Domestic violence and mental health in Bolivia

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Introduction

Over the past decade, there has been growing awareness that domestic violence is a problem that affects all countries and cultures. Data from standardized national surveys have revealed that the prevalence of domestic violence, including physical, sexual, and psychological violence, is very high in some regions. Countries in Latin America, including Bolivia, are said to have among the highest rates of domestic violence in the world (Bliss 2010; Ellsberg et al. 2008). While a substantial body of research shows that domestic violence is associated with physical health problems (Bliss, 2010; Diaz-Olavarrieta et al. 2009; Heise et al. 2002; Hindin, Kishor, and Ansara 2008; Pallito and O'Campo 2004; Parish et al. 2004; Population Reference Bureau and Interagency Gender Working Group, 2010), there is less research that focuses on its associate with mental health problems (Hegarty, 2011). Research on the mental health consequences of domestic violence is particularly scarce for developing countries (Fishbach and Herbert, 1997). This paper analyzes data from the 2008 Bolivia Demographic and Health Survey and aims to 1) examine how the prevalence of domestic violence varies across subgroups of married and cohabiting women, and 2) to examine the relationship between women's experiences with domestic violence and mental health. The results confirm that nearly 50% of women experienced domestic violence is the past year. Psychological abuse and a combination of both physical and psychological abuse are the particularly common type of abuse. Logistic regression analyses show that women who experienced only physical abuse are no more likely than women who did not report any abuse to have symptoms of mental health problems. However, women who experienced psychological abuse, or a

combination of psychological abuse and physical and sexual abuse are significantly more likely to have symptoms of mental health problems, even after controlling for other factors. Our findings indicate that domestic violence typically has a much larger impact on women's mental health than on their physical health, and that there is a need for programs that reduce domestic violence and for programs that address the mental health issues of victims of domestic violence.

Background

Definition and prevalence of domestic violence

The terminology used in the literature to describe domestic abuse varies from study to study. In many cases, the terms domestic abuse, intimate partner violence, domestic violence, and spousal violence are used interchangeably (Fishbach and Herbert, 2001; Hindin et al., 2008). Studies that use the term spousal violence may include married couples as well as couples who are living together or who are in other forms of non-marital unions. While the definitions of domestic violence also vary, a number of definitions emphasize that violence does not merely refer to physical or sexual acts, but that violence can also occur in psychological form. Furthermore, some definitions explicitly note that threats of harm also constitute violence. Two of the most commonly used definitions are those formulated by the United Nations and the World Health Organization. The 1993 United Nations General Assembly classified any act "that results in, or is likely to result in, physical, sexual, or psychological harm or suffering to women, including threats of such acts, coercion, or arbitrary deprivations of liberty, whether occurring in public or private life" as gender-based violence (cited in Fishbach and

Herbert 1997: 1162). WHO describes domestic violence as "any behavior within an intimate relationship that causes physical, psychological or sexual harm" (Hegarty, 2011; World Health Organization, 2005).

Although domestic violence is a problem that affects all parts of the globe, its prevalence varies substantially across regions and countries (Bott, Morrison and Ellsberg, 2005; Garcia-Moreno et al., 2005, 2006; Hindin et al. 2008). Data from standardized household surveys conducted by the World Health Organization between 2000 and 2003 found that the percentage of ever-partnered women who reported they ever experiencing either physical or sexual violence, or both ranged from a low of 15% in a major city in Japan and 24% in a city in Serbia and Montenegro to over 60% in selected provinces in Bangladesh, Ethiopia, and Peru (Garcia-Moreno et al., 2005, 2006). The Demographic and Health Surveys (DHS) also found wide variations in the percentage of currently married or cohabiting women aged 20-44 who ever experienced any physical or sexual violence by their current partner. For example, in the Dominican Republic, only 16% of women reported ever experiencing physical or sexual violence by their current partners, compared to 75% of women in Bangladesh (Hindin et al., 2008).

Data on recent physical and sexual violence show similar variations. The WHO surveys show that the percentage of women who experienced physical or sexual violence during the 12 months prior to the survey ranged from below 10% for major cities in Brazil, Japan, and Serbia and Montenegro (9%, 4%, and 4%, respectively) to over 30% in provinces of Bangladesh and Peru (32% and 34%), to as high as 54% in a province in Ethiopia (Garcia-Moreno et al., 2005, 2006). In most sites, there was overlap between physical and sexual violence. According to DHS data, the percentage of women who

reported experiencing physical or sexual violence by their current partner during the 12 months preceding the survey ranged from 10% in the Dominican Republic to 33% in Bangladesh (Hindin et al., 2008).

The WHO study also asked women whether their partner had engaged in emotional abuse (e.g., insulting them, belittling or humiliating them, intimidating or scaring them, or threatening to harm them). The percentage of ever-partnered women who reported that they ever experienced any such acts ranged from less than 20% in sites in Samoa to 75% in a province in Ethiopia. The percentage who experienced such events during the 12 months before the survey ranged from 12% in Samoa and urban Serbia and Montenegro to 58% in a province of Ethiopia (Garcia-Moreno et al., 2005, 2006). In addition, the WHO study revealed large variations in the percentage of ever-partnered women who reported that their partner had put constraints on their physical or social mobility. In a major city in Japan, 21% of women reported that their partner had engaged in one or more controlling behaviors, compared to nearly 90% in an urban site in Tanzania (Garcia-Moreno et al., 2005).

Domestic violence in Bolivia

The prevalence of domestic violence was found to be particularly high in several Latin American countries. The WHO study found that 49% of Peruvian women had experienced severe physical violence in their lifetime (Garcia-Moreno et al., 2006). A DHS analysis of Colombia found that 38% of women had been abused by a recent partner (Pallitto and O'Campo, 2004). In Bolivia, one DHS study found that 52% of women had experienced physical violence, and 14% had been the victim of sexual

violence (Hindin et al., 2008). Another study by Diaz-Olavarrieta et al. (2007) reported that 40% of Bolivian women admitted to experiencing intimate partner violence in the past year.

Correlates of domestic violence

The literature on domestic violence has shown that while the prevalence of domestic violence varies greatly, there are several factors that appear to increase the risk of violence by an intimate partner across countries (Abramsky et al. 2011). Several studies have noted that women who have low levels of education or a low socioeconomic status tend to be at higher risk of domestic violence (Abramsky et al., 2011; Hindin et al., 2008, Dalal and Lindqvist, 2010; ADD MORE REFS). Younger women also tend to have a significantly higher risk of experiencing domestic violence.

Although it is sometimes assumed that status differences within the relationship may increase the risk of domestic violence, analyses of the WHO multi-country data found that having an age gap of at least five years between partners only had a weak association with domestic violence, and the direction of the effect varied across countries (Abramsky et al. 2011). Moreover, while inequalities in the partners' level of education were a risk factor for domestic violence in several countries, the association was often weak, and the direction of the effect varied across sites (Abramsky et al., 2011; Flake and Forste, 2006).

Some studies have also suggested a relationship between cohabitation outside of marriage and risk for intimate partner violence. Specially, some studies argue that cohabiting women consistently have higher levels of domestic violence that married women (Brownridge and Halli, 2000; Flake and Forste, 2006). Hindin et al. (2008) also found that living in a cohabiting union was a risk factor for domestic violence in Rwanda and Zambia, but they found no effect in other countries, including Bolivia. There are several potential reasons why this relationship may not hold in Bolivia. Among the Andeans of Bolivia, cohabitation is typically not an alternative to marriage, but rather part of the marriage process. Andean marriage involves three main steps. The process typically starts with a lengthy period of cohabitation, during which the couple starts childbearing. This initial period, which can last up to three years, is followed by a civil wedding and a religious wedding, which is in turn followed by two or three days of wedding celebrations (Balan, 1996; Sanabria, 2011). Moreover, the Bolivian legislation against domestic violence (Law 1674) explicitly includes both marital and non-marital unions (Republic of Bolivia, 1995).

Some authors have suggested that the widespread occurrence of domestic violence in many Latin American countries may be related to the cultural concept of "machismo" (Flake and Forste, 2006). Machismo refers to the cultural expectation that men should be physically strong and sexually aggressive. Populations in which machismo is strong tend to be characterized by heavy alcohol use. Partner alcohol abuse has widely been found to be a strong predictor of domestic violence (Abramsky et al., 2011; Flake and Forste, 2006; Hindin et al., 2008; Koenig et al., 2003). In some countries, alcohol abuse by women is also a risk factor, but its effect tends to the smaller than that for men.

Data and Methods

This study analyzes data from the 2008 Bolivia Demographic and Health Survey (Coa and Ochoa, 2009), which contains data on a nationally representative sample of 16,939 women aged 15-49. Our analysis is restricted to those women who report they are currently married or in union, which reduced our working sample to 10,188 respondents. The 2008 BDHS questionnaire collected information on a wide range of health topics, including domestic violence and mental health. We use logistic regression analyses to assess the effect of exposure to domestic violence on mental health, after controlling for other factors.

The questionnaire includes nine questions relating to mental health. Seven of these questions are a subset of the Self Reporting Questionnaire 20 (SRQ-20), a mental health screening tool developed by the World Health Organization (WHO, 1994). The SRQ-20 has been used in numerous countries to screen for the presence of non-psychotic mental health disorders (Sattar, Salih & Jafri, 2010; Coêlho, Adair & Mocellin, 2004; Nakimuli-Mpungu et al., 2009; de Jong et al. 2008; Wutich & Ragsdale, 2008; Irmansyah et al., 2010; Bordin et al., 2008). Several studies have validated the SRQ-20 as a screening tool for psychological morbidity (Tuan, Harpham & Huong, 2004; Hanlon et al., 2008; Mazzoncini de Avedo-Marques & Zuardi, 2011; Harpham et al., 2003). The BDHS includes two additional mental health questions that were taken from the extended version of the Self-Reported Questionnaire, the SRQ-25. The SRQ-25 includes four additional questions aimed at identifying probable psychosis and one question that addresses epileptic fits, or convulsions. The SRQ-25 has also been used in many

countries to assess the presence of mental health disorders (Kinyanda, Hjelmeland & Musisi, 2005; Ramli et al., 1987; Abbo et al., 2009; Kinyanda et al., 2011).

The nine mental questions includes in the BDHS are directed at identifying four aspects of mental health: depression, anxiety, epilepsy, and psychotic disorders. To measure whether the respondent has symptoms of depression all respondents were asked whether they feel tired all the time, whether they cry easily, whether they have difficulty performing daily activities, and whether they find it difficult to make decisions. To identify whether the respondent has symptoms of anxiety disorders, all respondents were asked whether they often have headaches of great intensity at the nape of the neck, whether they feel fear for no apparent reason, and whether they are easily frightened. In addition, one question was used to assess whether the respondent had symptoms of psychotic disorders (" Do you hear voices that talk to you and that others do not hear?") and one question aimed to identify whether the respondent had symptoms of epilepsy ("Have you experienced convulsions or attacks with tongue-biting and loss of consciousness?).

The domestic violence module asked women whether their current partner engaged in any acts of physical, sexual, or psychological abuse towards them during the 12 months prior to the survey. To measure exposure to physical abuse, women were asked how often (one time, a few times, or often) in the last 12 months their partner had pushed or pinched them, beaten or kicked them, beaten them with an object, or tried to strangle or burn them. Exposure to sexual abuse was measured by asking women whether their partner forced them to have sexual relations against their will during the year prior to the survey. Exposure to psychological abuse was measured by asking the respondents how often their partner, in the past 12 months, had accused them of being unfaithful, had been jealous after she talked with a man, had attempted to limit her contact with her family, had humiliated or insulted her, had threatened to abandon her, had threatened to take away her children, had threatened to take away economic support, or had broken things inside the house.

Our indicator of exposure to domestic violence is a categorical variable that identifies which of the three types of domestic abuse the respondent experienced during the 12 months prior to the survey. Accordingly, respondents are classified as having not having experienced any domestic abuse, having experienced physical violence only, psychological abuse only, both physical and psychological abuse, sexual abuse (irrespective of other abuse), or all three types of abuse.

Our control variables include measures of the respondent's socioeconomic and demographic status, measures of her partner's socio-economic and demographic status, and indicators of exposure to domestic abuse in the respondent's parental household. Respondent characteristics include her age group, type of place of residence (rural vs. urban), marital status (married vs. cohabiting), region of residence, and socioeconomic status. The respondent's socioeconomic status was assessed by counting the number of amenities present in her household (flush toilet, car, motorcycle, refrigerator, bicycle, and radio). Respondents who reported living in households with none or one of these amenities were coded as low socioeconomic status, those who report having two to four amenities were coded as medium socioeconomic status, and women with five or six or of the amenities were classified as having a high socioeconomic status".

Controls for the partner's characteristics include his age group, the age difference between the respondent and her partner, partner's level of education, and the difference in the level of education between the respondent and her partner. To measure the extent to which the respondent may have been exposed to domestic abuse in her parental household, we include dichotomous variables that measure whether the respondent was slapped or had her ears pulled as a child (yes/no), whether she was beaten as a child (yes/no), and whether the respondent's father beat her mother (no vs. yes/don't know).

Table 1 about here

Table 1 describes the characteristics of the working sample of married and cohabiting women. Respondents were interviewed in all nine of Bolivia's departments. The weighted data show that most women lived in La Paz (29.2%), Santa Cruz (22.9%), Cochabamba (18.0%), and Potosi (10.2%). As anticipated, the sample has a fairly young age distribution. 17.1% of women sampled were between ages 15 and 24, 38.5% were between 25 and 34, 32.1% were between 35 and 44, and 12.4% were between 45 and 49. Over half of the women sampled (61.3%) lived in an urban area, but most women had a relatively low level of education. Around half of the women had attended primary school (51.4%), but only 28.3% had attended secondary school, and only 14.0% had attended university. Using our indicator of socioeconomic status, most women were classified as living in a household of medium socioeconomic status (52.6%) while 38.4% were characterized as having low socioeconomic status. Less than one in ten women (9.1%)

lived in a high socioeconomic status household. Most women reported that they were working at the time they were interviewed (66.6%).

Data on the characteristics of women's partners show that the large majority of women had a partner who was aged 25-34 (34.2%) or aged 35-44 (33.7%). Nearly half of all women (44.3%) reported that their partner was between one and five years older than themselves, while 26.7% reported that their partner was at least six years older. Data on the level of education of the women's partner shows that on average men tend to have somewhat higher levels of education than women: 36.0% of the male partners had secondary education, while 18.5% had university level education. Direct comparison of the respondent's level of education with that of her partner shows that 23.4% of women report having the same level of education as their partner. In over half of the couples (55%), the male partner has the highest level of education. Nevertheless, just over one in five women (22%) report that they have a higher level of education than their partner.

The third panel of Table 1 shows information about domestic abuse in the respondent's parental household. When respondents were asked whether their father beat their mother, only 46.1% denied that this happened. The remaining 51.9% of women either admitted that their father beat their mother or reported that they did not know whether this happened.

Results

Table 2 shows the percentage of married or cohabiting women who have experienced different types of domestic violence in the last 12 months, differentiated by socio-economic and demographic background characteristics. Overall, 47.0% of these

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women reported experiencing some type of domestic violence in the year prior to the survey. Specifically, 21.0% of women reported having experienced psychological abuse, and 15.3% reported having experienced both psychological and physical abuse. Only a small fraction of women (3.9%) reported that they only experienced physical abuse, and only 1.4% reported experiencing only sexual abuse. About one in 20 women (5.5%) reported experiencing all three types of domestic abuse (psychological, physical, and sexual).

Breakdown by type of place of residence shows that urban women are more likely than rural women to have experienced abuse (49.5% vs. 43.2%, respectively). Most of this difference appears to stem from the fact that urban women are more likely than rural women to have experienced psychological abuse (22.8% vs. 18.1%), and to have experience both psychological and physical abuse (16.0% vs. 14.1%). Urban women are also slightly more likely than rural women to report having experienced all three types of abuse (6.0% vs. 4.7%).

As anticipated, the percentage of women who reported experiencing domestic violence declines with level of socioeconomic status. The percentage of women who reported experiencing domestic violence in the past year decreases from 49.5% for women with a low SES, to 46.1% for those with a medium SES, and 41.7% for those who report having a high SES. High SES women are less likely than low SES women to report having experienced both psychological and physical violence (11.9% vs. 17.5%), less likely to have experienced only physical abuse (2.9% vs. 4.3%), and less likely to have experienced all three types of abuse (4.5% vs. 6.7%). The percentage of women who reported having experienced domestic violence increased from 43.2% for those with

no education to 51.9% for those with secondary education. However, women who attended higher education report the lowest levels of domestic abuse (41.4%). Women with higher education are least likely to have experienced physical abuse (2.6%), both psychological and physical abuse (12.4%), or to have experienced all three types of domestic abuse (2.6%). Table 2 further shows that women who are working are more likely than other women to have experienced domestic violence, but the difference is fairly small (47.8% vs. 45.5%).

The percentage of women who reported some form of domestic abuse during the 12 months prior to the survey varies by geographic region. The departments with the highest percentage of women reporting domestic violence are Laz Paz (48.6%), Santa Cruz (48.9%) and Beni (48.2%), while those with the lowest levels are Cochobamba (43.4%) and Tarija (44.9%). Beni, Cochabamba, and Oruro had the highest percentages of women reporting all three types of violence at 7.2%, 6.7% and 6.6%, respectively.

Consistent with other studies (Flake and Forste 2006; Hindin et al., 2008), Table 2 shows that levels of domestic violence vary with marital status. Specifically, the results indicated that 43.6% of married women reported abuse in the past year compared to 52.8% of cohabiting women. Cohabiting women reported higher levels of violence than married women for every category.

Reported levels of domestic abuse decreased with the respondent's age, from 51.6% for women aged 15-24, to 48.3% for women aged 25-34, to 44.5% for women aged 35-44 and to 43.3% for women aged 45-49. The decrease in domestic abuse with age appears to stem largely from the fact that older women are less likely than younger women who report having experienced both psychological and physical abuse.

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Table 2 also shows to what extent reported levels of domestic abuse vary according to the characteristics of her partner. The percentage of women who reported having experienced domestic violence decreases with the age of their partner. For example, 53.4% of women who were in union with a man aged under age 25 reported having experienced some kind of domestic violence. By contrast, only 44.3% of women in union with a man aged 45 or older reported experienced domestic abuse. Once again, this decline can be attributed in large part to a decline in the percentage of women reporting both psychological and physical abuse. The percentage of women who reported domestic abuse increased from 46.4% for women who are in union with an uneducated man, to 47.0% for those whose partner has primary education, and to 50.2% for those whose partner has secondary education. However, women whose partner has tertiary education report substantially lower levels of domestic abuse (41.0%). Women who have more education than their partner report higher levels of domestic abuse (50.6%) than those who have the same levels of education (44.3%) or less education than their male partner (46.8%).

Differences in socio-demographic status of the couples are also related to abuse, but the differences are not very pronounced. For example, among those women who are in a relationship with a man who is more than 10 years older than themselves, 43.8% report having experienced some type of domestic abuse in the past year. By contrast, among women who have a partner who is of the same age or who is younger, 48.1% report having such experiences. Similarly, 50.6% of women in a relationship with man who has a lower level of education than herself report having experienced domestic abuse, compared to 46.8% for women in a relationship with a man who has a higher level of education.

Table 2 about here

Table 3 shows the percentage of women who reported having experienced various physical and mental health outcomes, by type of domestic violence experienced. The first four outcomes are indicators of depression, the next three are indicators of anxiety, and the last two are indicators of psychotic disorders and epilepsy. The results show that the percentage of women who report having symptoms of depression varies according to their exposure to domestic violence. For example, among women who reported not experiencing any domestic abuse in the past 12 months, 49.8% report feeling tired all the time. This percentage is only slightly higher for women who reported experiencing physical abuse (52.6%), but considerably higher for those who experienced psychological abuse (56.1%) or who experience both physical and psychological abuse (57.2%). Women who experienced sexual abuse, or who experienced all three types of abuse are most likely to report feeling tired all the time (64.7% and 69.2%, respectively). The results for the other three indicators of depression (crying easily, having difficulty performing daily activities, and having difficulty making decisions) reveal a nearly identical pattern.

The percentage of women who report experiencing symptoms of anxiety (having feelings of fear without apparent reason, scaring easily, and having headaches of great

intensity) also varies depending on the respondent's exposure to domestic abuse in the past year. For example, 45.6% of women who report not being abused report having feelings of fear without apparent reason. This percentage increased to 47.7% for those women who experienced physical abuse and to 49.2% for those who experienced psychological abuse. Among women who report being sexually abused, 52.2% express having feelings of fear. The percentage who report having feelings of fear increased to 56.7% for women who experienced both psychological and physical abuse, and to 63.5% for those who experienced all three types of domestic abuse. Comparing the three indicators of anxiety, we observe that women did report not experiencing any domestic abuse and those who experienced only physical abuse have the lowest scores on each of the three anxiety indicators. Women who experience all three types of domestic abuse have the highest scores.

Table 3 further shows that percentage of women who reported having convulsions or attacks with tongue biting (an indicator of epilepsy), and the percentage who reported hearing voices that others do not hear (an indicator of psychotic disorders) are also associated with domestic violence. The percentage of women who report having convulsions or attacks with tongue biting is highest among women who experienced sexual abuse (12.5%) and those who experienced all three types of domestic abuse (13.3%). The percentage of women who reported hearing voices is highest among women who experienced sexual abuse (19.1%), and who experienced all three types of domestic abuse (26.6%).

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Table 3 about here

Table 4: Relative odds of having mental health problems, by experience with domestic violence and background characteristics

Discussion

References

Abbo et al., 2009

- Abramsky, Tanya, Charlotte Watts, Clauda Garcia-Moreno, Karen DeVries, Ligia Kiss, Mary Ellsberg, Henrica Jansen, and Lori Heise. 2011. What factors are associated with recent intimate partner violence? Findings from the WHO multi-country study on women's health and domestic violence. *BMC Public Health* 11: 109.
- Balan, Jorge. 1996. Stealing a bride: Marriage customs, gender roles, and fertility transition in two peasant communities in Bolivia. *Health Transition Review* (Supplement 6): 69-87.
- Bliss, Katherine. 2010. Gender based violence in Latin America. <u>http://www.smartglobalhealth.org/blog/entry/gender-based-violence-in-Latin-</u> <u>America/</u> [downloaded July 6, 2011].
- Bordin, Isabel, Cristiane Duarte, Clovis Peres, Rosimeire Nascimento, Bartira Curto and Cristiane Paula. 2008. Severe physical punishment: risk of mental health problems for poor urban children in Brazil. *Bulletin of the World Health Organization* 87: 336-344. (doi: 10.2471/BLT.07.043125).
- Bott, Sarah, Andrew Morrison, and Mary Ellsberg. 2005. Preventing and responding to gender-based violence in middle and low-income countries: A global review and analysis. *World Bank Policy Research Working Paper*, No. 3618. Washington, D.C.: The World Bank.
- Brownridge, D. A. and S. S. Halli. 2000. Living in sin and sinful living: Toward filling a gap in the explanation of violence against women. *Aggression and Violent Behavior* 5(6): 565-583.

- Coa, Ramiro and Luis Ochoa. 2009. Bolivia Encuesta Nacional de Demografia y Salud
 2008 (ENDSA 2008). La Paz, Bolivia: Ministerio de Salud y Deportes, Instituto
 Nacional de Estadistica.
- Coêlho, Angela, John Adair & Jane Mocellin. 2004. Psychological responses to drought in Northeastern Brazil. *Interamerican Journal of Psychology* 38(1): 95-103.
- Dalal, Koustuv and Kent Lindqvist. 2010. A national study of the prevalence and correlates of domestic violence among women in India. Asia Pacific Journal of Public Health (published online before print edition; doi: 10.1177/1010539510384499).
- de Jong, Kaz, Saskia van der Kam, Nathan Ford, Kamaline Lokuge, Silke Fromm, Renate van Galen, Brigg Reilley, and Rolf Kleber. 2008. Conflict in the Indian Kashmir Valley II: Psychological impact. *Conflict and Health* 2: 11. (doi: 10.1186/1752-1505-2-11).
- Diaz-Olavarietta, Claudia, Kate Wilson, Sandra Garcia, Rita Revollo, Kara Richmond, Francisco Paz, and Lorena Chavez. 2009. The co-occurrence in intimate partner violence and syphilis among pregnant women in Bolivia. *Journal of Women's Health* 18(12): 2077-86 [doi: 10.1089/jwh.2008.1258].
- Ellsberg, Mary, Henrica Jansen, Lori Heise, Charlotte Watts, and Claudia Garcia-Moreno. 2008. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: An observational study. *Lancet* 371(9619): 1165-72.

- Fehringer, J. and M. Hindin. 2008. Like child, like parent: Intergenerational transmission of partner violence in Cebu, the Philippines. *Journal of Adolescent Health* 44(4): 363-71 (doi: 10.1016/jadohealth.2008.08.012)
- Fishbach, Ruth and Barbara Herbert. 1997. Domestic violence and mental health: Correlates and conundrums within and across cultures. *Social Science and Medicine* 45(8): 1161-1176.
- Flake, Dallan and Renata Forste. 2006. Fighting families: Family characteristics associated with domestic violence in five Latin American countries. *Journal of Family Violence* 21(1): 19-29. (doi: 10.1007/s10896-005-9002-2).
- Garcia-Moreno, C., H. Jansen, M. Ellsberg, L. Heise, and C. Watts. 2005. WHO multicountry study on women's health and domestic violence against women: Initial results on prevalence, health outcomes and women's responses. Geneva: World Health Organization.
- Garcia-Moreno, C., H. Jansen, M. Ellsberg, L. Heise, and C. Watts. 2006. Prevalence of intimate partner violence: Findings from the WHO multi-country study on women's health and domestic violence. *Lancet* 368(9543): 1260-69.
- Hanlon, Charlotte, Girmay Medhin, Atalay Alem, Mesfin Araya, Abdulreshid Abdulahi,
 Marcus Hughes, Markos Tesfaye, Dawit Wondimagegn, Vikram Patel, and
 Martin Prince. 2008. Detecting perinatal common mental disorders in Ethiopia:
 Validation of the self-reporting questionnaire and Edinburgh Postnatal Depression
 Scale. *Journal of Affective Disorders* 108: 251-262. (doi: 10.10.16/j.jad.2007.10.023).

- Harpham, Trudy, Michael Reichenheim, Rebecca Oser, Elizabeth Thomas, Narmeen Hamid, Surinder Jaswal, Ana Ludermir, and Magna Aidoo. 2003. Measuring mental health in a cost-effective manner. *Health Policy and Planning* 18(3): 344-349. (doi: 10.1093/heapol/czg041).
- Hegarty, Kelsey. 2011. Domestic violence: The hidden epidemic associated with mental illness. *British Journal of Psychiatry* 198: 169-170. (doi: 10.1192/bjp.bp.110.083758).
- Heise, L. M. Ellsberg, and M. Gottmoeller. 2002. A global overview of gender-based violence. *International Journal of Gynecology and Obstetrics* 78(Suppl.1): S5-S14.
- Hindin, Michelle, Sunita Kishor, and Donna Ansara. 2008. Intimate partner violence among couples in 10 DHS countries: Predictors and health outcomes. DHS Analytical Studies, No. 18. Calverton, MD: Macro International Inc.
- Irmansyah, I., Suryo Dharmono, Albert Maramis & Harry Minas. 2010. Determinants of psychological morbidity in survivors of the earthquake and tsunami in Aceh and Nias. *International Journal of Mental Health Systems* 4: 8 (doi: 10.1186/1752-4458-4-8)

Kinyanda, Hjelmeland & Musisi, 2005

Kinyanda et al., 2011

- Kishor, S. and K. Johnson. 2004. Profiling domestic violence: A multi-country study. Calverton, MD: ORC Macro.
- Koenig, Michael, Tom Lutalo, Feng Zhao, Fred Nalugoda, Fred Wabwire-Mangen, Noah Kiwanuka, Jennifer Wagman, David Serwadda, Maria Wawer, and Ron Gray.

2003. Domestic violence in rural Uganda: Evidence from a community-based study. *Bulletin of the World Health Organization* 81(1): 53-60.

Martin, S., K. Moracco, J. Garo, A. Tsui, L, Kupper, et al. 2002. Domestic violence across generations: Findings from northern India. *International Journal of Epidemiology* 31(3): 560-72.

Mazzoncini de Avedo-Marques & Zuardi, 2011

- Nakimuli-Mpungu, Etheldreda, Brian Mutamba, Makanga Othengo, and Seggane Musisi.
 2009. Psychological distress and adherence to highly active anti-retroviral therapy (HAART) in Uganda: A Pilot Study. *African Health Sciences* 9(Special Issue 1): S2-S7.
- Pallito, Christina and Patricia O'Campo. 2004. The relationship between intimate partner violence and unintended pregnancy: Analysis of a national sample from Columbia. *International Family Planning Perspectives* 30(4): 165-173.
- Parish, William, Edward Laumann, Suiming Pan and Ye Luo. 2004. Intimate partner violence in China: National prevalence, risk factors and associated health problems. *International Family Planning Perspectives* 30(4): 174-191.
- Population Reference Bureau and Interagency Gender Working Group (IGWG). 2010. Gender-based violence: Impediment to reproductive health. Washington, D.C.: Population Reference Bureau.

Ramli et al., 1987;

Republic of Bolivia. 1995. Ley contra la violencia en la familia o domestica. Ley de la República Nº 1674.

(http://www.gparlamentario.org/spip/IMG/pdf/Ley_contra_la_violencia_en_la_fa milia o domestica - Bolivia.pdf).

- Sanabria, Harry. 2011. *Countries and their cultures: Culture of Bolivia*. http://www.everyculture.com/A-Bo/Bolivia.html (accessed 3/30/2011).
- Sattar, Abdul, Mohammad Salih & Wasim Jafri. 2010. Burden of common mental disorders in patients with Functional Dyspepsia. Journal of the Pakistan Medical Association 60(12): 995-997.
- Tuan, Tran, Trudy Harpham & Nguyen Thu Huong. 2004. Validity and reliability of the self-reporting questionnaire 20 items in Vietnam. Hong Kong Psychiatry 14(3): 15-18.
- United Nations. 1993. Declaration on the elimination of violence against women. UN General Assembly, A/RES/48/104 adopted on December 20, 1993 (http://www.un.org/documents/ga/res/48/a48r104.htm).
- World Health Organization. 1994. *A user's guide to the self reporting questionnaire (SRQ)*. Geneva: Division of Mental Health, World Health Organization.
- World Health Organization. 2005. WHO multi-country study on women's health and domestic violence against women: Summary report of initial results on prevalence, health outcomes and women's responses. Geneva: World Health Organization.
- Wutich, Amber & Kathleen Ragsdale. 2008. Water insecurity and emotional distress: Coping with supply, access, and seasonal variability of water in a Bolivian squatter settlement. *Social Science and Medicine* 67: 2116-2125.

Table 1: Sample	Description	(married and	cohabiting women	only)

% (weighted)	% (unweighted)	r
61.3%	58.7%	5,978
38.7	41.3	4,210
38.4	36.8	3,715
52.6	53.4	5,387
9.1	9.9	995
6.4	6.2	634
		5,142
		2,849
		1,563
11.0	10.0	1,000
5.6	87	882
		1,906
		1,345
		861
		1,081
		988
		1,908
		721
0.7	4.9	496
		c = c
		6,560
33.6	35.4	3,596
		1,840
		3,840
		3,257
12.4	12.3	1,251
	10.1	1,033
34.2	34.0	3,461
33.7	33.2	3,379
22.2	22.6	2,307
29.0	28.2	2,872
		4,496
		1,828
		984
2.0	2.1	20-
15	18	181
		4,528
		3,456
		2,012
	$\begin{array}{c} 61.3\%\\ 38.7\\ 38.7\\ 38.4\\ 52.6\\ 9.1\\ 6.4\\ 51.4\\ 28.3\\ 14.0\\ 5.6\\ 29.2\\ 18.0\\ 5.2\\ 10.2\\ 4.7\\ 22.9\\ 3.6\\ 0.7\\ 66.4\\ 33.6\\ 17.1\\ 38.5\\ 32.1\\ 12.4\\ 9.9\\ 34.2\\ 33.7\\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 1 (continued)

	% (weighted)	% (unweighted)	Ν
Partner's education, relative to			
respondent			
More	55.0	52.8	5 275
Same	23.4	32.8 24.0	5,375
~			2,438
Less	21.5	23.2	2,362
Respondent slapped or had			
ears pulled as a child			
Yes			
No			
Respondent beaten as a child			
Ýes			
No			
Respondent reported her father			
beat her mother			
Yes/DK	53.9	51.9	5,286
No	46.1	48.1	4,892
Total	100.0%	100.0%	10,188

	No abuse	Physical	Psych.	Psych. &	Sexual	All three	N o
		abuse	, Abuse	, Physical	abuse Ψ	types	cases
		only	only	abuse only		typeo	00000
Residence***							
Urban	50.5%	3.3%	22.8%	16.0%	1.3%	6.0%	5,924
Rural	56.8	4.8	18.1	14.1	1.4	4.7	4,195
SES***							
Low	50.5	4.3	19.8	17.5	1.2	6.7	3,694
Middle	53.9	4.5 3.8	21.9	17.5	1.2	4.8	5,346
High	58.3	2.9	21.9	14.1	1.5	4.o 4.5	5,540 988
-	0010			11.0			500
Education***							
None	56.8	5.7	14.7	16.5	0.8	5.6	630
Primary	53.6	3.7	20.4	14.6	1.4	6.2	5,109
Secondary	48.1	4.5	22.8	17.7	1.3	5.7	2,829
Higher	58.6	2.6	22.4	12.4	1.4	2.6	1,551
Region***							
Chuquisaca	54.2	3.1	18.7	16.6	0.5	6.8	881
La Paz	51.4	3.8	22.3	16.8	0.8	4.9	1,895
Cochabamba	56.6	4.8	15.6	14.8	1.6	6.7	1,315
Oruro	52.6	5.7	18.2	16.1	0.8	6.6	854
Potosí	54.2	5.7	15.5	17.0	2.3	5.2	1,079
Tarija	55.1	3.3	18.4	16.7	1.3	5.2	987
Santa Cruz	51.1	2.8	27.6	12.1	1.6	4.8	1,897
Beni	51.8	3.0	21.1	14.7	2.2	7.2	718
Pando	53.7	1.5	25.4	11.9	1.5	6.0	493
Work status**							
Working	52.2	3.6	21.2	15.8	1.4	5.9	6,511
Not working	54.5	4.4	20.7	14.3	1.3	4.9	3,577
Marital status***							
Married	56.4	3.7	19.5	14.0	1.2	5.1	6,178
Cohabiting	47.2	4.2	23.5	17.4	1.6	6.2	3,941
Age***							
15-24	48.4	5.1	20.7	19.7	1.1	5.0	1,831
25-34	51.7	4.3	20.8	15.9	1.4	6.0	3,816
35-44	55.5	2.8	21.8	13.3	1.3	5.2	3,231
45-49	56.7	4.1	20.1	12.1	1.5	5.5	1,241
Total	53.0	3.9	21.0	15.3	1.4	5.5	10,188

Table 2: Percentage of married or cohabiting women who have experienced different types of domestic violence in the last 12 months, by socioeconomic and demographic background variables, partner characteristics, and reported abuse in the parental household.

 Ψ Sexual abuse variable includes sexual abuse only, or with either physical or psychological abuse

Table 2 (cont'd): Percentage of married or cohabiting women who have experienced different types of domestic violence in the last 12 months, by socioeconomic and demographic background variables, partner characteristics, and reported abuse in the parental household.

	No abuse	Physical	Psych.	Psych. &	Sexual	All three	No
		, abuse	, Abuse	, Physical	abuseΨ	types	case
		only	only	abuse only		-71	
Partner's age***							
14-24	46.6	5.5	20.5	21.7	0.8	5.0	1,029
25-34	51.7	4.6	19.8	16.6	1.4	6.0	3,429
35-44	54.3	3.3	21.3	14.2	1.5	5.3	3,35
45+	55.7	3.1	22.5	12.0	1.3	5.3	2,29
Partner's age, compare							_,
Same/younger	51.9	4.6	19.9	16.4	1.2	5.9	2,85
1-5 yrs older	53.4	3.9	21.0	15.1	1.6	5.0	4,46
6-10 yrs older	52.1	3.3	23.0	14.7	0.8	6.1	1,813
10+ yrs older	56.2	3.2	20.3	13.4	1.5	5.4	982
-	0012	0.1	20.0	2011	1.0	011	50
Partner's education***							
None	53.6	5.2	14.4	18.3	1.3	7.2	181
Primary	53.0	4.4	19.7	14.8	1.5	6.6	4,502
Secondary	49.8	4.0	22.1	17.1	1.3	5.6	3,429
Higher	59.0	2.6	22.5	12.3	1.1	2.5	1,997
Partner's age, compare	d to respondent**						
Same/younger	51.9	4.6	19.9	16.4	1.2	5.9	2,853
1-5 yrs older	53.4	3.9	21.0	15.1	1.6	5.0	4,46
6-10 yrs older	52.1	3.3	23.0	14.7	0.8	6.1	1,813
10+ yrs older	56.2	3.2	20.3	13.4	1.5	5.4	982
Partner's education, con	mpared to						
respondent***							
More	53.2	3.8	20.8	15.4	1.3	5.4	5,334
Same	55.7	4.1	20.6	13.7	1.0	4.9	2,425
Less	49.4	3.9	22.0	16.6	1.8	6.4	2,348
Respondent slapped or	had ears pulled as						
a child**							
Yes	49.8	4.0	22.6	16.3	1.4	5.9	2,525
No	54.0	3.9	20.5	14.9	1.3	5.4	7,589
Respondent beaten as a	a child***						
Yes	49.6	4.2	21.9	16.4	1.5	6.4	6,500
No	59.3	3.3	19.3	13.1	1.1	3.8	3,614
Respondent reports fat mother***	her beat her						
Yes/Not sure	49.1	4.4	21.4	17.4	1.4	6.3	5,25
No	57.4	3.4	20.6	12.7	1.3	4.5	4,86
Total	53.0	3.9	21.0	15.3	1.4	5.5	10,18

*p<0.1 **p<0.05 ***p<0.01

 Ψ Sexual abuse variable includes sexual abuse only, or with either physical or psychological abuse

Table 3: Percentage of married or cohabiting women ages 15-49 who report having experienced various physical and mental health outcomes, by type of domestic violence experienced.

	Percentage of Women Who Report Currently Experiencing Symptoms of											
		Dep	pression			Anxiety		Epilepsy	Psychotic disorder			
	Feels tired all the time	Cries easily	Difficulty performing daily activities	Difficulty making decisions	Feelings of fear without apparent reason	Scares easily	Headaches of great intensity	Convulsions, attacks with tongue biting	Hears voices that others do not hear	N of cases		
No abuse	49.8	72.2	28.0	42.0	45.6	62.9	50.9	6.5	11.2	5,372		
Physical abuse only	52.6	72.1	28.8	43.9	47.7	55.6	50.3	8.1	11.2	374		
Psychol. abuse	56.1	74.5	33.6	50.9	49.2	67.0	58.8	8.3	13.9	2,100		
Psychol. & physical abuse	57.2	81.3	35.4	54.0	56.7	70.7	60.0	9.6	16.8	1,558		
Sexual abuse¥	64.7	78.8	40.4	53.7	52.2	64.2	52.9	12.5	19.1	146		
All three types	69.2	88.1	44.8	66.4	63.5	74.8	70.3	13.3	26.6	569		
Signif.	***	***	***	***	***	***	***	***	***			
Total Sample												

Percentage of Women Who Report Currently Experiencing Symptoms of

*p<0.1 **p<0.05 ***p<0.01

¥ With or without other types of abuse

Table 4a: Relative odds of experiencing various symptoms of *depression*, by exposure to domestic abuse, socioeconomic and demographic characteristics of the respondent, partner's characteristics, and exposure to domestic abuse in the parental household

	Feels tired all the time		Cries easily		Difficulty doing daily activities		Difficulty making decisions	
No abuse	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Psych. abuse only	1.292***	1.427***	1.130**	1.073	1.306***	1.331***	1.431***	1.398***
Psych. and phys. abuse	1.350***	1.348***	1.674***	1.537***	1.414***	1.436***	1.616***	1.521***
Phys. abuse only	1.117	1.074	0.994	0.948	1.044	1.046	1.080	1.019
Sexual abuse (with or without other abuse)	1.865***	1.968***	1.450*	1.502***	1.742***	1.773***	1.585***	1.565**
All three types of abuse	2.259***	2.149***	2.592***	2.644***	2.084***	1.990***	2.723***	2.499***
Residence Urban Rural SES		1.000 1.023		1.000 0.892**		1.000 1.009		1.000 0.908**
Low Middle High		1.000 0.967 0.793***		1.000 0.942 0.866		1.000 0.885** 0.731***		1.000 0.992 0.856*
Education None Primary Secondary Higher		1.000 0.973 0.670*** 0.492***		1.000 0.922 1.090 0.816		1.000 0.997 0.774** 0.631***		1.000 1.222** 1.129 0.717**
Region La Paz Chuquisaca Cochabamba Oruro Potosí Tarija Santa Cruz Beni		1.000 0.471*** 0.836*** 0.585*** 0.750*** 0.678*** 0.501*** 0.309***		1.000 1.113 0.916 0.769** 0.511*** 0.780** 0.756*** 0.653***		1.000 0.608*** 1.087 0.738*** 0.717*** 1.196* 0.779*** 0.541***		1.000 0.897 0.852** 0.842* 0.730*** 1.189* 0.749*** 0.453***
Pando Work status Not working Working		0.746 1.000 1.168***		0.546** 1.000 0.989		0.907 1.000 1.116**		0.840 1.000 1.051
Marital status Married Cohabiting (not married)		1.000 0.886**		1.000 0.981		1.000 1.105*		1.000 1.071
Age 15-24 25-34 35-44 45-49		1.000 1.189** 1.435*** 1.620***		1.000 1.135 1.182 1.365*		1.000 1.117 1.197 1.402**		1.000 0.894 0.879 1.046

Partner's age		1.000		4.000
14-24	1.000	1.000	1.000	1.000
25-34	1.012	1.012	0.823*	0.956
35-44	0.979	0.921	0.989	1.046
46+	0.953	0.935	1.194	0.978
Partner's age,				
compared to				
respondent				
Same age or	1.000	1.000	1.000	1.000
younger				
1-5 years	0.898*	0.859	0.895*	0.976
older				
6-10 years	0.859*	0.892	0.856*	0.948
older				
>10 years	0.973	0.823*	0.739***	0.986
older				
Partner's				
education				
None	1.000	1.000	1.000	1.000
Primary	1.142	1.079	1.986***	1.276
Secondary	1.110	1.102	1.996***	1.401*
Higher	0.735	0.983	1.669**	1.079
Partner's				
education				
compared to				
respondent				
Less	1.000	1.000	1.000	1.000
No diff.	0.848**	0.985	0.875*	0.967
More	1.064	1.109	1.061	1.070
Was slapped				
or had ears				
pulled as a				
child				
No	1.000	1.000	1.000	1.000
Yes	1.136**	1.025	1.053	0.999
Was beaten				
as a child				
No	1.000	1.000	1.000	1.000
Yes	0.978	1.189***	1.079	1.044
Denies that				
father beat				
mother				
No	1.000	1.000	1.000	1.000

Table 4b: Relative odds of experiencing various *symptoms of anxiety, symptoms of epilepsy, and of psychotic disorders*, by exposure to domestic abuse, socioeconomic and demographic characteristics of the respondent, partner's characteristics, and exposure to domestic abuse in the parental household

	Feelings of fear for no apparent reason		Scares easily		Headache s of great intensity		Convulsions, attacks with tongue biting		Hears voices that others don't hear	
No abuse	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Psych. abuse only	1.156***	1.181** *	1.198***	1.191***	1.375***	1.442***	1.300***	1.394***	1.285***	1.236***
Psych. and phys. abuse	1.564***	1.490** *	1.421***	1.350***	1.445***	1.534***	1.518***	1.614***	1.607***	1.539***
Phys. abuse only	1.089	1.012	0.742***	0.662***	0.976	1.000	1.274	1.249	1.002	0.980
Sexual abuse (with or without other abuse)	1.297	1.249	1.065	1.050	1.082	1.087	2.041***	1.991**	1.871***	1.744**
All three types of abuse	2.074***	1.902** *	1.755***	1.626***	2.285***	2.208***	2.203***	2.080***	2.886***	2.705***
Residence Urban Rural		1.000 1.098*		1.000 1.132**		1.000 1.282***		1.000 1.522***		1.000 0.897
SES Low Middle High		1.000 0.873** * 0.810**		1.000 0.943 0.841**		1.000 0.895** 0.892		1.000 0.951 0.818		1.000 0.920 1.025
Education None Primary Secondary Higher		1.000 0.931 0.832 0.601**		1.000 0.897 0.771** 0.580***		1.000 0.914 0.674*** 0.525***		1.000 1.085 0.947 0.857		1.000 1.382** 1.186 0.903
Region La Paz Chuquisaca Cochabamba Oruro Potosí Tarija Santa Cruz Beni Pando		1.000 0.650** * 0.947 0.896 0.789** * 0.980 0.747** * 0.783** 0.716		1.000 0.664*** 0.851** 0.768** 0.614*** 0.939 0.787*** 0.464*** 0.675		1.000 0.995 1.384*** 0.868 0.735*** 1.233** 1.065 1.231* 1.285		1.000 0.760 1.805 0.998 1.170 1.113 1.004 2.002*** 2.130**		1.000 0.464*** 1.164* 0.467*** 0.727** 1.407** 1.269*** 0.949 1.767*
Work status Not working Working		1.000 1.088*		1.000 0.976		1.000 0.984		1.000 1.193**		1.000 1.144**
Marital status Married Co- habiting (not married)		1.000 0.948		1.000 1.017		1.000 1.034		1.000 1.071		1.000 1.048