Gender Norms, Tolerance for Domestic Violence and Fertility in Uzbekistan
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A growing body of research on domestic violence and reproductive health documents the relationship between domestic violence and outcomes such as unintended pregnancy, no or inconsistent contraception use, and high parity. Using a sub-sample of 3,666 married women from the nationally representative 2002 Uzbekistan Health Examination Survey, we examine the relationship between high tolerance for domestic violence, which may reflect family and social norms about gender, and parity, contraception use, and abortion. Preliminary results from logistic regression models indicate that women with high tolerance for domestic violence are significantly more likely to have four or more children. Though domestic violence tolerance is not associated with contraception use overall, it is associated with lifetime history of abortion, which may indicate a higher risk of unintended pregnancies than among those with low or no tolerance. We will further explore the relationship between tolerance of domestic violence and specific contraceptive methods.

Over the past 20 years, domestic violence has been increasingly recognized as a serious health risk. Victims of domestic violence are at risk not only of the direct harmful effects of violence, but also of the indirect effects, including reproductive health outcomes. A growing body of literature examines the relationship between violence and reproductive health, but the majority of this research examines the association between domestic violence and HIV/AIDS. There is some evidence suggesting that domestic violence may be linked to other reproductive health outcomes, including high parity, no or inconsistent contraceptive use and unintended pregnancy. Using a multinomial logit model to analyze a subset of married women from the nationally representative 2002 Uzbekistan Health Examination Survey, we find that high tolerance for domestic violence is associated with high parity and lifetime history of abortion, suggesting a link to unintended pregnancy.

The growing research consensus is that domestic violence is associated with increased risk of sexually transmitted infections, including HIV (Maman et al 2000, Heise & Ellsberg 2001, Lary et al 2004, and Watts & Mayhew 2004). Research has also demonstrated that violence against women is linked to other reproductive health outcomes, such as unintended pregnancy (Palitto and O'Campo 2004) and child mortality (Rosenberg 2003). Violence is also associated with lower levels of contraceptive use and poor pregnancy outcomes (Gazmaranian et al 2000). Though these associations have been observed in a number of settings, the direction and magnitude remains largely unknown. In addition, the findings on domestic violence and parity, contraceptive use and pregnancy intention have been inconsistent. This paper contributes to this body of knowledge by establishing whether this relationship exists in a heretofore unexamined context.

This study uses measures of tolerance for domestic violence rather than incidence or prevalence measures. Measures that rely on report of violence may be subject to significant underreporting bias due to the sensitive nature of the topic and possible safety concerns (Ellsberg et al 2001). By examining tolerance scenarios, we assess the social environment in which decisions about fertility are made. We also explore whether the link between domestic violence

and fertility decisions and outcomes is due not to experience of or fear of actual violence but the context in which women's control over fertility exists.

Data and Methods

This study utilizes data from the 2002 Uzbekistan Health Examination Survey (UHES). The UHES is a nationally representative sample of 5,463 women age 15-49 and 2,333 men age 15-59. This paper analyzes a sub-sample of 3,666 women currently in union. We made the decision to limit the sample to primarily married women due to the nature of the variables of interest. Cohabiting and pre-marital sexual relations are still very rare in Uzbekistan, and examining parity and use of contraception in non-married respondents would have skewed the results.

We run several logistic regression models with different dependent variables of interest. In each of these models, tolerance of domestic violence is the independent variable of most interest. Married women in Uzbekistan exhibit a high tolerance for domestic violence in all scenarios included (Figure 1). Almost 75% of married women consider wife-beating to be justified in at least one scenario (Figure 2) and almost 65% agree to two or more scenarios. We consider agreement to two or more scenarios to be high tolerance for domestic violence. We use this cut-off rather than any agreement, because one of the scenarios included is that of neglecting children. In a society where children are central to women's roles, this behavior may be conceptualized differently than the other included scenarios.

Socio-demographic controls include ethnicity, education, urban residence, age, and employment status. Future models will test the effects of economic status, financial control, and partner choice.

Our multinomial logit model examines the effects of these independent variables on the number of the respondent's children. We use 1-3 children as our reference category, as almost 92% of our sample has at least one child. Uzbekistan's total fertility rate is 2.92 (UHES), making 1-3 children a normative family size. We compare respondents with 1-3 children vs. those with no children and those with four or more (the maximum number of children is nine). Additional logistic regression models assess the role of our independent variables on ever use of birth control and current use. A final preliminary model examines the predictive value of covariates on lifetime history of abortion, which may indicate a history of unintended pregnancy. These are preliminary models; the full paper will include assessments of covariates' effect on type of contraceptive, differentiating between those that are primarily woman controlled (e.g. IUD, the Pill) and those that require partner consent (e.g. condoms, withdrawal).

Results and Discussion

All results are preliminary but are quite suggestive (See Table 1). In all models, age has the expected effect: increasing age decreases the risk of having no children and increases the risk for having high parity. High tolerance for domestic violence has no effect on having no children, but increases the risk of high parity by over 50%. Russian ethnicity increases the risk of having no children by almost 300% and significantly decreases the risk of high parity. Higher education and urban residence both decrease the risk of high parity but have no significant effect on the risk of childlessness.

High tolerance for domestic violence has no significant effect on ever use or current use of contraception. Future models will further probe this relationship by examining specific contraceptive choices.

High tolerance for domestic violence is a marginally significant predictor for lifetime history of abortion. Other significant factors predicting lifetime history of abortion include age, Russian ethnicity, urban residence, and higher education. Being neither Uzbek nor Russian significantly decreases the risk of ever having had an induced abortion. These results raise questions about unintended pregnancy that will be further probed in additional models.
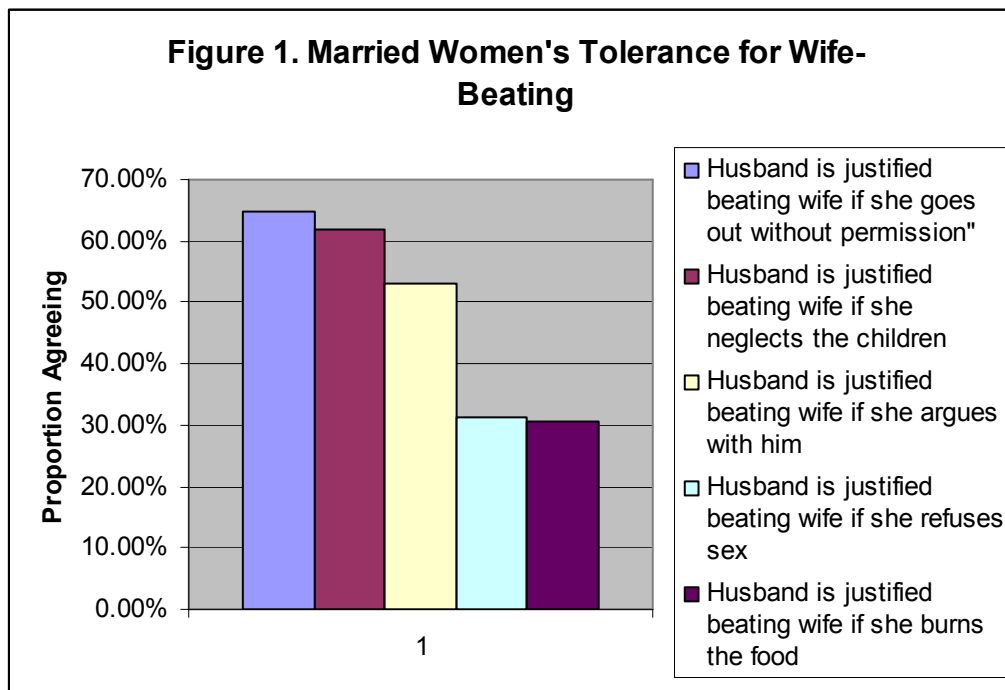
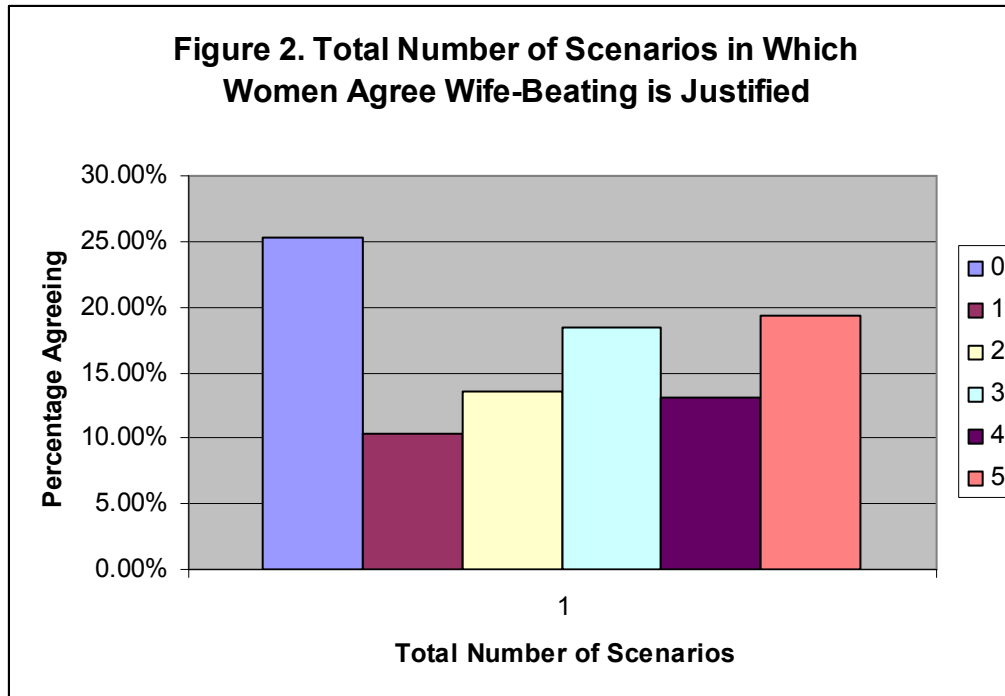### Table 1. Preliminary Results and Findings

	Model 1 No children	Model1 4+ children	Model 4 Lifetime Abortion
High DV Tolerance	.97 (.13)	1.51 (.16)***	1.16 (.1) +
Russian	2.87 (.87)***	.08 (.06) ***	1.86 (.41)**
Other Ethnicity	1.0 (.19)	1.0 (.13)	.70 (.08)**
Current Employment	1.12 (.15)	1.07 (.10)	1.06 (.09)
Urban Residence	.99 (.14)	.43 (.05) ***	1.68 (.15) ***
Age	.88 (.01)***	1.15 (.08) ***	1.09 (.01)***
Higher Education	1.21 (.26)	.52 (.09) ***	1.18 (.14)

***=p<.001, **=p<.01, *=p<.05, +-p<.10
Source: 2002 Uzbekistan Health Examination Survey
 Results are presented as odds/relative risk ratios with standard errors in parentheses. The sample is limited to ever-married women age 15-49.

Figure 1. Married Women's Tolerance for Wife-Beating

Figure 2. Total Number of Scenarios in Which Women Agree Wife-Beating is Justified

References

Ellsberg, Mary, Heise, Lori, Pena, Rodolfo, Agurto, Sonia, and Anna Winkvurst. (2001). Researching Domestic Violence Against Women: Methodological and Ethical Considerations. *Studies in Family Planning, 32(1):*1-16.

Gazmaranian, J.A., Petersen, R., Spitz, A.M., Goodwin, M.M., Saltzman, L.E. & Marks, J.S. (2000). Violence and reproductive health: Current knowledge and future research directions. *Maternal and Child Health Journal, 4(2)*: 79-84.

Heise, L. & Ellsberg, M. (2001). Violence against women: impact on sexual and reproductive health. In *Reproductive health, gender and human rights: A dialogue.* Eds. E. Murphy & K. Ringheim, Washington, D.C.: PATH, 41-52.

Lary, H., Maman, S., Katebalila, M., McCauley, A. & Mbwambo, J. (December 2004). Exploring the association between HIV and violence: Young people's experiences with infidelity, violence and forced sex in Dar es Salaam, Tanzania. *International Family Planning Perspectives, 30(4)*: 200-206.

Maman, S., Campbell, J., Sweat, M.D. & Gielen, A.C. (2000). The intersections of HIV and violence: directions for future research and interventions. *Social Science and Medicine,* 50 (4), 459-478.

Watts, C. & Mayhew, S. (December 2004). Reproductive health services and intimate partner violence: Shaping a pragmatic response in Sub-Saharan Africa. *International Family Planning Perspectives, 30(4)*: 207-213.