Dimensions of Domestic Violence and Their Relationship to Unintended Pregnancy in Cambodia

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Introduction and Background

Domestic violence is widely acknowledged as a major international problem, both in itself and due to associated health problems. A growing body of research links domestic violence to reproductive health outcomes, including unintended pregnancy, sexually transmitted infections, and painful intercourse (Campbell 2002), but the mechanisms behind this link remain unclear. Contributing to the confusion surrounding how domestic violence affects health is a continuing lack of clarity on the causes and definitions of domestic violence. While recent research has greatly enriched our knowledge of the causes and correlates of domestic violence at both the individual and community level, much remains unknown about what measures of domestic violence actually mean and which types of explanatory factors are associated with particular measures. In earlier work we found that in Cambodia, while tolerance for violence and experience of violence are related, different variables predict tolerance for violence than predict actual experience of violence. We extend this work to examine whether domestic violence is related to unintended pregnancy in Cambodia, and whether experience of violence, tolerance for violence, or the variables predicting either are associated with unintended pregnancy.

Numerous researchers have identified a link between domestic violence and unintended pregnancy, but there remains disagreement about the direction of the relationship and what causal mechanisms may be involved. While much of the earliest research on domestic violence and unintended pregnancy, much like the earliest research on domestic violence in general, focused exclusively on the United States (e.g. Gazmararian et al 2000), recognition of the need to assess the prevalence of violence and its numerous reproductive health outcomes in a variety of developing country contexts is growing (e.g. Pallitto and O'Campo 2004, 2005). Gazmararian et al (1995) found that women with mistimed or unwanted pregnancies were more likely than those with planned pregnancies to experience violence, suggesting that the pregnancy itself raised the risk of violence. Others, however, have suggested that violence may make women more at risk of unintended pregnancy, through mechanisms including fear of negotiating contraceptive use with a partner and fear of violence if use of contraceptives is discovered (Pallitto and O'Campo 2004).

The relationship between attitudes toward domestic violence and violence itself is indirect and unclear, but an important one to understand. Our past work (Bylander and Ryan, PAA presentation 2007) demonstrates that there is a strong relationship between tolerance for domestic violence and incidence of violence, but that different types of variables are linked to the two dimensions of domestic violence. Variables reflecting women's empowerment broadly conceptualized, including labor force participation and earning a high proportion of the household's income, are most strongly associated with tolerance for domestic violence. In general, as women's empowerment increases, tolerance for wife-beating declines. In contrast, economic variables such as partner unemployment and household wealth are those most closely linked to incidence of violence. Most of these characteristics are also known to have important implications for fertility, including unintended fertility.

In this paper, we will first establish whether a relationship exists between unintended fertility and either of the two dimensions of domestic violence, incidence or tolerance, which we consider here. Unintended pregnancy is difficult to measure, as women may not wish to disclose

their views on a pregnancy, particularly once the child is born and has been accepted into family life. Past work has used induced abortion as a proxy for unintended pregnancy, as well as more direct measures of whether a pregnancy was wanted when it occurred, later, or not at all (Pallitto and O'Campo 2004). Our preliminary findings focus on reported mistimed or unwanted most recent births, as we believe this measure to be most appropriate in the Cambodian context, but we explore both measures as we try to fully explore the issue of domestic violence and unintended pregnancy in this context. We will also assess which other characteristics are associated with both domestic violence and unintended pregnancy, as an attempt to untangle the mechanisms through which violence against women and their control of fertility may be related.

Data and Methods

We use data from the 2000 Cambodia Demographic and Health Survey to test the relationship between domestic violence, correlates of domestic violence, and unintended pregnancy among women in Cambodia. In addition, the full paper will include estimates derived from the 2005 CDHS for comparison and to ascertain whether changes have occurred over the five years between surveys. The CDHS is a nationally representative survey conducted between February and July 2000. The overall sample contains 15, 341 women aged 15-41. One-fourth of included households were sampled to take part in a women's status module. All ever-married women within these households answered questions relating to women's decision making and other questions designed to elicit information on women's status. In addition, one woman in each household was asked to complete a module on domestic violence. In total, 2,403 women answered questions relating to tolerance and experience of sexual and physical violence.

We use several different multivariate logistic regression models to capture the main relationship of interest, which is whether domestic violence affects unintended pregnancy. As outlined above, unintended pregnancy is difficult to measure and can be conceptualized in multiple ways. The main dependent variables of interest for this analysis are whether a pregnancy was wanted at the time, later or not at all and a history of induced abortion. This extended abstract contains results only for reported wantedness of the most recent birth. The key independent variables are lifetime experience of domestic violence and tolerance of domestic violence. Lifetime experience is measured using a modified version of the Conflict Tactics Scale, which asks about specific acts of violence. Tolerance is measured with a series of five questions that asks whether a woman thinks it is acceptable for a man to beat is wife in each of the following scenarios: if she burns the food or it is late, if she goes out without telling him, if she neglects the children, if she argues with him, or if she refuses to have sex with him.

Additional variables are included in subsequent models. These variables are grouped to reflect demographic and background characteristics, socioeconomic characteristics, and factors related to women's empowerment. These groups reflect our earlier work on Cambodia, which demonstrated that the different types of factors affect women's risk for violence in varying ways, as well as the literature on domestic violence in which there is much debate on the relative importance of each type of variable in predicting risk of domestic violence.

Preliminary and Expected Findings

These results reflect a sub-sample of those 1,357 women who answered the question asking whether their most recent birth was wanted at that time, later, or not at all. Missing values were excluded from this analysis. Subsequent analyses will also look at induced abortion, as well

as attitudes toward the acceptability of contraception and women's contraceptive decision-making.

Of the 1,357 women, 868 wanted their last birth at the time it occurred, 118 wanted it later, and 371 did not want the birth at all. We consider all mistimed or unwanted pregnancies as unintended for a total 489 pregnancies. Over 36% of last pregnancies were unintended. Almost 20% reported a lifetime experience of domestic violence, and over 43% were tolerant of wife-beating in at least one scenario. Descriptive statistics for the sample are included in Table 1.

In bivariate relationships, experience of domestic violence raises the odds of unintended pregnancy by over 77%, but tolerance of domestic violence is unassociated with unintended pregnancy. As additional variables are added, the relationship between experience of violence and unintended pregnancy remains statistically significant, experience of domestic violence increasing the odds of an unintended pregnancy by 60%. The other characteristics significantly associated with unintended pregnancy are the total number of kids born and a family history of violence. These relationships held for the model including tolerance as well as the model including incidence of violence (See Tables 2 and 3). As expected, the greater the number of total children the more likely that the current pregnancy was unintended. Of more note, in both models a history of the respondent's father beating her mother raised the odds of unintended pregnancy by close to 50%. This relationship between a family history of abuse and unintended pregnancy deserves further inquiry, and may demonstrate an indirect relationship between violence and lack of control of fertility as well as the documented direct relationship.

Preliminary results are extremely suggestive of an important link between partner violence and unintended pregnancy in Cambodia. Further work will continue to explore the pathways through which background, economic and personal characteristics may affect the links between domestic violence and unintended pregnancy in Cambodia.

Table 1: Characteristics of Women Reporting Intendedness of Last Pregnancy	
Variable	**Mean/Percentage (Standard Deviation)**
Unintended Pregnancy	36.04% (.48)
Experience of Domestic Violence	19.75% (.40)
Tolerance for DV (at least one scenario)	43.05% (.50)
Age	31.33 (6.8)
Total Kids	4.01 (2.43)
Partner Unemployment	2.87% (.17)
Urban	13.49% (.34)
Logged Wealth Index	.93 (.59)
Father Beat Mother	9.87% (.30)
N	**1357**

Source: 2000 Cambodia Demographic and Health Survey

Table 2: Experience of Domestic Violence and Odds of Unintended Pregnancy	
Variable	**Odds Ratio (95% CI)**
Experience of Domestic Violence	1.60** (1.19, 2.16)
Age	0.98 (0.95, 1.00)
Total Kids	1.46*** (1.35, 1.57)

Partner Unemployment	0.56 (0.26, 1.22)
Urban	1.13 (0.79, 1.63)
Logged Wealth Index	0.92 (0.74, 1.13)
Father Beat Mother	1.48* (0.99, 2.19)
N	**1357**

*=p<.05, **=p<.01, ***=p<.001
Source: 2000 Cambodia Demographic and Health Survey

Table 3: Tolerance for Domestic Violence and Odds of Unintended Pregnancy	
Variable	**Odds Ratio (95% CI)**
Tolerance for Domestic Violence	1.11 (0.87, 1.41)
Age	0.98 (0.95, 1.00)
Total Kids	1.47*** (1.36, 1.58)
Partner Unemployment	0.63 (0.29, 1.36)
Urban	1.14 (0.80, 1.64)
Logged Wealth Index	0.90 (0.73, 1.11)
Father Beat Mother	1.59** (1.08, 2.35)
N	**1357**

*=p<.05, **=p<.01, ***=p<.001
Source: 2000 Cambodia Demographic and Health Survey

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