest woman in the 2007 sample at 26 years of age. Therefore, the 2011 survey and interviews were unable to capture younger women. Additionally, perhaps due to the age requirements in 2000, all women in the 2011 sample were married, divorced or widowed. There were no "never married" participants in the 2011 study. Both of these demographic variables limit the generalizability of the findings.

Due to funding limitations, all survey respondents had to reside within 10 miles of the Jumla District headquarters. Therefore, individuals who had relocated to other districts or were originally located outside of the Jumla District were not included in sampling. This may limit the scope of the study to less mobile individuals or individuals only surrounding the Jumla district headquarters.

Plans for Data Analysis

Quantitative

Data was entered into an Excel spreadsheet by the primary investigator and a research assistant in Kathmandu, Nepal. The spreadsheet was then inputted into SAS Version 9.3 for analysis. Descriptive statistics were computed.

Qualitative

All audio recordings were simultaneously translated into English and transcribed by a research assistant fluent in both English and Nepali. Qualitative principles of grounded theory were employed for analysis. Transcriptions were then de-identified, imported and analyzed using MAXQDA Version 10. All data were coded and then analyzed, using description and comparison techniques.

Chapter 3: Results

Case Studies of Suicidal Ideation

Suicidal ideation refers to thoughts about taking one's own life, with or without some degree of intent. Several women in the sample expressed suicidal ideation. Their stories and experiences reflect accounts commonly heard within the community and shed light on how a combination of economic factors, domestic strife, alcoholism, and mental health issues can lead to the desire to chose death over life. The lives and stories of two women in particular, D.D.M. and N.M., help elucidate the situation of women in Jumla and the rise of suicide within the population.

D.D.M., age 27, married

D.D.M. is a 27-year-old Brahmin woman who lives in a mountainous village in Jumla. Her house is small and cramped, surrounded by piles of mud that accumulated during the rainy season. Her skin, smudged with dirt from working on her farm, shows signs of early sun damage and her long dark hair is tied back loosely. Hung along bedroom walls are small, colorful posters of Hindu gods and goddesses as well as a cartoon depiction of a luxurious Western style house and car. D.D.M. is a shy woman who speaks softly and succinctly.

D.D.M. had a love marriage six years ago and claims that her "life was better when [she] was not married." Her family was upset that she got married so young, wishing that she would have waited and completed her studies first. Although D.D.M. went on to receive a higher degree as a community health worker, she has been unable to find work in her profession and rather, does manual labor to support her family. Her

husband is unemployed. Her land produces food for less than 3 months a year and she does not own any livestock. She does not own a television, telephone, or other modern electronic devises.

Her first pregnancy at age 16 resulted in a miscarriage and D.D.M. said that at the time, she was scared of dying from the experience. After her first son was born when she was 19 years old, her husband had a vasectomy to prevent further pregnancies. While she said that they received resistance from family members for this decision, she felt that this was a decision that had to be made between herself and her husband, without outside input.

Following the birth of her son, D.D.M. was allowed 30 days rest and then went back to work doing manual labor on her farm. She noted that because her "husband is an addict" he did not care about her fragile, post-partum physical condition. D.D.M. described her condition one month after childbirth: "I was so weak that my body couldn't produce enough milk to feed the child. I felt sad and irritated when the child cried. I had a lot of burden." Without the help of her husband, she was left to care for her child, farm and perform home chores alone.

In recent years, she has had numerous health problems, citing a blocked tear duct as her primary concern. Because of the blocked duct, she says that she feels dizzy all of the time and often must rest in the middle of the day. Although there is a surgery to fix the problem, she cannot afford the procedure.

D.D.M. emphasized how domestic strife has highly impacted her. Her husband is addicted to both alcohol and tobacco and she said that when he drinks, he "scolds her" saying that she is "a useless woman." Her husband's verbal abuse when intoxicated has

increased due to her health issues. She explained: "He has been drinking a lot. I have a sick eye. He says this woman is sick and he regrets getting married to me. He drinks alcohol and fights with me. I am sick. What can I do about it?"

D.D.M. said that she often feels like she cannot handle her life situation. She expressed specific anxieties related to her deteriorating health, feeding her child, and providing him with an education. She said, "I feel like crying at my situation. I often wonder what has happened to me. I wonder why I was born. I feel anxious about what's happened to me. I feel nauseous all the time." She expressed concern that, like so many others in her community, she will die of suicide. However, while she expressed such worry, she also felt that death would bring a sense of relief: "I often worry that I will die similarly. Sometimes I have such thoughts. I do not have a source of income. I often think about how will I feed my child and educate him. How will I survive? I often feel that it would be a relief if I could die like that."

D.D.M.'s story highlights how economic problems, health problems, and domestic strife have led her to suicidal ideation. Unlike other women in the sample who noted their children as their source of strength, D.D.M. did not mention her child as a suicide preventative factor.

N.M., age 35, married

N.M. is a 35-year-old Brahmin woman. She lives in a spacious multi-bedroom house that includes a storeroom, a sizeable porch, and a well-equipped kitchen. N.M. is a generous, friendly woman whose wrinkled skin makes her look years older than her true age. However, her dark hair exposes her youth. She dresses in typical Nepali garb, covering her head at all times with a blanket and wearing colorful beads to dress up.

N.M. never went to school but has recently completed an adult education class. She said that when she was young, she "wanted to get education but no one was willing to educate" her. She feels that lack of education has been the primarily limiting factor in her life.

N.M. does manual labor for her living and is especially proud of her farm plot. Her land produces between 3 to 6 months of produce per year and she sells excess produce in the town market. Her family also owns 8 livestock, including chickens and cows. Her husband is unemployed and she says he spends most of his time hanging out in the bazaar (local market). He "is not very educated" and is only "literate enough to write letters."

N.M. had an arranged marriage when she was 15 years old and has three children – two boys and one girl. N.M. had her first child at the age of 16 at which point she said she was scared of dying. A few years into her marriage, her husband took her sister as a second wife. Since that point, N.M. said that her life has been difficult and her marriage unhappy. Before the second marriage, she felt that her husband loved her but since he married another woman she feels "like he doesn't love [her] anymore". Her husband is physically and emotionally abusive, often coming home drunk and angry. She pointed to a problem in her inner ear that has left her partially deaf. She believes being hit in the side of her head by her husband caused this.

N.M. said that she feels sad all the time. Although she works tirelessly on the farm and in the home, she feels like she cannot complete her work. She expressed specific sadness and anxiety over the potential inability to educate her children. N.M. feels that her level of suffering exceeds the normal suffering experienced by women in Jumla. She explained: "There are women who suffer but they have relief in one way or

other but I have suffered in every way. My husband doesn't even have a job. He quarrels with me all the time." She feels that without relief from her husband, all other concerns cannot be ameliorated.

N.M. expressed concerns over her physical and mental well-being. She said that she "fear[s] something [bad] will happen" to her. For instance, "sometimes [she] feel[s] like something has moved in [her] head." Doctors have found no evidence of a physical problem, indicating possible psychosomatic issues. Additionally, N.M. expressed explicit suicidal ideation. She shared her thoughts: "Once in a while I feel like jumping in the river or poisoning myself." Although N.M. expressed suicidal ideation several times in the course of the interview, she said that thinking about her children's wellbeing prevents her from committing suicide. She has also thought about running away from her husband but feels that she cannot leave her children alone. She said: "I look at my children. I cannot run away because I have children. I cannot die because there won't be anyone to look after my children."

N.M.'s situation highlights how mental health issues bisect economic and social classes. In particular, domestic abuse, her husband's alcoholism, and her husband's unemployment have caused exceptional mental stress, leading to suicidal ideation.

These two case studies touch on numerous issues that Jumla women face on a daily basis. They are only two examples that illuminate how mental health issues, economics, education, domestic issues, differential gender impacts and suicide affect women in Nepal, and in particular, in Jumla. The compounding of these issues could lead to suicidal ideation and eventual suicidal attempts and completion. While the case

studies only describe the lives of two women, their stories reflect the broader experience of women in the community. Through an understanding of these themes, one can begin to concentrate on mental health programming aimed at improving well-being and reducing female suicides in Nepal.

In-Depth Interviews

In the in-depth-interviews, women were asked about their general mental well being, their daily lives, and their attitudes toward suicide. Six dominant themes emerged from the interviews: 1) mental health issues; 2) economics; 3) education; 4) domestic issues; 5) differential gender impacts; and 6) suicide.

Table 1. Main and sub-themes identified in in-depth interviews

Main Theme	Sub-themes	
Mental health issues	Depression/sadness	
	Anxiety/worry	
Economics		
Education		
Domestic issues	Domestic strife and alcohol abuse	
	Love vs. arranged/captured marriage	
Differential gender impacts	Personal attitudes and community response	
	toward child gender	
	Male vs. female work balance	
Suicide	Reasons for committing suicide	
	Impulsivity in suicide	
	Speculation of family involvement in	
	suicide	
	Reactions toward suicide	

Table 2. Characteristics of Women in Case Studies/In-depth Interviews

Table 2. Characteristics of women in Case Studies/In-depth Interviews									
Initials	Age	Caste	Education Level	Marital Status	Children	BAI Score 2011*	BDI Score 2000**	BDI Score 2007**	BDI Score 2011**
M.A.	26	Chetri	S.L.C	M	2 (S)	20	15	20	12
K.R.	33	Chetri	S.L.C	M	2 (S)	24	11	27	6
D.D.M.	27	Brahman	I.A. or above	M	1 (S)	36	11	17	32
A.B.D.	58	Brahman	Secondary	M	6 (4 S; 2 D)	41	10	28	35
A.C.D.	43	Brahman	No schooling	M	5 (2 S; 3 D)	11	21	19	14
S.R.K.	44	Dalit	Adult literacy class	M	2 (S)	33	24	32	29
D.B.	42	Brahman	Adult literacy class	M	3 (1 S; 2 D)	29	8	8	25
S.U.	40	Dalit	No schooling	M	3 (2 S; 1 D)	41	21	30	41
N.M.	35	Brahman	Adult literacy class	M	3 (2 S; 1 D)	29	32	21	19
A.B.K.	48	Brahman	No schooling	M	6 (D)	35	26	29	34
N.B.		Brahman	Secondary	M	3 (S)	30	15	21	26
N.B.M.	47	Brahman	Primary	M	2 (D)	30	22	14	13

SLC = School Leaving Certificate (high school level)

IA = Proficiency Certificate (college level)

M = married

S = son; D = daughter

^{*}Score of 17 and above indicates moderate to severe anxiety

^{**} Score of 20 and above indicates presence of moderate to severe depression

1) Mental Health Issues

The theme "mental health issues" applies to references toward mental health states, with two main states mentioned most frequently: a) depression/sadness and b) anxiety/worries. In Nepal, emotions are expressed in terms of how things affect the "heart-mind". For instance, if an interviewer wanted to know what makes a woman sad, he would ask, "What makes your *heart-mind* feel bad." This concept conveys the holistic approach through which Nepali view mental health.

a) Depression/sadness

Throughout the interviews, women commonly referenced experiences and situations that made them sad. While women did not use the term "depression" to address their sadness, many women discussed a prolonged sense of sadness ("I feel sad all the time") and general malaise accompanied by feelings of hopelessness and inadequacy. Therefore, the term "depression" is used in conjunction with "sadness" to emphasize that many women discussed sadness in terms of a chronic mental state.

Sadness was discussed in reference to a variety of situations. Some women noted a general sense of sadness, unrelated to a specific event or factor. For instance, A.B.K., a 48-year-old woman, explained how she experiences sadness: "I have pain in my heartmind but who will take the pain away. There is no one to give or take pain. I have to console my heart-mind whenever it is in pain." While women often conveyed a general sense of sadness, three particular situations overwhelmingly were referenced in terms of their ability to induce sadness: economic conditions, inability to acquire/provide education, and marriage.

When discussing the biggest burden in their lives, all women addressed their economic situations. They referenced their economic situations as "their biggest problem" and "their biggest burden." Many women said they would feel happier if their businesses did well, indicating that they feel bad when their businesses fail to succeed. One woman, who works as a farmer, said that she often worried about if her "business would go to loss or [her] farm would be destroyed. Those thoughts made [her] feel bad" (N.P., age unknown). In Jumla, women often serve as the sole provider of the family and therefore, feel intense personal and familial pressure for their farms/businesses to succeed.

A second source of sadness for the women was their inability to acquire education and the inability to provide education for their children. The majority of the women interviewed stopped school prematurely due to marriage, childbirth, or home responsibilities. For many of these women, the inability to complete their schooling served as a major source of sadness and societal restriction. N.B.M., age 47, quit school upon completing primary school. She said that during her childhood "it was a big deal even to study until 8th grade." She explained further:

During those times girls were not sent to school. I adapted to what work I had to do. I had studied a little so I felt like it was enough during those days. I thought if I have to work anyways why don't I just work [now].

Unlike N.B.M., who quit school to help out with chores, N.B. was forced to quit school when she got pregnant: "I kept wondering why I had to stop. I felt sad about it. I couldn't continue after I had children. ... I felt very bad."

While the women often discussed their own inability to pursue education, they also frequently expressed sadness over the inability, or potential inability, to provide their

children with education. When asked what makes her sad, N.M. said, "I feel sad when I think that I might not be able to educate the children. I have suffered a lot but I want to make them big people." Many women expressed a similar sentiment.

Finally, women often referenced sadness when discussing the act of getting married and their situations once married. For instance, N.B. had an arranged marriage. When discussing how she felt when she got married, she said: "I felt bad that I was having to go to other's home. Who would feel good to leave one's parents and go to other's home?" Most of the women interviewed referred to the sadness experienced when leaving their maternal home upon marriage. These women were typically married between the ages of 11-15 and therefore, left their homes during adolescence. The emotional toll of this separation and unfamiliarity is something that remained with these women over time — even when they could not remember other details of emotions surrounding their weddings. In addition to the conditions under which women got married, domestic issues post-marriage were often mentioned as sources of sadness. One woman explained a situation in which her husband acquired a new wife - her sister:

I felt extremely sad when my husband brought home another wife. I felt like my heart was broken into pieces. I felt extremely worried... I felt like my heart was burning. I felt very sad. I do not know what mistake I did. I have had no peace in my heart. (N.B., age unknown)

For this woman, her husband's acquisition of a second wife has served as a constant source of sadness for her over time. Other women reflected the notion that husbands only serve as a source of sadness and trouble for their wives.

There were no noticeable differences in trends of sadness/depression between women who have become more depressed over time vs. women who have become less depressed over time (based on the Beck Depression Inventory [BDI]). In fact, even

women with decreasing BDI scores over time expressed increasing or static sadness levels over time. One woman, whose BDI has decreased since 2007, said, "It is obvious that the sadness will increase [over time]. There is no one to support me. If I had my husband with me I would have at least someone to share during difficult times." There was a sense among all of the women that sadness was a fact of life that could not be practically ameliorated in their current reality.

b) Anxiety/worry

"Anxiety/worry" emerged as a pervasive theme across almost all of the interviews. It was expressed as feelings of nervousness and unease. Women were explicit in describing their anxiety/worry and used the terms "worry" or "I was anxious" to discuss an issue that caused a sense of worry or anxiety.

A theme that unified most of the interviews was a general worry for how to provide for children (in terms of clothing, food, and education), tied to economic uncertainty. For instance, one woman, age 27, commented: "My husband doesn't have an income and I do not earn either...How will I educate my child? How can I afford to buy exercise book[s] and pencils for him?" Women generally expressed a sense of anxiety over not earning enough to cover school expenses, with schooling for their children noted as a priority.

Tied to economic issues, many women expressed worry over completing their farming and household duties. N.M., a 35-year-old woman, reflected this sentiment:

My husband doesn't help me at all. I do everything alone. Sometimes I feel very anxious about when I would finish all the work that needs to be done. When I am anxious I do not like eating... I have not seen anyone who suffered as much [as I have].

N.M.'s anxieties are directly tied to her work burden and economics. With no income generated by her husband, she is the sole provider for the family.

Another common concern among the women was over their health status and how changes in health could result in an inability to care for their children, provide for their families, or complete their work. D.D.M., a 58-year-old farmer, expressed worry over how aging would impact her ability to complete her work:

I feel like as the time is passing, I am getting weaker, I get worried what I will do. I feel like I am sad... I am weaker now. My blood and bone marrow is weak. I think I won't be able to do things much longer.

Another woman connected her health worries to her economic distress: "They say I have to have an operation. But I didn't have money for that. I am scared that I will die without getting treatment and medicine. I feel worried about it." This concern over the inability to pay for medical care was universal amongst the women.

Finally, expressions of anxiety/worry commonly arose in the context of childbirth. Women expressed worry about their own health during childbirth and the health of the child. Although not a sentiment reflected by the other women, D.B., a 42-year-old woman, expressed worry about the gender of her child. She said:

The community was also not happy [when I had a girl] and I also felt a bit sad. I hoped that it would be a son. I worried what if I had a lot of daughters. I was worried that I would have five or six daughters. Society wants you to have a boy. They want to give birth until they have a son.

When comparing anxiety/worry across sub-grouping, some general trends emerge. Women who have become more depressed over time talked about their worries/anxieties significantly more than women who have become less depressed over time. Interestingly, a woman in the decreasing depression group repeated that "there was

no use worrying" after she expressed concern over an issue whereas women in the increasing depression group dwelled on their worries extensively in the interviews.

There were few differences in how women expressed anxiety/worry based on their age cohort. While women below the age of 35 mostly expressed worry about raising children and dying in childbirth, women above the age of 35 mostly expressed worry about health issues and how that would affect their children. Additionally, the younger women talked about anxiety/worry less than the older women. However, both groups talked about economic concerns as a key issue.

2) Economics

As mentioned previously, economics serve as a major source of anxiety amongst the women interviewed and serves as a primary focus within the community. The theme "economics" refers to discussion of financial issues, employment as related to income generation, and income in general.

N.B.M., who reported earnings of more than 8,000 rupees a month (the highest income category possible), explains that, even for her, economic problems are universal within Jumla. She says, "Everyone has problem because our village is poor. Everyone faces problem even to buy salt and oil." On the other end of the financial spectrum, S.U. reported no monthly income. She explained her economic situation and the resulting hardships:

No matter what I do there is never enough to eat. I feel sad. I cannot afford buying exercise books to send my children to school. My son is studying in 12th standard. I do not have enough money to pay for his admissions. If my husband had a job, we would have kept money in the house. It would have been easier. How many times would I ask for a loan? Even if I take a loan there is trouble paying it back. All these things make me feel sad. I feel sad and my troubles increase.

Although S.U. knows of available financial assistance, she feels unable to manage the financial responsibilities that would accompany a loan. Within Jumla, two women in different villages reported their involvement in and the existence of loan societies created specifically for women. N.B.M. explained how the loan societies function:

We collect 50 rupees each from every group member every month and deposit it in the bank. Then we regulate the loan. We also take interest from the women. If any woman needs financial support, they ask for help and we give them some part of the deposit. When she returns it she has to return with interest... We regulate that money and charge interest.

While all of the women discussed financial problems, none of the women, aside from the two mentioned above, referred to the role of the loan societies in helping them cope with their financial issues.

A variety of other issues were discussed in relation to economics. As previously mentioned, many women discussed economic problems in relation to an inability to address a medical condition, reporting that some women "have died because they didn't have any money to go for the treatment" (N.B., age unknown). S.K.U. explained that the inability to pay for medical treatments is a ubiquitous problem. She said, "Everyone has same problems here. We are all similar. My sister-in-law just died because she didn't get treatment for same kind of pain as me." Another woman explained that after a child fell sick, she was forced to sell her land to pay for his medical bills. When he eventually died from his condition, they were left with nothing and her economic status plummeted.

For many, their economic situation is viewed as a hindrance toward upward progress in society. A 47-year-old woman explained that she has been "barred [in society] because [her] economic position is not strong" (N.B.M.). This economic/social position holds much weight within Nepali society and determines one's ability to seek

additional aid. A.B.K. explained that "those who have resources resolve the problem and those who do not have resources cannot do anything. It is like that in society."

There were no significant differences between women who earned more per month and women who earned less. Even among women who earned the most per month (more than 8,000 rupees per month), economic hardships were mentioned as the biggest problems in their lives.

3) Education

This theme applies to references to formal education relating to personal experiences, attitudes, or beliefs or relating to others' experiences, attitudes, or beliefs. As previously noted, many women mentioned education in the context of regret toward not receiving additional education, worry/desire to provide children with education, and the relationship between economics and education.

The average level of education achieved by the women interviewed was lower secondary schooling. For varying reasons (mentioned earlier), women chose to quit or dropped out of school at an early age. Many "couldn't continue after [they] had children" or had to remain home to help with household labor. For instance, N.M., who did not complete elementary school, explained why her family chose to keep her home rather than send her to school and how she sought to defy their wishes:

I used to go to school sometimes when I was very small...I am only literate enough to write my signature. During those times girls were not sent to school. My maternal home had big farm...They made me work in the farm like plant the rice and take grains to the water mill. But I was very interested in studying so I went to school hiding from everyone. I wanted to study and move ahead.... I wanted to get education but no one was willing to educate me.

For N.M., the only way to get an education was to attend school surreptitiously.

She emphasized that "girls were not sent to school". In this society, education for boys was more highly valued than education for girls and therefore, it was easier to sacrifice female's education for the needs of the family.

All of the women expressed the belief that had they received more education, their current situation would be decidedly different. Lack of education was noted as a "barrier" to moving up in society. N.B. explained, "There are people who are more educated than me and they have higher status than me in the society. I am not as educated as them so it is a barrier for me." For N.B education would have meant that she "wouldn't have had to do labor work like this. [She] could have found a job." Women commonly mentioned that education would have allowed them to pursue employment that did not involve physical, grueling labor. In this agrarian society, work outside of the farm is considered more reputable. One woman explained that had she had the chance to study, her life would not have been as hard. She believed that if she had received an education, she "would have been a reputed person in the society... There is a difference between a reputation of someone who works in the farm and someone who works in office" (N.M., age 35).

However, several women mentioned that even with education, women in Jumla would not be able to pursue the same opportunities that are available to men. K.J. explained that "there are a lot of problems in Jumla...Women are not literate. Those who study, they cannot get degree. Most of them cannot use their education for anything." A.B.D. echoed this sentiment saying that "[m]en are educated and they visit different places. [Society] treat[s] men differently. Even if a woman is educated they treat her as

illiterate." Amongst these women, there was a strong belief that even with more education, the position of women in society was immutable.

For many, although hope for their own education and societal mobility was futile, hope for their children's futures was paramount and viewed as an ultimate goal. A.C.D. said that she "only want[ed] [her] children to live and get good education". She felt that her "days have already passed" and she just "hope[s] that [her] children will study." A child's ability to acquire and succeed in education was frequently noted as a source of happiness ("I feel good when my children study well and are able to secure good marks"), with one woman even noting that the happiest day of her life was when her son passed his high school completion exams.

A common refrain was that the educational situation is better for children today, girls in particular. Today, women expressed, "times have changed and [g]irls study and make progress." For the modern woman, "education is more valued." D.B., explained how things will be different for girls in modern society. "We were not given education", she explained, "but we have educated our daughters. I think life will be different for them. They will not need to work as much as we did. They go to school and study. They do not work as much as we work." In this context, women refer to "work" as physical labor.

A.B.D., who completed secondary school, was able to educate her girl children. She remarked how her children's ability to pursue education has changed their employment trajectory and their views on labor:

These children will not work. The land I have cultivated until now will remain barren in their times. They are all educated and they do not like to work in the farm. Who will work hard? There are lots of troubles in farming. We have to work for six months to bring the water canal to our village. The products from our farm are not worth the energy we invest in it.

This was one of the few areas where the women expressed hope for the future and believed in their capacity to create change for the future generation.

4) Domestic Issues

The theme "domestic issues" refers to issues relating to household affairs or the family. Two sub-themes emerged under the theme "domestic issues": 1) domestic strife and alcohol abuse; and 2) love vs. arranged/captured marriages.

a) Domestic strife and alcohol abuse

The seemingly dissimilar sub-themes "domestic strife" and "alcohol abuse" were combined into one sub-theme for the purposes of analysis because of their overwhelming coexistence when women discussed domestic issues. Alcohol abuse was never mentioned in isolation from domestic strife and most commonly, domestic strife was mentioned in relation to alcohol abuse. Therefore, the two will be discussed side by side in this section.

The sub-theme "domestic strife" includes any mention of domestic quarrels, disputes, or abuse as related to the self or others. This theme includes emotional abuse or disputes as well as physical threats or abuse. It is important to remember that any member of the family unit can perpetrate domestic violence, with violence in Nepal often perpetrated by in-laws. Alcohol abuse refers to references toward alcohol use that "results in harm to one's health, interpersonal relationships or ability to work" (Centers for Disease Control and Prevention, 2011b).

Women frequently and openly discussed the role of domestic strife in their lives. For many of the women, domestic disputes and tensions were a fact of daily life – the

norm – with occasions of tranquility savored. For instance, N.B. noted that she feels good when her husband "behaves well and there is no conflict at home." For some women, keeping their husbands away from the house was a mechanism to avoid domestic strife. When asked about her husband's employment far from home, B.D.A. explained that she appreciated when he was away: "I don't want him home that often. He talks a lot. He scolds me. It's better he stays outside...He gives me derogatory remarks because I am illiterate and he is highly literate." In this case, B.D.A. explains how she enjoys when her husband is away from home as well as how lack of female education often places women in a subjugated position with little power.

Many women mentioned emotional abuse alongside instances of physical abuse. One woman, in particular, spoke at length about the role of violence in her household. She explained how her children and neighbors try to protect her from her husband's abuse; however, it continues nonetheless. She continued:

If neighbors know about the fight they come to help...Sometimes I run away outside the home. I have hidden in other's homes many times because of the fear that my husband will beat me... [My husband] scorns me for no reason. He uses derogatory words to scold me. Sometimes he beats me. (N.M., age 35)

While emotional violence was often mentioned in the context of verbal disputes, it was also discussed in the context of a husband taking another wife. For instance, for N.M., the emotional impact of her husband taking a second wife was emotionally harmful, leading her to consider suicide. She explained that her husband "tormented [her] by bringing a second wife."

Although not often mentioned in the interviews, the role of in-laws in perpetrating domestic violence was noted. For instance, one woman explained how her sister-in-law, in addition to her husband, has caused her emotional distress. N.M. explained: "After I

got married I was happy only for a year. After that I never knew happiness. My sister-in-laws troubled me a lot. My husband also troubled me. I have always suffered after a year of marriage." In a more extreme example, S.U. discussed the suicide of her sister. She said that her sister "killed herself because she had problems with her father and mother-in-law." While S.U. did not outline what the exact "problems" were in the relationship between her sister and her in-laws, other interviewees mentioned cases of in-laws restricting a woman's mobility, forcing her to work long hours, and requiring her to work soon after childbirth. For instance, D.D.M. said that if she "didn't work, [her] mother-in-law would say that she has also given birth to children and she didn't take rest so why would [D.D.M.] need more rest than she did."

The women repeatedly mentioned alcohol abuse in relation to their husbands. For the most part, all references to alcohol were related to how alcohol leads to domestic violence. K.R. explained that men "get married. Man drinks alcohol. He beats his wife and they have conflict." This cycle was noted as normal in Jumla society. S.U., a 40-year-old mother of three, explained how her husband's alcohol abuse impacted her:

My husband drinks day and night. He cannot do without alcohol. ... I feel worried... I tell him [how it makes me feel] but he fights with me. He says "have I drunk out of your father's property?" Then I feel hurt and he beats me and I beat him.

This was the only instance mentioned of a woman also harming her husband.

Domestic strife as related to alcoholism is not restricted to physical abuse. It includes emotional and verbal abuse as well. S.R.K., a 44-year-old woman, explained: "Yes, lives are hard for women. Men drink alcohol and come to scorn women. Women have huge amounts of work to do. Men scold the women but it's women who have to work hard. "Personal accounts of emotional abuse create a better picture of how alcohol

abuse relates to domestic abuse. For instance, one woman discussed how her husband's alcohol abuse led to his emotional violence:

I have been very affected. He drinks alcohols and comes to me. He scolds me using whatever words he wants. He scolds the child and chases him away. He doesn't have a job and he doesn't do anything. He just goes away to the bazaar and hangs out. He says I am a useless woman. (D.D.M., age 27)

Another woman described the emotional toll caused by her husband's alcohol abuse. After experiencing multiple seizures, D.B. sought medical care to seek an explanation:

We went to see a doctor. The doctor told me that I have no problems. The doctor also told my husband that your wife has no physical problem but you are her problem. [The doctor] called my husband and told him not to drink because my sickness was caused by his drinking habits.

According to her doctor, D.B.'s seizures were psychosomatic in origin with no medical basis. Rather, the stress and worry caused by her husband's drinking were manifesting as physical impairment. While this was the only first hand testament of a conversion disorder - a condition, often induced by stress or trauma, in which a person has negative physical symptomology that cannot be explained by medical evaluation – local doctors attested that they see many women in the local hospital who come with conversion disorders.

There was a sense in the community that alcohol abuse was on the rise. R.K. noted that alcoholism was a problem in the past but "not a problem like today". She believed that alcohol is more "available" now. Another woman explained that if men do "not produce the alcohol here they bring it from somewhere else. If they do not bring it they produce it here. There is no way to stop it" (D.B., age 42).

b) Love vs. arranged/captured marriages

In Nepal, arranged marriage is incredibly common. An arranged marriage is a marriage in which the parents of the bride and groom arrange the union and neither the bride nor the groom has a say over the selection of a future spouse. A captured marriage is a marriage in which the groom abducts the woman he wishes to marry. In many cases, captured marriage occurs if the man is significantly older than the woman he wants to marry. Finally, a love marriage is a marriage based on mutual agreement between the bride and the groom. Among the women interviewed, three women had love marriages, two women had captured marriages, and six women had arranged marriages. Although there were differences in the methods by which the women got married, for the most part, the women all spoke about marriage in a similar way.

While love marriages are more accepted in current Nepali society, previously households and communities shunned women who partook in a love marriage. M.A., a 26-year-old woman who had a love marriage, explained how her family reacted to her love marriage:

We had a love marriage... My maternal home didn't let me in for four years. They still don't have a good attitude towards me. They were very upset that I married at a very young age and dropped out of school and stopped studying. They thought I will have to work a lot in Jumla. My maternal home tormented me a lot...I was just fourteen complete fifteen... They took me back to my maternal home once and said that it is wrong to let me get married at such a young age.

In this case, the family primarily disapproved of her marriage because she was leaving her schooling early. Interestingly, D.D.M., who also had a love marriage, explained that her family was upset with her for the same reason. They "scolded" her and got angry, saying that she "still very young" and that she should "study first". By leaving school

early, women in Jumla limit their economic earning potential. While these reports show family's concern over daughters education and economic stability, more commonly heard is that families disapprove of love marriage because it breaks from tradition and undermines the authority of the family.

Although the women who partook in love marriages arranged their own unions, they expressed similar worries and issues about marriage as women who had arranged or captured marriages. For instance, D.D.M. explained that her husband is an alcoholic who is emotionally abusive. Due to her health problems (a blocked tear duct), she says that he "drinks alcohol... fights with [her]" and "regrets getting married to [her]". M.A. also had a love marriage. She says she got married out of "the excitement of being a teenager." When asked if she is happy she got married, she explained that she already has children so she has to be happy – "there is no use being sad." Although M.A. did not speak as negatively as the other women who had love marriages, she still expressed a similar dispassion for her marriage, as did other women.

Most of the women interviewed had some form of arranged marriage. When asked about their experiences around the time of their weddings, most of the women felt that it was difficult to recall memories and emotions from that time. Yet, A.B.D. a 58-year-old woman vividly remembered how she felt on her wedding day: "Yes I remember. I felt very bad that day. If I had a lover I would have married of my own choice. My father and mother got me married away. My father- and mother-in-law asked for my hand in marriage." N.B.M. explained a similar process: "[I had] an arranged marriage. I was still very young and my mind had not grown yet. My parents said they want to marry me away. They said that a daughter has to go to others' home anyway and I thought they are

right... Those were the days when you would feel bad. I felt bad too."

While many women had difficulties recalling memories from their weddings, they all shared a common recollection – the feeling of being taken from their mother's house.

N.B. explained: "I felt bad that I was having to go to other's home. Who would feel good to leave one's parents and go to other's home?" This phrase, "who would feel good leaving one's mother's home/one's parents' home" was repeated often amongst the women. They all felt that they were "still very young" when they got married and therefore, the act of leaving their maternal home was distressing. That is an emotion they remember until today.

Women who had captured marriages explained similar feelings of sadness around their marriages. A.C.D. was 13 when she got married. She explained that her in-laws "neither asked for [her] hand in marriage nor was it a love marriage." She said, "I was stolen and brought here. They captured me and got me married." D.B. also had a captured marriage. She explained the process: "They enticed me and brought me here and got me married to him. I was captured. They cajoled me and brought me here. Later they got me married to my husband. I felt very scared." These women expressed sadness about leaving their maternal home, similar other women, with an added sense of fear surrounding the wedding.

Although there are distinct differences in the methods by which the women were married, there were no pronounced differences in how the women discussed marriage or how they emotionally related to their marriages. While most of the women expressed sadness and even hopelessness when discussing their marriages, many felt that times were changing. Based on the women's responses about their own children, in addition to

the marriage demographics of the younger women in the interview sample, there has been a significant shift in marriage norms. Two thirds of the younger women in the interview sample had love marriages compared to one love marriage amongst the sample of older women (above the age of 35).

Many women expressed the belief that their own children should have the choice over whom to marry, a significant shift from the norm. A.B.D., a 58-year old mother of six, had an arranged marriage. When asked if she would have an arranged marriage for her daughters, she responded:

Whatever they wish. I will do whatever they want. The tradition of arranging marriage is no more. I do not know if they will send a man to ask their hand in marriage or they will marry themselves.

A.B.D.'s response was typical amongst the women when asked about their children's marriages. N.M. said that in recent times "[m]any changes have occurred. People get married to whoever they wish." She explained that when people come to ask for her daughter's hand in marriage, she tells them that they will not arrange her marriage and that her daughter "will get married to who she thinks is appropriate to her." These responses to changes in tradition also emphasize the important role of marriage in society, where remaining unmarried is not an option. For A.B.D. and N.M., their daughters can choose the method by which they want to get married; however, they cannot choose to remain unmarried. This emphasis on marriage in society is reflected in the demographic homogeneity in the sample of women interviewed. Every woman interviewed as part of the larger study was married. However, marriage was not a requirement for eligibility in the study.

Although arranged marriages are decreasing, it is still a widespread practice in

Jumla. S.U.K. chose an arranged marriage for her 16-year-old son. She explained her son's response to the marriage: "He felt shy in the beginning but later he said why you got me married, I was still studying. I wouldn't have married until I was 20 or 25 years old. He said we got him into a mess." Although marriage norms are shifting, the change has not been universally accepted.

The women interviewed discussed their marriages at length. They felt it was a source of distress and sadness, regardless of the type of marriage they had (love vs. arranged/captured). For many, the distress stemmed from husband's substance abuse, domestic abuse, unemployment, and lack of support in home responsibilities. All of this is reflected in differential gender norms within Jumla society.

5) Differential Gender Impact

Differential gender impact represents the unequal treatment of men and women in society and the subsequent ramifications of this disparate treatment. Two sub-themes emerged under the main theme "differential gender impact": 1) personal attitudes and community response toward child gender and 2) male vs. female work balance.

a) Personal attitudes and community response toward child gender

Child gender was discussed by almost all of the women. However, while there was consensus between the women over past communal beliefs, the women differed in terms of their current beliefs and approach to child gender and their perceptions of the communal response toward child gender.

Most women expressed a personal indifference toward having a boy or a girl child. They felt that "sons and daughters are equal" with one woman going so far as to say that "only ignorant people discriminate between a son and daughter" (M.A., age 26). Some women who only had daughters said that it "hasn't made a difference" to their position in society.

While most women openly embraced both boy and girl children, many still believed that "society" or the "community" held different beliefs toward child gender.

N.B., a mother to three sons expressed the following over her position in society in relation to her children's gender:

If I had no boys people would despise me. I would have been bullied in my neighborhood for not having a boy... My family would have despised me. Society and neighbors would have intimidated me. A woman who doesn't have sons faces a lot of trouble in society. If I had had no boys society would not have given me the same position as they have given me now. My husband would have married another woman for a son.

N.B. believes that not only would the community have "despised" her if she hadn't had sons, but her husband would have left her as well. This sentiment was echoed by N.M., a woman whose husband took a second wife. She said that she could not understand why he would have taken a second wife "when he already had a son from [her]." Other women felt that the community would not despise them for their first child being a girl; however, once a second girl would come, the community would shame them. D.B. explained: "[The] community doesn't say anything when you have first girl. But if you have a lot of girls they despise you. They celebrate with you the first time... [After my second daughter] the community was also not happy and I also felt a bit sad. I hoped that it would be a son."

While not all women expressed the same perception of community *disdain* toward girl children, they expressed a perception of communal *preference* toward boys. S.R.K., a 44-year-old mother of three, said, "Everyone feels happy when a boy is born. It is like this everywhere not only in Jumla. They say girls and boys are equal but when a son is born they celebrate by playing music and putting red vermillion powder on each other." K.J., a mother of two boys, expressed a level of prestige granted to her because she has boys. She said "they treat [her] differently" and "say that [she does] not have trouble because [she has] no daughter."

Women felt that part of the preference toward sons was based on the marriage structure in society. Within Nepali society, daughters are expected to leave their maternal home to live with the husband's family. Sons, on the other hand, remain at home and bring in the added benefit of a daughter-in-law, who can help with the farm and home chores. A.B.K. talked at length about how her daughters could not help her like a son could and how her position in society changed when her only son died:

I think society despises me. The god gave me [a son] but he took it back. I keep thinking why he took it away? I have nothing left... [The community] they say this woman doesn't have a son. Why does she need to bother about anything? Her daughters are going to go to others' homes anyway... I think before my son's death my position in society was like this full glass. But later it changed to the empty glass...Daughters will marry and go away to other's home. Only I and my husband will be left. I have nothing left. I have no son.

A.B.K., as well as other women, felt that as they grew older, they would need extra hands around the house. While daughters help when they are younger, they would eventually leave, having drained resources during their younger years at home.

Several women expressed that they actually prefer daughters to sons. N.M. felt that being able to provide for her daughters was a way to mend her own treatment as a

woman in society. She said, "I love my daughters more [than my sons]. I suffered a lot so I feel like I should give more love to my daughter. I wish that my daughter has a good life because I suffered a lot in life." K.J. did not have any daughters and expressed that she wishes she had had daughters. However, once her sons were born, she realized how lucky she was:

To be honest, I wanted a daughter for my first kid. There is nothing I can say now that the son was born. They sacrificed many goats to celebrate a son's birth... I felt happy thinking about other neighbors who only have daughters...Men want sons and I was happy that I gave birth to a son. In our community no one says that he or she would like two daughters...I don't know why they differentiate, after all sons and daughter both are your own children.

Although it appears that personal attitudes toward child gender have changed, the power of societal attitudes toward gender seem to be ever present and powerful. While most of the women expressed ambivalence toward their own child's gender, they recognized that community attitudes and even prestige were related to having male or female children.

b) Male vs. female work balance

Women talked extensively about the "male vs. female work balance" in their community. This theme includes discussion of the labor roles of men and women, including the employment opportunities available to men and women and the typical work roles of both. In general, all of the women felt that they do the lion's share of the work in their households. They said that they work "a lot more than men" and the majority of the women expressed that men don't "do anything." Most women, even those with employed or helpful husbands, referenced general male unemployment and/or men going to the bazaar to hang out instead of work. The work imbalance between men and

women in Jumla is evident through women describing their typical days. N.M. detailed her day as follows:

I wake up and sweep the house and go to sell vegetables in the market. I come back and have lunch. Then sometimes I rest but I never get to rest. I see things that need to be done. When would I rest?... Then I go to my kitchen garden to tend saplings. I carry fertilizer for my farm. Sometimes I go to the jungle and carry back firewood... [My husband] doesn't do anything. He sleeps all the time and when he wakes up he goes to hang around. Sometimes he carries rice from the food distribution office. That's all the help he offers.

In Jumla, women share a sense that they work harder than women elsewhere in Nepal and the men in Jumla are not expected to contribute to typically female household duties if they are unemployed. The women felt that the severity of male unemployment or "laziness" was particular to Jumla and that "women in other places don't need to work as hard as women in Jumla". A 58-year-old women said that she feels that her "work is very hard... [In Jumla] only a few men work. Women do everything in Jumla. Men have become lazy." While some women expressed that they are "used to it" (doing more work than their husbands), other women said that they are frustrated and feel like "slaves". One woman expressed frustration over the imbalance:

Men do not have to work as much as women... It is very frustrating because we have to work all the time and men can just hang around the bazaar and work at their office. (K.J, age 33).

Many women explained that female happiness was dependent on husband's employment. "Happy women" are those who have "earning husbands". "Sad women" are "those who have to do everything on their own". S.U., a 40-year-old farmer said: "If I had property and my husband had a job I would be happier...If one has employed husband you could just buy rice from the market. You wouldn't have to do everyone's work." This connection between husband's unemployment and happiness was common,

partially reflecting that with male unemployment comes an increased workload was common.

Interestingly, although women complained about the female workload in society, they did not expect their sons to take on a larger load and rather, expected their daughters to assume a similar role as them in relation to household duties. A 33- year-old mother of two boys commented:

A mother needs a daughter. If I had a daughter she would have helped me in whatever I did. She would have helped me with the kitchen work or household work. Sons do not care a lot.

While for the most part "male vs. female work balance" was discussed in relation to male unemployment and female sadness, there were some variations in the theme's applicability. Women often discussed "male vs. female work balance" in the context of their inability to pursue education because of burdensome household duties. They also related the labor role imbalance to certain health problems, like prolapsed uterus after pregnancy because of the need to go back to work soon after delivery and the inability to get proper rest when sick/injured.

There were some marked differences in the expression of "male vs. female work balance" between sub-groups. Women in the decreasing depression sub-group, while aware and open about the issue, did not express as much frustration with the imbalance between gender labor roles as did women in the increasing depression sub-group. One woman in the decreasing depression sub-group said that this was just the way things were and another woman said that there was a work imbalance in society but that her husband had a job and was helpful and supportive. Women in the increasing depression sub-group felt that life was harder for women in Jumla because they had to work harder than women

elsewhere. They spoke more about how their lives were difficult because of the imbalance and due to their workload they were unable to pursue education/employment goals. Both groups, however, expressed that there was a stark imbalance in labor roles between genders.

An interesting sub-group distinction was found between younger, more educated women and older, less educated women. The younger women talked disproportionately more about the work imbalance than older women, and expressed greater discontent over the imbalance. Younger women seemed aware of alternatives to their current lifestyle. They understood that there were areas of the world where women experienced a lifestyle with greater gender equality and this awareness created distressing cognitive dissonance. On the other hand, older women felt that the state of gender equality had been this way for years and that they actually suffered less than women before them. They viewed themselves as part of a continuum existing solely within Jumla and/or Nepali society. As opposed to the younger women who compared themselves to a global community, the older women had a more limited perspective, easing their concerns by comparing themselves to other women who lived in the same environment with similar conditions.

6) Suicide

Four dominant sub-themes around suicide emerged from the in-depth-interviews:

a) reasons for committing suicide; b) impulsivity in suicide; c) speculation of family involvement in suicide; and d) reactions toward suicide. These four themes provide a complex view of the women's attitudes and beliefs relating to suicide in Jumla.

a) Reasons for committing suicide

The interviewees provided many different reasons for committing suicide. In general, there was consensus over the common reasons for committing suicide for both men and women: domestic issues, male alcoholism, economic concerns and educational stress. Finally, mental health issues were mentioned rarely as a cause of suicide.

Domestic Issues

Overall, domestic issues were cited as the primary cause of suicide amongst both men and women. The main domestic issues mentioned as causes for suicide were physical and emotional abuse, polygamy/extramarital affairs, and marital choice.

Domestic violence as a cause of suicide was mentioned in relation to both men and women. For instance, K.J. said that a man might commit suicide over guilt or shame after "maiming" his wife. A.C.D. said that "some [women] commit suicide because their husband[s] make them suffer. Some men commit suicide because of their wife." While these quotes exhibit both male and female suicide as a result of domestic violence, overwhelmingly, domestic violence was mentioned as a cause of female suicide over male suicide.

In addition to spousal abuse, the women cited problems with in-laws as a reason some women may attempt suicide. S.U. spoke about the circumstances surrounding her sister's suicide. She explained:

Last year my sister hanged herself... She could not tolerate what her [in-law] family said to her...She killed herself because she had problems with her fatherand mother-in-law.

In Jumla society, women move in with their in-laws upon marriage. For some women, tensions with their new family prove too much.

Polygamy and extramarital affairs were often cited as reasons women commit suicide. N.B.M. said that a woman may attempt suicide "[i]f the husband brings home another wife and neglects the household." Leaving the first wife feeling "frustrated." A.B.K. recounted a story she recently heard about a woman in a nearby village who committed suicide. When the husband married a second wife, the husband and wife got into a fight and "[she] hung herself."

Although not mentioned frequently, extramarital affairs were discussed as a cause for suicide. M.A.'s sister-in-law committed suicide after her husband had an affair. M.A. explained: "He had an affair with other women. She heard of the affair. She asked her husband not to do so. Her husband also loved her and brought her whatever she asked for. Then they had a fight...[and] she hanged herself."

Finally, choice in marriage was mentioned several times as a potential reason that both men and women may commit suicide. A.B.D. explained:

A boy wants to get married to a girl he chooses but his parents have an objection to that. They say they will not accept a daughter-in-law from a lower caste in the house. Then in frustration a man commits suicide...The reason is almost similar for women. They try to get married to a man of their choice. Parents usually say they have to get married to an educated man from their own caste group. They get married and if they could not get along with the in-laws they commit suicide.

While men may commit suicide before the marriage ensues, women may feel less empowered to defy parental wishes before the marriage. However, if the marriage causes additional emotional distress, she may opt for suicide.

Male Alcoholism

Many women mentioned how alcohol abuse can lead to suicide among both men and women. The interviewees said that many men "drink alcohol and hang themselves" or kill themselves in another manner. D.D.M. said that "[a] lot of [men] have died of

alcoholism," with some dying from "falling down and some [dying from] falling from the hill under the effect of alcohol. Some of them have drowned in the creek." Speaking about her personal situation, D.D.M. said that her own husband "has problem of alcoholism" and that she is "worried that something will happen to him" like that "he will drown in the creek or in the river."

Many of the women discussed how men might get into fights when they are drunk, and kill themselves out of frustration. For instance, N.M. described a situation in which a man killed himself after a fight with his wife: "Recently one man jumped into the river. He drank alcohol and had a fight with his wife. He jumped into the river and got swept away."

Women, on the other hand, commit suicide as a result of their husband's alcohol abuse. Some women "have hanged themselves getting tired of drinking habits of their husbands." D.B. explained that women may "poison themselves" or "hang themselves" when they get "tired of drinking habits of their husbands." When men drink, she explained, they "fight at home. Many households face this problem."

Economic Concerns

Economic concerns were frequently mentioned as a cause of suicide in Jumla. Specifically, women mentioned how economic concerns related to worries over providing food, clothing and education to their children could cause excess stress and lead to suicide. Women explained that "people suffer...if they do not have any source of income." In this dire economic situation, a person thinks "about how he will manage his meals, how he will buy clothes or live his daily life... [and his] worries keep increasing." For this reason, D.D.M. explained that "people hang themselves or take medicines and

die " (D.D.M., age 27).

Many of the women believed that such economic concerns weighed more heavily on women than on men. M.A. elaborated:

[People who commit suicide] do not usually have a source of income. They get worried about how to send their children to school or how to bring up their children. How to provide clothing for the children? Women usually think of such problems. Men are only interested in getting themselves drunk. They only give more worries to the woman.

While economic concerns were mentioned primarily as a cause of female suicide, economic concerns related to debt were mentioned as a male catalyst toward suicide.

M.A. said that "[m]en usually commit suicide if they are too worried about their debt.

Some people drink and gamble. They loose all their property in gambling. Then they commit suicide after they have lost everything." It is clear from the women's comments that economic concerns related to suicide are tied up with the male vs. female work imbalance in Jumla society and alcoholism.

Educational Stress

Educational stress was mentioned as a potential cause for suicide with "people harm[ing] themselves when they fail in studies." N.B.M. explained further: "Some young people commit suicide if they fail in exams and feel embarrassed that his or her friends have moved ahead and he or she lagged behind. They think their dreams are not fulfilled." The women emphasized that educational stress was more relevant to male suicide than female suicide. Yet, N.M. explained that women might be more susceptible to the effects of educational stress if they are not yet married: "Women who are not married sometimes kill themselves if they fail in [school leaving certificate] examinations."

Mental Health Issues

Mental health, or heart-mind, issues were rarely mentioned as a cause for suicide.

N.B.M. said that "[s]ome people are not fine in their mind and commit suicide" and N.M. explained one female suicide by saying that the woman was "not mentally fit in her mind."

Both helplessness and frustration were cited as mental states that could lead to suicide.

A.B.K. said that "[i]t must be the helplessness that they feel in their heart-mind which makes them [commit suicide]. They have fights and conflict and they feel like it's better to die than live." Others pointed to frustration as an impetus to commit suicide. For instance, N.B. discussed how frustration could upset one's mental balance and lead to suicide:

When people are frustrated [with] their circumstances they try to harm themselves. ... The kind of frustration that one feels when things don't go as one has planned or wished... Frustration like the feeling that they have when their farm doesn't yield good harvest. They feel like they do not want to work on their farm anymore. They feel frustrated when their goals are not met.

Another woman said that she "heard that some people when they have fights tell the other party to die and the other party kills himself or herself out of frustration" (N.M., age 35). Interestingly, none of the women mentioned extreme sadness/depression as a cause for suicide.

b) Impulsivity in suicide

The theme of impulsivity was highly pervasive when the women talked about the circumstances surrounding a suicide. Impulsivity in suicide is defined as suicide as a result of a fight, reaction toward an incident of domestic violence, alcohol or drug abuse,

or accidental overdose to draw attention. It does not include suicide as a result of depression.

The most frequent reason cited was a suicide attempt following a fight. One interviewee said, "a lot of people commit suicide...some people have fights ... and kill themselves" (A.C.D., age 43). The women said that following a fight, a man or woman may feel so frustrated and overwhelmed that they jump into the nearby river, take poison, or hang themselves. S.U.K. told a story about two women who were married to the same man. They had a fight and "both of them jumped into the river... The river was flooding and it took them both away."

The relationship between frustration and suicide was especially salient for men. For instance, the interviewees discussed how men's "hot anger" could lead to fights and subsequent alcohol abuse. If something "happens while they are drunk they kill themselves." For instance, N.M. said that there was a recent incident where a drunken man fought with his wife and killed himself by jumping into a nearby river. Several women discussed how "hot anger" amongst men could lead to suicide. Without the ability to regulate their emotions, men may do rash things that lead to suicide. R.K. expressed this concept of "hot anger" as "high blood pressure." She said that there are "foolish men who have high blood pressure. They do not have power to tolerate things. So they commit suicide. They beat their wives and hang themselves. They maim their wives." Again, these stories reflect impulsivity and lack of a suicide plan.

A common story repeated amongst the women was of a woman committing suicide by accident. A woman tries to get attention from her husband or threaten her husband after a fight by taking poison. Yet, without knowledge of the toxicity of the

poison or lacking proper health care, the woman dies. N.M. described a typical situation that could result in suicide:

Women suffer a lot... They feel like if they take a small amount [of poison] nothing will happen but if they take an overdose they will die of the poison... Sometimes they are cured in the hospital...Some people do it without being serious about it. They think that they would not die...Women try to threaten the men and attempt suicide without meaning to kill themselves.

Stories such as these reflect a lack of foresight in relation to a "suicidal" attempt.

Frustration, anger, lack of foresight due to alcohol abuse, and the need for attention may all lead to impulsive suicidal attempts that may result in suicide completion.

c) Speculation of family involvement in suicide

Often when the women discussed the circumstances surrounding a suicide, they mentioned the potential or suspected role of family in causing the suicide. The women echoed a belief that family members could cause such extreme distress as to lead someone to suicide. Often, they said, family members try to hide a suicide because of a fear that they will be blamed for the death because this belief is so prevalent in society. For instance, women shared the view that "if there was a fight before the person committed suicide, [the family will] try to hide [the suicide] because of the fear of being charged for the person's death." This distrust of the family leads to long-standing suspicions and skepticism of the family of an individual who committed suicide.

In particular, there was suspicion of in-laws in the case of a female suicide. One woman described the typical order of events following a married woman's suicide:

When a woman kills herself her parents come and investigate the incident. Sometimes they hit the women's husband's family with stones and ask why they killed their daughter. The husband's family usually says that they didn't do anything. She killed herself. If the maternal home of the woman is not convinced the issue prolongs for a long time.

While the women said that this suspicion does not lead to poor treatment of the husband and in-laws, they did say that there exists a lasting sense that the family must have had some sort of involvement. In general, in relation to both male and female suicide, the women felt that although the community will not treat the family differently, "people [will still] speculate that the family must have tortured the person or must have done something to him or her" that led to suicide" (M.A., age 26).

d) Reactions toward suicide

In general, the women felt that people who commit suicide are "foolish". There was a general belief that people should "struggle" through life rather than give up prematurely. The typical attitude was that people only get "one chance to live" so why sacrifice the opportunity. One woman went as far to say that people in Jumla "are going to die of pain anyway why ... kill yourself" (S.U., age 40).

A couple of the women referenced religious beliefs as a reason not to commit suicide. N.B.M. explained: "You get a human life after passing 84 other lives. Why do you need to kill yourself?" However, reactions to suicide as it related to religious beliefs did not dominate the field of responses. Most of the women believed that although people commit suicide to escape their situations, they could have "found a solution to [their] problems". For instance, A.B.D. explained her reaction when someone commits suicide:

I wonder why they have to hang themselves. They waste their lives. If it is difficult for them to live in that house they can go live in other house. They can find another husband and go live with him. If they had a forced marriage and didn't like the husband they can simply find another man. Why do they need to hang

themselves?

Women said that people in the community would offer to help a suicidal person, particularly a woman, by finding them an alternate solution to her problems. However, most of the women recognized that it is hard to discern if someone is going to commit suicide so it is often difficult to take advance preventative measures.

One woman emphasized that the suicide of a woman is more significant than the suicide of a man. M.A. spoke personally about her sister-in-law's suicide:

If a father dies it doesn't affect children that much but when a mother dies it affects children very much. Her children are in deep grief. Her husband won't stop living with that woman just because she killed herself. He will live his own life. What did she get by dying? I think it's a waste to die. It is better to struggle than waste your life by committing suicide.

While other women did not express this sentiment, most women spoke only about female suicides (even when asked about suicide in general) and how these suicides affect the family.

The five major themes that emerged from the women's in-depth-interviews depict a rich landscape of the thoughts, perceptions, and emotions of women in Jumla. Their views on mental health issues, economics, education, domestic issues, differential gender impacts and suicide paint a vivid picture of the intricacies of female life and the struggles that they face daily. Through an understanding of these themes, one can begin to concentrate on mental health programming aimed at improving well-being and reducing female suicides in Nepal.

Chapter 4: Discussion, Conclusion and Recommendations

Discussion

The goals of the study were to explore a) how the roles of different sociocultural factors (such as marital relationships, social supports, and female roles in society) effect women's mental health b) women's beliefs and attitudes about suicide and c) contributing factors toward committing suicide. The study was part of a larger, longitudinal study started in 2000, with an additional data point in 2007. Women were selected to participate in the current qualitative study based on changes in their Beck Depression Inventory (BDI) scores collected in 2007 and 2011 - half with increasing depression scores over time and half with decreasing depression scores over time. Both in-depth interviews and case studies were used to approach the research questions.

The two case studies revealed how mental health issues, economics, education, domestic issues, differential gender impacts and suicide affect women in Nepal. The women noted marital problems as a particular issue negatively affecting their mental health. This is substantiated by other studies, which found that marital problems play a much larger role in suicidal ideation in Asia than it does elsewhere in the world (Khan, 2002). In particular, the studies highlight how the accumulation of societal stressors could lead to suicidal ideation and eventual suicidal attempts and completion. This is consistent with the social stress model of suicide, which claims that suicide is a social problem rather than a problem caused by mental illness (Phillips, Liu, & Zhang, 1999). These social stressors, such as marital issues, economic problems, and gender inequality can accumulate and lead to suicide.

Based on the in-depth interviews, six dominant themes emerged as highly salient to

women's mental health and their beliefs and perceptions about suicide: 1) mental health issues (including depression/sadness and anxiety/worries); 2) economics; 3) education;
4) domestic issues (including domestic strife and alcohol abuse and love vs.
arranged/captured marriage); 5) differential gender impacts (including personal attitudes and community response toward child gender and male vs. female work balance); and 6) suicide (including reasons for committing suicide, impulsivity in suicide, speculation of family involvement in suicide, and reactions toward suicide).
These six themes intersect to provide a complex picture of the female experience in Jumla and how different sociocultural factors affect female mental well-being and in some cases, lead to suicidal ideation and attempts. The interaction between these themes will be discussed later in the chapter after a review of the study's findings.

Women commonly discussed sadness, hopelessness, and inadequacy, with three particular influences on sadness referenced most often: economic conditions, inability to acquire/provide education, and marriage. These issues were also highlighted as sources of sadness among women in Jumla in both ethnographic and epidemiologic research by Kohrt et. al. (Kohrt, et al., 2005; Kohrt & Worthman, 2009). It is unsurprising that these three factors were most notable. They reflect gender inequality, which has been shown to contribute to women's risk for depression in LMIC (Ali, et al., 2009). Findings about the harsh effects of economic conditions on mental wellness were consistent with results from Das et. al. who found that gender was a risk factor for poor mental health even when controlling for poverty (Das, Do, Friedman, McKenzie, & Scott, 2007). This may be related to cultural limitations against women making economic decisions in the household. Without access to financial resources and control over financial decision-

making, women feel the accruing stresses of providing for their families and often must sacrifice vital resources to keep food on the table.

Findings about the relationship between lack of access to education and sadness were consistent with findings from Kohrt et. al. (Kohrt, et al., 2005). Without education, women felt that their ability to advance in society was stymied and they were perpetually stuck in their unfortunate situations. Deprivation of education was found to be a principle reason why many girls joined the Maoist army in Nepal (Kohrt, Tol, Pettigrew, & Karki, 2010). The current study also found that marriage was a principle cause for sadness, with the action of leaving one's maternal home being especially traumatic for women. This is consistent with findings from Desjarlais (1991) who found that Yolmo women in Nepal have particular songs of sorrow related to marriage and leaving their parents' homes (Desjarlais, 1991, 1992). Additionally, it is consistent with findings from other studies conducted in LMIC which find that women are significantly affected emotionally by difficult marital relationships (Lee & Klienman, 2000; Vijayakumar & Thilothammal, 1993). Marital relationships are the central unit within the community and it is almost unheard of for a marriage to dissolve in a Nepali context. Therefore, marital problems are inescapable, leaving women feeling trapped and despondent.

Like findings from other Nepali psychological anthropology studies, the women did not use the term "depression" to describe these emotional states. Kohrt and Hruschka (2010) found that the general Nepali population poorly understood the English term "depression", a term commonly used by Nepali health professionals (Kohrt & Hruschka, 2010).

Anxiety/worry was a highly prevalent concept among the women interviewed in the

study. This is consistent with studies finding a high prevalence of anxiety among women in Nepal, with women in Jumla having greater than two times the anxiety levels of men (Kohrt & Worthman, 2009). The difference in anxiety levels between men and women in Nepal is among the highest gender differences in anxiety in the world (Kohrt & Worthman, 2009). The current study found that women who have become more depressed over time talked about their worries/anxieties significantly more than women whose have become less depressed over time. The overlapping aspects of depression and anxiety highlight how depression can affect perception and highly impact quality of life. These findings are consistent with Cognitive Behavior Therapy in which less cognitive reports of worried thoughts are associated with improvements in depression (Beck, 2011).

Health was found to be a primary source of anxiety/worry in this study, consistent with findings from other studies, which found health to be a primary source of anxiety amongst women (Kohrt, et al., 2005; Kohrt, et al., 2009). Additionally, worry over child gender was found to be a source of anxiety. Studies have found similar gender preference in India (Mahalingam, Haritatos, & Jackson, 2007; Mahalingam & Jackson, 2007), with high endorsement of masculinity in society having negative mental health consequences for women (Mahalingam & Jackson, 2007).

Economics were also shown to be a major source of anxiety amongst women and serve as a primary focus within the community. There were no significant differences in the perception and expression of economic difficulties between women who earned more per month and women who earned less. This is not reflected in the literature, but may be related to the cultural limitations in financial decision-making hypothesized above.

Another factor may be that economic concerns in this context appear to be unrelated to 'relative' poverty in Jumla but rather related to a perception that everyone is too poor to meet their needs.

Education served as a major focus for the women, with women mentioning education in the context of regret toward not receiving additional education, worry/desire to provide children with education, and the relationship between economics and education. All of the women felt they did not have enough education, or weren't treated like they were educated. Similar to poverty, it is not a relative lack of education, but perception that all women need more education and to be treated as if they are educated. Findings from Kohrt et. al. support this finding (Kohrt, 2009). In that study a Nepali teenage girl explains her parent's response to her request to go to school. Her mother said "Is an elephant big because he studies?" (Kohrt, 2009). Even when a girl is educated in the community, they do not receive the recognition typically earned by men through education acquisition. Women in the current study had more hope for future generations and their abilities to acquire education and progress in society. This connection between education and progress is substantiated in the literature, which shows that more education has been shown to be related to having less children (LeVine, 2006), one way to increase health and economic conditions.

Domestic issues, such as domestic strife and alcohol abuse, were highly salient for the women. Both domestic strife and alcohol abuse were frequently cited as causes for depression, anxiety, inadequacy, and suicide. Another study had similar findings, with husband's alcohol consumption, which often leads to domestic violence, making women more vulnerable to mental health disorders (Kohrt, et al., 2009). Interestingly, many of

the reasons women cited for feeling sadness, hopelessness, and inadequacy (poverty, lack of education, and domestic abuse/spouse's alcoholism) are the same reasons women cited for joining the Maoists in the Nepali Civil War (Gautam, Banskota, & Manchanda, 2001; Kohrt et al., 2010; Pettigrew & Shneiderman, 2004; Sharma & Prasain, 2004).

In the current study sample, the majority of women described experiencing some form of domestic strife or violence – from verbal to physical abuse. The central role of domestic strife and violence in the conversation about women's mental health is reflected in the literature as well. Studies have found rates as high as half of the female population in India experiencing domestic violence (Jejeebhoy, 1998), with ample evidence showing an association between domestic violence and mental health issues amongst women (Ali, et al., 2009; Fischbach & Herbert, 1997; Garcia-Moreno, et al., 2005). Women who experience such physical and emotional violence feel like they have no escape in a patriarchal society, which views these acts as acceptable (Khan, 1998).

Study results pointing to alcohol as a source of domestic strife and mental health problems among women is reflected in findings from other studies conducted in South Asia and Nepal (M. Koenig, et al., 2004; Kohrt & Worthman, 2009). This is similar to findings from a study conducted in Nepal that found that among young married men and women, husband's use of alcohol was the most commonly mentioned factor related to domestic abuse (Puri, et al., 2010). The dramatic increase in alcohol abuse among men has been an unfortunate byproduct of modernization in Asia (Patel et al., 2007).

Although women frequently discussed love and arranged/captured marriages, no significant differences in mental well-being were found between women who had love marriages vs. women who had captured/arranged marriages. This is contrary to previous

studies that found a positive association between depression and arranged marriage (Ali, et al., 2009).

Most women expressed a personal indifference toward child gender; however, all of the women agreed that society showed a definite preference toward male children. They discussed celebrations that occurred following the birth of a boy in juxtaposition to communal disdain toward a woman who has many female children. This attitude is evident from past studies which found similar cultural attitudes toward child gender in Nepal and elsewhere in South Asia (Law & Liu, 2008; Niaz & Hassan, 2006). It remains unclear why the personal attitudes of the women in the study were so divergent from the perceived communal attitudes toward child gender.

Women talked extensively about the "male vs. female work balance" in their community, with women feeling like they do the majority of the work in their households. Younger women talked more about the work imbalance than older women, and expressed greater discontent over the imbalance. Older women felt like it had been this way for years and that they actually suffered less than women before them, and this is consistent with household surveys that demonstrated decrease in the gender disparity in work from the 1980s to late 1990s (Cooke, 2000). This is similarly reflected in age differences found in women related to feelings of sadness, hopelessness, and inadequacy. For younger women, work imbalance seems to be paramount to their mental well-being. Similar to other aspects of female mental health mentioned earlier, gender imbalance was emphasized by the Maoists to recruit supporters. Male unemployment was cited as a major issue in the community leading to an increased burden on women. Other South Asian countries have also seen an increase in male unemployment, attributed to the

economic developments of modernization that may negatively affect rural communities (Patel, et al., 2006).

For both men and women, common reasons for committing suicide were domestic issues, male alcoholism, economic concerns and educational stress, with mental health issues rarely mentioned as a cause of suicide. This is supported by literature from China and India, that shows that cultural stressors and domestic violence, rather than depression or other mental health disorders, play a greater role in suicidal risk (Ahmed & Zuberi, 1981; Lee, et al., 2007; Pradhan, et al., 2010; Vijayakumar, et al., 2005).

Overall, domestic issues and male alcoholism were cited as the primary causes of suicide amongst both men and women, with physical and emotional abuse, polygamy/extramarital affairs, and marital choice most often cited. These results are consistent with studies that found a strong relationship between domestic violence and suicidal behavior among women (Gururaj, et al., 2004). In a study conducted in Nepal, husbands were noted as the "predominant contributor" to female suicides (Pradhan, et al., 2010), with husbands being a source of verbal and physical abuse.

Polygamy/extramarital affairs as a cause for suicidal behavior have also been described in China (Phillips, et al., 1999). This is reflective of the social stress model of suicide, which views suicide as a social problem rather than a problem caused by mental illness (Phillips, et al., 1999). Polygamy and extramarital affairs can be viewed as a type of emotional abuse.

Findings about the relationship between educational stress and unfulfilled dreams and suicide are consistent with previous research findings, which found high rates of suicide among young adults due to academic pressures and shame associated with failure.

It is also consistent with a study which found that "unfulfilled dreams", especially failing the SLC, was seen as one of the most traumatic experiences of one's life (Kohrt et al., 2011). Finally, marital choice was cited as a cause for suicide, a finding validated in a study demonstrating that sometimes women chose suicide when prevented from marrying the man of their choice (Vijayakumar & Thilothammal, 1993).

Impulsivity was found to be a highly prevalent issue when the women talked about the circumstances surrounding a suicide. Suicides following fights and times of frustration were said to be most common. This finding is consistent with data that shows that individuals with impulsive disorders are at much greater risk for suicide than individuals with depression, especially in LMIC (Nock, Hwang, Sampson, & Kessler, 2010). The connection between poison and impulsivity was clear from this study and has been discussed thoroughly in the literature about suicide in South Asia (Joseph, et al., 2003; Phillips, Li, et al., 2002). Women in the current study discussed cases of suicide where a woman tried to get her husband's attention or threaten her husband after a fight by taking poison. Without knowledge about the toxicity of poisons and/or adequate medical care (Eddleston & Phillips, 2004), they may die from the impulsive attempt. This is similar to finding from the MMM Study 2008/2009 which found that many women who ingested pesticides did so to threaten their husbands and families and often did not fully understand the lethality of their actions (Pradhan, et al., 2010). This type of act is consistent with "instrumental suicidal behavior" where someone engages in an act or makes claims that they are going to commit suicide in order to gain attention or other support, but the person does not intend to die (Oquendo, et al., 2003).

All of the women cited speculation of family involvement in female suicides and

subsequent suspicion of cover-ups conducted by the deceased's family. Nepali law dictates that family members of an individual who has completed suicide may be fined, inhibiting family members from reporting attempted or completed suicides. This is similar to the situation in China and India (Gajalakshmi & Peto, 2007; Gunnell, et al., 2007).

In general, women felt that individuals who commit suicide are foolish and that those individuals should have struggled through life rather than give up prematurely. There is no research to date that looks at female perceptions of suicide in LMIC. The participants' attitudes seem to be reflective of a religious environment which views suicide as disrespectful to the body and life that is considered holy.

Based on the results from the current study as well as consistent findings from other studies, a model has been developed to explain how societal factors affect female mental health and suicide in Jumla, Nepal. Figure 2 below presents a schematic of the interaction between the six dominant themes that emerged from the in-depth interviews and case studies. The sub-themes "love vs. arranged/captured marriage" and "education" are included under the heading "Societal Norms". The theme "economics" is relevant throughout the process to suicidal outcomes.

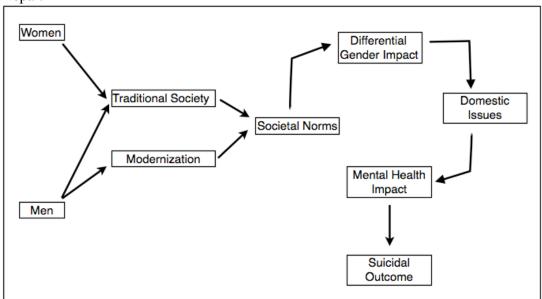


Figure 2. The effects of societal factors on female mental health and suicide in Jumla, Nepal.

Men and women in Jumla have different entry points into society. Women enter purely through traditional society, adhering to traditional roles and expected to maintain their traditional position in society. Men, on the other hand, enter through both traditional and modern societies. They maintain a belief that traditional societal roles are important to maintain in the home (especially in relation to their wife's role); yet, they also enter society through the lens of modernization – where they are no longer expected to work on their farms and have increasing access to alcohol and modern vices. This differential access to modernization, with the persistent application of traditional societal expectations on women, leads to women's ultimate mental health outcomes.

Traditional society and modernization effect societal norms in the community, such as who is expected to work the farm, take care of children and provide for the family, how marriages are established, and how education is distributed. These norms, which are traditional for women and a mix of traditional and modern for men, lead to a differential gender impact between men and women. Men, seeking employment outside

of the home (an aspect of modernization), are no longer expected to work on the farm. In fact, the process of modernization has transformed farm work into an almost purely female job. However, Jumla has yet to progress to the point of commercialization where there are ample jobs available to men who choose to work outside of the home, leaving women as the primary financial providers of the family.

Due to the shifting roles of men and women in society, men no longer play the customary role of family provider. With free time and a persistent belief that women are not equals, they spend much of their time hanging out with friends in the bazaar and consuming alcohol. Alcohol abuse as well as the debasement of typical manhood pillars result in domestic violence and strife. Subsequently, women experience sadness, depression and/or anxiety. The accumulation of such stresses may lead to suicidal ideation or suicidal attempts.

While the associations between mental health/suicide and modernization have been minimally explored in Asia, many researchers and theorists assume that development and modernization have a negative effect on mental health (Pradhan, et al., 2010). For instance, examples from China have shown that modernization has detrimental effects on traditional society, thereby increasing suicide rates (Law & Liu, 2008). And although working practices change rapidly with modernization, more traditional societal practices are not changing at the same pace (Pradhan, et al., 2010). In traditional societies experiencing transition, such as in Jumla, women are expected to preserve family and religious traditions in the face of modernization and increased expectations to fulfill domestic roles.

Strengths and Limitations

A main strength of the study is its longitudinal methodology. Based on longitudinal data, the researcher was able to identify women with increasing and decreasing depression over time. This allowed the collection of varied perspectives related to mental health and suicide. Additionally, the study also had a quantitative component, giving the researcher valuable background information on each participant, which made the interviews rich and deep. It also allowed for crucial rapport building time, as each participant was visited at least twice. Finally, the interviewer was from Nepal and was fluent in Nepali. As a woman, she was able to relate to the participants and put them at ease.

There were several limitations to the study. The researcher did not know Nepali and therefore, all interviews were conducted with the aid of a translator. Therefore, the researcher's verbal communication with the participants was conducted through a conduit, limiting rapport. Additionally, as all of the interviews were conducted in Nepali and translated to English for analysis, the interviews could not be evaluated in their original form. Finally, due to the close nature of families and communities in Jumla, there were often other individuals present during the interviews, possibly limiting the full disclosure of the participants.

Conclusion

Currently, more than 6 million Nepalese - 20% of the total population - have symptoms of mental health disorders (IRIN News, 2010a). Of particular concern is the rise of suicide in Nepali society, particularly amongst women. The Nepal Maternal

Mortality and Morbidity (MMM) Study 2008/2009 found that suicide was the leading cause of death amongst women of reproductive age (15-49). While the mental health situation in Nepal appears to be in urgent need of redress, mental health needs have been largely neglected, underreported and underfunded. Consequently, there is a dearth of data on mental health and suicide in Nepal, particularly amongst women.

While the association between suicide and mental health disorders in Nepal is still debatable, there is increasing acceptance for the growing role of cultural stressors on suicide. Many of the factors that may predispose a woman to mental health disorders or suicidal behavior are related to the status and treatment of women in Nepal. Women are commonly denied education, choice in marriage, economic independence, and reproductive independence, making them dependent upon their husbands for economic subsistence. The denial of basic rights and freedoms to women in Nepal "increas[es] their vulnerability to violence, injury and suicide" (Pradhan, et al., 2010).

Little is known about how specific factors interact to contribute to mental health issues and suicide amongst women in Nepal. The current study attempts to fill this gap in the literature by exploring how cultural stressors affect a women's mental health and how women perceive suicide in Nepal.

Implications/Recommendations

This study has several important programmatic and clinical implications. Women in this study, as well as previous studies, did not relate to or understand the term "depression". Clinically, it is important to utilize and employ local mental health terminology in order to a) relate to patients, b) understand what they are trying to express

and c) explain mental health conditions appropriately.

Additionally, mental health issues were not mentioned as a primary factor in committing suicide. Rather, a combination of sociocultural factors was found to influence suicidal behavior. The clinical and programmatic implications for this are significant. Treating depression alone will not reduce suicide attempts. Rather, in order to reduce suicide incidence, interventions must address domestic violence, alcoholism, and women's access to income and education. Due to the central role of men in affecting female mental health, these interventions should involve and target men as well as women.

Findings about the role of impulsive behavior in suicidal acts may be highly beneficial toward designing efficacious suicide intervention programs. The impulsive suicidal behavior commonly seen in Nepal is congruous with Borderline Personality Disorder and would best be treated with Dialectical Behavior Therapy (Linehan et al., 2006; Regmi, et al., 2004; Stanley, Brodsky, Nelson, & Dulit, 2007). Dialectical Behavior Therapy combines standard cognitive-behavioral therapy techniques with techniques derived from Zen Buddhist meditative practice, such as distress tolerance and mindful awareness (Palmer, 2002). Many of these techniques may be familiar to the local community and serve as a valuable way to reach the target population in a culturally appropriate manner.

Nepal is unique within the South Asian region. It has yet to undergo the same type of massive economic upheaval seen elsewhere in the region, which has affected suicide trends. Therefore, this is a prime opportunity to learn from other South Asian countries and preemptively institute cultural and communal institutions and safeguards to mental

health. Future research should explore suicidal beliefs and attitudes among women elsewhere in Nepal, in particular, in more urban locals.

References

- Aaron, R., Joesph, A., Abraham, S., Muliyil, J. P., George, K., Prassad, J., . . . Bose, A. (2004). Suicides in youbg people in rural southern India. *The Lancet*, *363*(9415), 1117-1118.
- Ahmed, S. H., & Zuberi, H. (1981). Changing pattern of suicide and parasuicide in Karachi. *Journal of Pakistan Medical Association*, 31, 76-78.
- Ajdacic-Gross, V., Weiss, M. G., Ring, M., Hepp, U., Bopp, M., Gutzwiller, F., & Rossler, W. (2008). Methods of suicide: international suicide patterns derived from the WHO mortality database. *Bulletin of the World Health Organization*, 86(9), 726-731.
- Ali, F. A., Israr, S. M., Ali, B. S., & Janjua, N. Z. (2009). Association of various reproductive rights, domestic violence and marital rape with depression among Pakistani women. *BMC Psychiatry*, *9*(77).
- Beautrais, A. L. (2006). Suicide in Asia. Crisis, 27, 55-57.
- Beck, J. (2011). *Cognitive behavior therapy: basics and beyond* (Vol. Second Edition). New York: The Guilford Press.
- Bertolote, J. M., Fleischmann, A., Butchart, A., & Besbelli, N. (2006). Suicide, suicide attempts and pesticides: a major hidden public health problem. *Bulletin of the World Health Organization*, 84(260).
- Bhat, M. (1991). Mortality from accidents and violence in India and China. Research report 91-06-1. Minneapolis: Center for Population Analysis and Policy, Humphrey Institute of Public Affairs, University of Minnesota.

- Bloom, D. E., Cafiero, E. T., Jane-Llopis, E., Abrahams-Gessel, S., Bloom, L. R., Fathima, S., . . . Weinstein, C. (2011). The global economic burden of non-communicable diseases. Geneva: World Economic Forum.
- Catalan, J. (1999). Mental health and HIV infection. In J. Catalan (Ed.), *Psychological and Psychiatric aspects*. London: Taylor & Francis.
- Cavanagh, J. T., Carson, A. J., Sharpe, M., & Lawrie, S. M. (2003). Psychological autopsy studies of suicide: a systematic review. *Psychological Medicine*, *33*, 395-405.
- Centers for Disease Control and Prevention. (2011a). Definitions: self-directed violence

 Retrieved March 2, 2012, from

 http://www.cdc.gov/ViolencePrevention/suicide/definitions.html
- Centers for Disease Control and Prevention. (2011b). Frequently asked questions: alcohol and public health Retrieved February 14, 2012, from http://www.cdc.gov/alcohol/faqs.htm heavyDrinking
- Central Intelligence Agency. (2011). Nepal. *The World Factbook* Retrieved September 11, 2011, from https://http://www.cia.gov/library/publications/the-world-factbook/geos/np.html
- Cooke, P. A. (2000). Changes in intrahousehold labor allocation to environmental goods collection:
- a case study from rural Nepal, 1982 to 1997. Washington, D.C.: International Food Policy Research Institute

- Das, J., Do, Q., Friedman, J., McKenzie, D., & Scott, K. (2007). Mental health and poverty in developing countries: revisiting the relationship. *Social Science and Medicine*, 65, 467-480.
- Desjarlais, R. R. (1991). Poetic transformations of Yolmo "sadness". *Culture, Medicine* and *Psychiatry, 15*(4), 387-420.
- Desjarlais, R. R. (1992). *Body and emotion: the aesthetics of illness and healing in the Nepal Himalayas*. Philadelphia: University of Pennsylvania Press.
- Dhakal, S. (2008). Nepalese women under the shadow of domestic violence. *The Lancet,* 371, 547-548.
- Eddleston, M. (2000). Patterns and problems of deliberate self-poisoning in the developing world. *QJM*, *93*(11), 715-731.
- Eddleston, M., & Phillips, M. R. (2004). Self poisoning and pesticides. *British Medical Journal*, 328, 42-44.
- Fischbach, R. I., & Herbert, B. (1997). Domestic violence and mental health: correlates and conundrums within and across cultures. *Social Science and Medicine*, *45*, 1161-1170.
- Gajalakshmi, V., & Peto, R. (2007). Suicide rates in rural Tamil Nadu, south India: verbal autopsy of 39,000 deaths in 1997-98. *Psychiatric Epidemiology, 36*, 203-207.
- Garcia-Moreno, C., Jansen, H., Ellsberg, M., Heise, L., & Watts, C. (2005). WHO multicountry study on women's health and domestic violence against women: initial results on prevelence, health outcomes and women's responses. Geneva: World Health Organization.

- Garcia-Moreno, C., Jansen, H. A. F. M., Ellsberg, M., & Watts, C. (2006). Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence. *The Lancet*, *368*, 1260-1269.
- Garcia-Moreno, C., & Watts, C. (2011). Violence against women: an urgent public health priority. *Bulletin of the World Health Organization*, 89(1).
- Gautam, S., Banskota, A., & Manchanda, R. (2001). Where there are no men: women in the Maoist insurgency. In R. Manchanda (Ed.), *Women, War and Peace in South Asia: Beyond Victimhood to Agency*. New Delhi: Sage Publications.
- Goldberg, D. P., & Huxley, P. (1992). *Common mental disorders: a bio-social model:*Tavistock/Toutledge.
- Gunnell, D., Do, D. D., & Murray, V. (2004). Medical management of deliberate drug overdose a neglected area of suicide prevention? *Emergency Medical Journal*, 21(2), 268.
- Gunnell, D., & Eddleston, M. (2003). Suicide by intentional ingestion of pesticides: a continuing tragedy in developing countries. *International Journal of Epidemiology*, 32(6), 902-909.
- Gunnell, D., Eddleston, M., Phillips, M. R., & Konradsen, F. (2007). The global distribution of fatal pesticide self-poisoning: systematic review. *BMC Public Health*, 7(357).
- Gururaj, G., Isaac, G., Isaac, M. K., Subbakrishna, D. K., & Ranjani, R. (2004). Risk factors for completed suicide: a case-control study from Bangalore, India. *International Journal of Injury Control and Safety Promotion, 11*, 183-191.

- Hennink, M., Hutter, I., & Bailey, A. (2011). *Qualitative research methods*. Los Angeles: Sage Publications.
- Hetrick, S. E., Purcell, R., Garner B., & R., P. (2010). Combined pharmacotherapy and psychological therapies for post traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*(7).
- HMG-CBS. (2003). Census Results-2001. Kathmandu, Nepal.
- Indexmundi. (2010a). India GDP real growth rate Retrieved January 17, 2012, from http://www.indexmundi.com/india/gdp_real_growth_rate.html
- Indexmundi. (2010b). Nepal GDP real growth rate Retrieved January 17, 2012, from http://www.indexmundi.com/nepal/gdp_real_growth_rate.html
- Investopedia.com. (2012). Human development index HDI Retrieved March 2, 2012, from http://www.investopedia.com/terms/h/human-development-index-hdi.asp-axzz1nzgzULh3
- IRIN News. (2010a). Nepal: Mental health care neglected Retrieved February 9, 2011, from http://www.irinnews.org/report.aspx?Reportid=91490
- IRIN News. (2010b). Nepal: Why are so many women killing themselves? Retrieved February 9, 2011, from http://www.irinnews.org/report.aspx?Reportid=87823
- Jacob, K. S. (2008). The prevention of suicide in India and the developing world: the need for population-based strategies. *Crisis*, *29*(2), 102-106.
- Jejeebhoy, S. (1998). Wife-beating in rural India: a husband's right? evidence from survey data. *Economic and Political Weekly 33*, 855-862.
- Jeyaratnam, J. (1985). Health problems of pesticide usage in the third world. *British Journal of Industrial Medicine*, 42, 505-506.

- Joseph, A., Abraham, S., Muliyil, J. P., George, K., Prasad, J., Minz, S., . . . Jacob, K. S. (2003). Evaluation of suicide rates in rural India using verbal autopsies, 1994-9. *British Medical Journal*, 326, 1121-1122.
- Khan, M. (1998). Suicide and parasuicide in Pakistan. *Journal of Crises International* and Suicide Prevention, 19, 148-151.
- Khan, M. (2002). Suicide on the Indian subcontinent. Crisis, 23(3), 104-107.
- Kim, W. J., & Singh, T. (2004). Trends and dynamics of youth suicides in developing countries. *The Lancet*, 363(9415), 1090-1091.
- Koenig, M., Lutalo, T., Zhao, F., Nalugoda, F., Kiwanuka, N., Wabwire-Mangen, F., . . . Gray, R. (2004). Coersive sex in rural Uganda: prevelence and associated risk factors. *Social Science and Medicine*, *58*(4), 787-798.
- Koenig, R. A., & Kohrt, B. A. (Writers). (2009). Returned: child soldiers of Nepal's Maoist Army. Watertown, Massachusetts: Adventure Production Pictures/Documentary Education Resources (DER).
- Kohrt, B. A. (2007). All in the mind: looking beyond just the physical scars of conflict

 Retrieved January 20, 2012, from

 http://www.nepalitimes.com/issue/355/GuestColumn/13680
- Kohrt, B. A. (2009). Vulnerable social groups in postconflict settings: a mixed methods policy analysis and epidemiology study of caste and psychological morbidity in Nepal. *Intervention*, 73, 239-264.
- Kohrt, B. A., & Hruschka, D. J. (2010). Nepali concepts of psychological trauma: the role of idioms of distress, ethnopsychology and ethnophysiology in alleviating

- suffering and preventing stigma. *Culture, medicine and psychiatry, 34*(2), 322-352.
- Kohrt, B. A., Jordans, M. J., Tol, W. A., Luitel, N. P., Maharjan, S. M., & Upadhaya, N. (2011). Validation of cross-cultural child mental health and psychosocial research instruments: adapting the Depression Self-Rating Scale and Child PTSD
 Symptom Scale in Nepal. *BMC psychiatry*, 11(1), 127. doi: 10.1186/1471-244X-11-127
- Kohrt, B. A., Jordans, M. J., Tol, W. A., Perera, E., Karki, R., Koirala, S., & Upadhaya,
 N. (2010). Social ecology of child soldiers: child, family, and community
 determinants of mental health, psychosocial well-being, and reintegration in
 Nepal. *Transcultural psychiatry*, 47(5), 727-753.
- Kohrt, B. A., Jordans, M. J., Tol, W. A., Speckman, R. A., Maharjan, S. M., Worthman,
 C. M., & Komproe, I. H. (2008). Comparison of mental health between former child soldiers and children never conscripted by armed groups in Nepal. *JAMA*300(6), 691-702.
- Kohrt, B. A., Kunz, R. D., Baldwin, J. L., Koirala, N. R., Sharma, V. D., & Nepal, M. K. (2005). "Somatization" and "comorbidity": a study of jhum-jhum and depression in rural Nepal. *Ethos*, *33*(1), 125-147.
- Kohrt, B. A., Kunz, R. D., Koirala, N. R., Sharma, V. D., & Nepal, M. K. (2002).
 Validation of a Nepali version of the Beck Depression Inventory. *Nepalese Journal of Psychiatry*, 2(4), 123-130.
- Kohrt, B. A., & Schreiber, S. S. (1999). Jhum-jhum: neuropsychiatric symptoms in a Nepali village. [Comment

- Letter]. Lancet, 353(9158), 1070.
- Kohrt, B. A., Speckman, R. A., Kunz, R. D., Baldwin, J. L., Upadhaya, N., Acharya, N. R., . . . Worthman, C. M. (2009). Culture in psychiatric epidemiology: using ethnography and multiple mediator models to assess the relationship of caste with depression and anxiety in Nepal. *Annals of Human Biology*, *36*(3), 261-280.
- Kohrt, B. A., Tol, W. A., Pettigrew, J., & Karki, R. (2010). Children and revolution: the mental health and psychosocial wellbeing of child soldiers in Nepal's Maoist army. In M. Singer & G. D. Hodge (Eds.), *The War Machine and Global Health* (pp. 89-116). Lanham, MA: Altamira Press: Rowan & Littlefield Publishers.
- Kohrt, B. A., & Worthman, C. M. (2009). Gender and anxiety in Nepal: the role of social support, stressful life events, and structural violence. *CNS Neuroscience and Therapeutics* 15(3), 237-248.
- Lamichhane, J. (2010). South Asia needs to root out mental health stigmas Retrieved

 December 16, 2011, from

 http://www.guardian.co.uk/commentisfree/2010/may/20/south-asia-mental-health-stigmas
- Law, S., & Liu, P. (2008). Suicide in China: unique demographic patterns and relationship to depressive disorder. *Current Psychiatry Reports*, 10, 80-86.
- Lee, S., Fung, S. C., Tsang, A., Liu, Z. R., Huang, Y. Q., He, Y. L., . . . Kessler, R. C. (2007). Lifetime prevalence of suicide ideation, plan, and attempy in metropolitan China. *Acta Psychiatrica Scandinavica*, *116*, 429-437.

- Lee, S., & Klienman, A. (2000). Suicide as a resistance in Chinese society. In E. J. Perry & M. Selden (Eds.), *Chinese society: change conflict and resistance*. London: Routledge Press.
- LeVine, S. (2006). Getting in, dropping out, and staying on: determinants of girls' school attendance in the Kathmandu valley in Nepal. *Anthropology and Education Quarterly, 37*(1), 21-41.
- Li, Z., Page, A., Martin, G., & Taylor, R. (2011). Attributable risk of psychiatric and socio-economic factors for suicide from individual-level, population-based studies: a systematic review. *Social Science and Medicine*, 72, 608-616.
- Linehan, M. M., Comtois, K. A., Murray, A. M., Brown, M. Z., Gallop, R. J., Heard, H. L., . . . Lindenboim, N. (2006). Two-year randomized controlled trial and follow-up of dialectical behavior therapy vs therapy by experts for suicidal behaviors and borderline personality disorder. *Archives of General Psychiatry*, 63(7), 757-766.
- London, L., & Bailie, R. (2001). Challenges for improving surveillance for pesticide poisoning: policy implications for developing countries. *International Journal of Epidemiology*, 30(3), 564-570.
- Mahalingam, R., Haritatos, J., & Jackson, B. (2007). Essentialism and the cultural psychology of gender in extreme son preference communities in India. *American Journal of Orthopsychiatry*, 77(4), 598-609.
- Mahalingam, R., & Jackson, B. (2007). Idealized cultural beliefs about gender: implications for mental health. *Social Psychiatry and Psychiatric Epidemiology*, 42, 1012-1023.

- Maselko, J., & Patel, V. (2007). Why women attempt suicide: the role of mental illness and social disadvantage in a community cohort study in India *Journal of Epidemiology and Community Health*, 62, 817-822.
- Mathers, C. D., & Loncar, D. (2006). Projections of global mortality and burden of disease from 2002 to 2030. *PLos Medicine/Public Library of Science*, *3*(11).
- Mayer, P., & Ziaian, T. (2002). Suicide, gender, and age variation in India: are women in Indian society protected from suicide? *Crisis*, *23*, 98-103.
- Mollica, R. F., Cardozo, B. L., Osofsky, H. J., Raphael, B., Ager, A., & Salama, P. (2004). Mental health in complex emergencies. *The Lancet*, *365*, 842-843.
- Mollica, R. F., Donelan, K., Tor, S., Lavelle, J., Elias, C., Frankel, M., & Blendon, R. J. (1993). The effect of trauma and confinement on functional health and mental health status of Cambodians living in Thailand-Cambodia border camps. *JAMA*, 270(5), 581-586.
- National Crime Records Bureau. (2000). Accidental deaths and suicides in India: Government of India.
- Niaz, U. (2003). Violence against women in South Asia. *Archives of Women's Mental Health*, 6, 173-184.
- Niaz, U., & Hassan, S. (2006). Culture and mental health of women in south-east Asia. *World Psychiatry*, 5(2), 118-120.
- Nock, M. K., Hwang, I., Sampson, N. A., & Kessler, R. C. (2010). Mental disorders, comorbidity and suicidal behavior: results from the National Comorbidity Survey Replication. *Molecular Psychiatry*, *15*(8), 868-876.

- Oquendo, M. A., Halberstam, B., & Mann, J. J. (2003). Risk factors for suicial behavior: the utility and limitations of research instruments. In M. B. First (Ed.), Standardized Evaluation in Clinical Practice (Vol. 22). Arlington: American Psychiatric Publishing, Inc.
- Palmer, R. L. (2002). Dialectical behavior therapy for borderline personality disorder. *Advances in Psychiatric Treatment*, 8, 10-16.
- Patel, V. (2007). Mental health in low- and middle-income countries. *British Medical Bulletin*, 81 and 82, 81-96.
- Patel, V., Araya, R., Chatterjee, S., Chisholm, D., Cohen, A., De Silva, M., . . . van Ommeren, M. (2007). Treatment and prevention of mental disorders in low income and middle income countries. *The Lancet*, *370*(9591), 991-1005.
- Patel, V., Saraceno, B., & Kleinman, A. (2006). Beyond evidence: the moral case for international mental health. *American Journal of Psychiatry*, 163(8), 1312-1315.
- Peden, M., McGee, K., & Krug, E. (2002). Injury: a leading cause of the global burden of disease. Geneva: World Health Organization.
- Penninx, B. W. J. H., Beekman, A. T., Honig, A., Deeg, D. J. H., Schoevers, R. A., van Eijk, J. T. M., & van Tilburg, W. (2001). Depression and cardiac mortality: results from a community-based longitudinal study. *Archives of General Psychiatry*, *58*(227).
- Pettigrew, J., & Shneiderman, S. (2004). Women and the Maobaadi: ideology and agency in Nepal's Maoist movement. *Himal South Asian*, 17(1), 19-29.
- Phillips, M. R., Li, X., & Zhang, Y. (2002). Suicide rates in China, 1995-99. *The Lancet*, 359, 835-840.

- Phillips, M. R., Liu, H., & Zhang, Y. (1999). Suicide and social change in China. *Culture, Medicine and Psychiatry*, 23, 25-50.
- Phillips, M. R., Yang, G., Zhang, Y., Wang, L., Ji, H., & Zhou, M. (2002). Risk factors for suicide in China: A national case-control psychological autopsy study. *The Lancet*, *360*, 1728-1736.
- Pradhan, A., Poudel, P., Thomas, D., & Barnett, S. (2010). A review of the evidence: suicide amongst women in Nepal. Kathmandu: National Health Sector Support Programme and Ministry of Health and Population.
- Prasad, J., Abraham, V. J., Minz, S., Abraham, S., Joseph, A., Muliyil, J. P., . . . Jacob, K. S. (2006). Rates and factors associated with suicide in Kaniyambadi Block, Tamil Nadu, south India, 200-2002. *International Journal of Social Psychiatry*, *52*(1), 65-71.
- Prince, M., Patel, V., Shekhar, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). No health without mental health. *The Lancet*, *370*, 859-877.
- PubMed Health. (2010a). Borderline personality disorder Retrieved March 15, 2012, from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001931/
- PubMed Health. (2010b). Conversion disorder Retrieved March 4, 2012, from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001950/
- PubMed Health. (2011a). Major depression Retrieved March 2, 2012, from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001941/
- PubMed Health. (2011b). Stress and anxiety Retrieved March 2, 2012, from http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0003695/

- Puri, M., Shah, I., & Tamang, J. (2010). Exploring the nature and reasons of sexual violence within marriage among young women in Nepal. *Journal of Interpersonal Violence*, 25(10), 1873-1992.
- Qin, P., Agerbo, E., Westergard-Nielsen, N., Eriksson, T., & Mortensen, P. B. (2000).
 Gender differences in risk factors for suicide in Denmark. *British Journal of Psychiatry*, 177, 546-550.
- Regmi, S. K., Pokharei, A., Ojha, S. P., Pradhan, S. N., & Chapagain, G. (2004). Nepal mental health country profile. *International Review of Psychiatry*, 16(1-2), 142-149.
- Rule of Law in Armed Conflicts Project. (2011). International treaties adherence: Nepal

 Retrieved December 16, 2011, from http://www.adh-geneva.ch/RULAC/international_treaties.php?id_state=152
- Sack, W., Clarke, G., Him, C., Dickason, D., Goff, B., Lanham, K., & Kinzie, J. D. (1993). A six-year follow up study of Cambodian refugee adolescents traumatized as children. *Journal of the American Academy of Child and Adolescent Psychiatry*, 32(2431-437).
- Saraceno, B., Ommeren, M. V., Batniji, R., Cohen, A., Gureje, O., Mahoney, J., . . . Underhill, C. (2007). Barriers to improvement of mental health services in low-income and middle-income countries. *The Lancet*, *370*, 1164-1174.
- Savin, D., Sack, W. H., Clarke, G. N., Meas, N., & Richart, I. (1996). The Khmer Adolescent Project: III. a study of trauma from Thailand's Site II refugee camp. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35(3), 384-391.

- Sharma, M., & Prasain, D. (2004). Gender dimensions of the People's War: some reflections on the experiences of rural women. In M. Hutt (Ed.), *Himalayan people's war: Nepal's Maoist rebellion* (pp. 152-165). Bloomington: Indiana University Press.
- Shidhaye, R., & Patel, V. (2010). Association of socio-economic, gender and health factors with common mental disorders in women: a population-based study of 5703 married rural women in India. *International Journal of Epidemiology*, 39, 1510-1521.
- Singh, S. (2004). Impact of long-term political conflict on population health in Nepal.

 Canadian Medical Association Journal/Journal de L'Association Medicale

 Canadienne, 171(12), 1499-1501.
- Singh, S. (2005). Nepal's war and conflict-sensitive development. *PLos Medicine/Public Library of Science*, *2*(1), e29.
- Singh, S., Sharma, S. P., Mills, E., Poudel, K. C., & Jimba, M. (2007). Conflict induced internal displacement in Nepal. *Conflict & Survival*, 23(2), 103-110.
- Stanley, B., Brodsky, B., Nelson, J. D., & Dulit, R. (2007). Brief dialectical behavior therapy (DBT-B) for suicidal behavior and non-suicidal self injury. *Archives of Suicide Research*, 11(4), 337-341.
- Subba, S. H., Binu, V. S., Menezes, R. G., Kanchan, T., Arun, M., Patil, R., . . . Rana, M.
 S. (2009). Pattern and trend of deliberate self-harm in western Nepal. *Journal of Forensic Sciences*, 54(3), 704-707.
- Suvedi, B. K., Pradhan, A., Barnett, S., Puri, M., Chitrakar, S. R., Poudel, P., . . . Hulton, L. (2009). Nepal maternal mortality and morbidity study 2008/2009: summary of

- preliminary findings. Kathmandu: Family Health division, Department of Health Services, Ministry of Health, Government of Nepal.
- The World Bank. (2012). How we classify countries Retrieved March 2, 2012, from http://data.worldbank.org/about/country-classifications
- Tol, W. A., Kohrt, B. A., Jordans, M. J., Thapa, S. B., Pettigrew, J., Upadhaya, N., & de Jong, J. T. (2010). Political violence and mental health: a multi-disciplinary review of the literature on Nepal. [Review]. *Social Science and Medicine*, 70(1), 35-44. doi: 10.1016/j.socscimed.2009.09.037
- Tol, W. A., Komproe, I. H., Thapa, S. B., Jordans, M. J. D., Sharma, B., & de Jong, J. T. V. M. (2007). Disability associated wth psychiatric symptoms among torture survivors in rural Nepal. *Journal of Nervous and Mental Disease*, 195(6), 672-679.
- UNICEF. (2012). Basic indicators Retrieved March 2, 2012, from http://www.unicef.org/infobycountry/stats_popup1.html
- United Nations Development Programme. (2010). International human development indicators Retrieved September 11, 2011, from http://hdr.undp.org/en/statistics/
- United Nations Development Programme. (2011a). Gender inequality index Retrieved March 27, 2012, from http://hdrstats.undp.org/en/indicators/68606.html
- United Nations Development Programme. (2011b). Inequality-adjusted human development index (HDI) Retrieved March 27, 2012, from http://hdr.undp.org/en/statistics/ihdi/
- United Nations Development Programme. (2011c). Life expectancy at birth (years)

 Retrieved March 27, 2012, from http://hdrstats.undp.org/en/indicators/69206.html

- United Nations Population Fund. (2007). Gender Equality and Empowerment of Women: UNFPA.
- Upadhyaya, K. D., & Pol, K. (1998). Suicide in Kaski District. *Journal of the Institute of Medicine*, 20, 137-145.
- USAID, New ERA, & Ministry of Health and Population. (2006). Nepal demographic and health survey. Kathmandu: Ministry of Health and Population, Government of Nepal.
- Vijayakumar, L., Nagaraj, K., Pirkis, J., & Whiteford, H. (2005). Suicide in developing countries: frequencies, distribution, and association with socioeconomic indicators. *Crisis*, 26(3), 104-111.
- Vijayakumar, L., Pirkis, J., Huong, T. T., Yip, P., Seneviratne, R. D. A., & Hendin, H. (2008). Socio-economic, cultural and religious factors affecting suicide prevention in Asia *Suicide and Suicide Prevention in Asia*: Department of Mental Health and Substance Abuse, World Health Organization.
- Vijayakumar, L., & Rajkumar, S. (1999). Are risk factors for suicide universal? a case-control study in India. *Acta Psychiatrica Scandinavica*, 99, 407-411.
- Vijayakumar, L., & Thilothammal, N. (1993). Suicide pacts in India. Crisis, 14, 43-46.
- Warman, D. M., & Beck, A. T. (2003). Cognitive Behavioral Therapy Retrieved March 15, 2012, from
 - http://www.nami.org/Template.cfm?Section=About_Treatments_and_Supports&template=/ContentManagement/ContentDisplay.cfm&ContentID=7952
- World Bank. (1993). World development report 1993: investing in health. New York:

 Oxford University Press.

- World Health Organization. (1999). Figures and facts about suicide. In World Health Organization (Ed.). Geneva.
- World Health Organization. (2003). The world health report 2003 shaping the future. Geneva.
- World Health Organization. (2008a). The global burden of disease: 2004 update.

 Switzerland: World Health Organization,.
- World Health Organization. (2008b). Suicide and suicide prevention in Asia. In H. Hendin, M. R. Phillips, L. Vijayakumar, J. Pirkis, H. Wang, P. Yip, D. Wasserman, J. M. Bertolote & A. Fleischmann (Eds.).
- World Health Organization. (2011). Maternal mental health & child health and development Retrieved December 7, 2011, from http://www.who.int/mental_health/prevention/suicide/MaternalMH/en/index.html
- World Health Organization. (2012). Global burden of disease Retrieved January 15, 2012, from http://www.who.int/topics/global burden of disease/en/
- Wright, C., Nepal, M. K., & Bruce Jones, W. D. A. (1989). Mental health patients in primary health care services in Nepal. *Asia-Pacific Journal of Public Health*, *3*(3), 224-230.
- Yang, G. H., Phillips, M. R., Zhou, M. G., Wang, L. J., Zhang, Y. P., & Xu, D. (2005).
 Understanding the unique characteristics of suicide in China: national psychological autopsy study. *Biomedical and Environmental Sciences (China CDC)*, 18, 379-389.

Yeh, J. Y., Xirasagar, S., Liu, T. C., Li, C. Y., & Lin, H. C. (2008). Does marital status predict the odds of suicidal death in taiwan? A seven-year population based study. *Suicide and Life-Threatening Behavior*, 38(3), 302-310.

APPENDIX

Acronym List

- **BAI** Beck Anxiety Inventory
- **DALY** Disability-adjusted life years
- **BDI** Beck Depression Inventory
- **CMD** Common mental disorder
- **DSM-IV** Diagnostic and Statistical Manual, Version IV
- **GNI** Gross national income
- **HDI** Human Development Index
- **IA** Proficiency Certificate (college level)
- LMIC Lower and middle income countries
- **MDD** Major Depressive Disorder
- **PTSD** Post-traumatic Stress Disorder
- **SES** Socio-economic status
- **SLC** School Leaving Certificate (high school level)
- WHO World Health Organization

Glossary

Anxiety – "a feeling of fear, unease, and worry; source of these symptoms is not always known" (PubMed Health, 2011b).

Borderline Personality Disorder – "a condition in which people have long-term patterns of unstable or turbulent emotions, such as feelings about themselves and others"; may lead to impulsive actions and chaotic relationships (PubMed Health, 2010a).

Common mental disorder – term used to describe a varied range of disorders characterized by anxiety and depressive symptoms "commonly encountered in community settings and whose occurrence signals a breakdown in normal functioning" (Goldberg & Huxley, 1992).

Cognitive Behavioral Therapy – "an empirically supported treatment that focuses on patterns of thinking that are maladaptive and the beliefs that underlie such thinking" (Warman & Beck, 2003).

Conversion disorder - "a condition in which a person has blindness, paralysis, or other nervous system (neurologic) symptoms that cannot be explained by medical evaluation"; symptoms may arise after a psychological trauma (PubMed Health, 2010b).

Depression – "mood disorder in which feelings of sadness, loss, anger, or frustration interfere with everyday life for weeks or longer" (PubMed Health, 2011a); symptoms

may include (but are not limited to) agitation, restlessness, fatigue, feelings of hopelessness and helplessness, feelings of worthlessness, self-hate and guilt, thoughts of death or suicide, and trouble sleeping or excessive sleeping.

Dialectical Behavior Therapy - combines standard cognitive-behavioral therapy techniques with techniques derived from Zen Buddhist meditative practice, such as distress tolerance and mindful awareness (Palmer, 2002).

Gross national income (GNI) – "the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the evaluation of output plus net receipts of primary income (compensation of employees and property income) from abroad; GNI per capita is gross national income divided by mid-year population" (UNICEF, 2012).

Grounded Theory – "the process of developing empirical theory from qualitative research" based on the principles of a circular data analysis, use of verbatim transcripts, the interconnectedness between data collection and analysis, inductive analytic concepts, reflexive memo writing, and analysis that goes beyond description to develop "explanatory frameworks and theory" (Hennink, Hutter, & Bailey, 2011).

Human development index (HDI) – tool developed by the United Nations to measure and rank a country's level of social and economic development; based on four criteria:

life expectancy at birth, mean years of schooling, expected years of schooling and gross national income per capita (Investopedia.com, 2012).

Instrumental suicidal behavior – describes a situation in which an individual engages in an act or makes claims that they are going to commit suicide in order to gain attention or other support, but the person does not intend to die (Oquendo, Halberstam, & Mann, 2003).

Lower and middle-income countries (LMIC) –lower income countries are those with a GNI of \$1,005 or less and lower middle-income countries are those with a GNI between \$1,0006-\$3,975 (The World Bank, 2012).

Post-traumatic stress disorder (PTSD) - anxiety disorder triggered by exposure to a traumatic experience; there are three main clusters of symptoms: those related to reexperiencing the event; those related to avoidance and arousal; and the distress and impairment caused by the first two symptom clusters (Hetrick, Purcell, Garner B., & R., 2010).

Suicide – "death caused by self-directed injurious behavior with any intent to die as a result of the behavior" (Centers for Disease Control and Prevention, 2011a).

Suicide attempt – "a non-fatal, self-directed, potentially injurious behavior with any intent to die as a result of the behavior" (Centers for Disease Control and Prevention, 2011a).

Suicidal ideation – "thinking about, considering or planning for suicide" (Centers for Disease Control and Prevention, 2011a)