

RESOURCES, FAMILY ORGANIZATION, AND DOMESTIC VIOLENCE AGAINST
MARRIED WOMEN IN MINYA, EGYPT

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ABSTRACT

I evaluate the influence of household wealth, women's socioeconomic dependence, status inconsistency, and family organization on physical abuse in the prior year and attitudes about wife abuse and divorce among 2,522 married women in Minya, Egypt. Household wealth is negatively associated with physical abuse. Women who are dependent on marriage because they have sons and less schooling than their husbands are more likely to have experienced physical abuse and to report marginally more tolerance for such abuse. Women who are isolated from natal or biological kin and living with marital relatives are more likely to have experienced physical abuse. Findings underscore the role of women's dependence and social isolation in enabling physical abuse among women of all economic classes.

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Despite high levels of domestic violence against women globally, scholars have developed and tested theories of such violence largely in Western, industrialized contexts. As Goode (1971) argued, force is a resource that men may use when they lack other (economic) resources to induce desired behavior. Other scholars have argued that women who depend on a partnership because they have children or few economic alternatives may be more tolerant of abuse and less willing to leave abusive relationships (Kalmuss & Straus, 1982). Still others have argued that discrepancies in the resources of partners, which challenge men's status expectations, may lead men to use force to reinstate their dominance (MacMillan & Gartner, 1999). Finally, others have proposed that cross-cultural models of domestic violence against women should account for local, family characteristics that may facilitate or impede such violence. In this paper, I test the effects of these forces on recent episodes of physical abuse, women's tolerance for wife beating, and women's perceptions about appropriate grounds for divorce in a representative sample of 2,522 married women in Minya, Egypt. A composite score for assets typically owned by men captures household economic status. Number of living sons, number of living daughters, and prior work for cash measure a wife's socioeconomic dependence on marriage. The relative education of spouses and their relative contributions to the expenses of marriage capture economic dependence as well as status inconsistency of the wife vis-à-vis her husband. Measures of family organization include residence with marital relatives, proximity of women's *natal* or biological kin, and *endogamous marriage* or marriage to a blood relative. Multivariate methods are used to assess the effects of these variables, after controls, on women's attitudes about wife beating and divorce and experience of physical abuse in the prior year.

Resources, Status Inconsistency, and Domestic Violence Against Women

Domestic violence refers to “assaultive and coercive behaviors that adults use against

their intimate partners” (Holden, 2003, p. 155), and recent surveys have shown that domestic violence against women is widespread (Kishor & Johnson, 2004; Levinson, 1989; Watts & Zimmerman, 2002). Twenty-five percent of women interviewed in The 1995 – 1996 National Violence Against Women Survey reported that they were raped and/or physically assaulted by a current or former spouse, cohabiting partner, or date in their lifetime (Tjaden & Thoennes, 1998). The lifetime prevalence of physical domestic violence has ranged from 17% to 48% among groups of women in Africa (Coker & Richter, 1998; Jewkes, Penn-Kekana, Levin, Ratsaka, & Schrieber, 2001; Kishor & Johnson, 2004; Watts & Zimmerman, 2002) and from 40% to 52% among ever-married women in Colombia, Peru, and León, Nicaragua (Ellsberg, Pena, Herrera, Liljestrand, & Winkvist, 1999; Kishor & Johnson, 2004). Levels of lifetime and even recent physical domestic violence against women have been similarly high in parts of Asia (Hoffman, Demo, & Edwards, 1994; Kim & Choe, 1992; Koenig, Ahmed, Hossein, & Mozumder, 2003). Studies of domestic violence in the Middle East are rare, but one third of ever-married Egyptian women have reported being beaten since marriage, and 30% of married Arab women in Israel have reported recent physical or sexual abuse (El-Zanaty, Hussein, Shawky, Way, & Kishor, 1996; Haj-Yahia & Edleson, 1994). (Comparing estimates of abuse across contexts warrants some caution because of variation in the measurement of abuse across settings and variability in estimates of abuse within each setting).

In theory and research to explain domestic violence against women, scholars have given considerable attention to the role of resources in households and intimate partnerships (Figure 1). Goode (1971) argued that force, like money or personal attributes, is a resource that individuals may use to induce desired behavior or to deter unwanted actions. Goode predicted that individuals may rely on force when they lack resources of other kinds, or when other resources

have failed to achieve desired ends. In studies of domestic violence against women, scholars have tested Goode's hypothesis by estimating the effects of a husband's or household's socioeconomic status on physical abuse of the wife. Research in parts of India has shown that the unadjusted odds of wife beating are higher in households owning fewer consumer durables (Jejeebhoy & Cook, 1997), and in rural Bangladesh, landholdings have been negatively associated with wife beating by a husband or his family (Koenig et al., 2003). In Bangkok, Thailand, a combined index of family income and husband's education and occupational prestige has been negatively associated with physically abusing wives (Hoffman et al., 1994), and a measure combining individual income, education, and occupational prestige has been negatively associated with partner assaults among adult heterosexual couples in the U.S. (Williams, 1992). Research in North America has shown that a family's or husband's income is consistently negatively associated with physically abusing a wife, but that the relationships of men's education and employment with such abuse are less consistent (Smith, 1990). Smith (1990) and others (e.g., MacMillan & Gartner, 1999) have argued that evidence of an income-abuse association is consistent also with stress theory, insofar as low income induces stress that leads to violence (e.g., Dutton, 1988; Gelles, 1974). The relationship of a husband's socioeconomic status and marital violence through induced stress has had empirical support in urban Thailand (Hoffman et al., 1994).

(Figure 1)

Critics of Goode (1971) have argued that a male partner's lack of income or other economic resources is insufficient to explain abuse against women and that women's socioeconomic dependence on the partnership may better explain this abuse (Blumberg, 1984; Dobash & Dobash, 1979; Kalmuss & Straus, 1982). Scholars have argued that married women

with children and little other financial support may see few alternatives to marriage, which leads them to be more tolerant of an abusive husband (Figure 1). Contrary to these expectations, having sons in parts of South Asia has been either unrelated to or negatively associated with domestic violence against women (Koenig et al., 2003; Rao, 1997; Schuler et al., 1996), and homemakers have been less likely than working women to be in violent marriages in Kentucky (Hornung, McCullough, & Sugimoto, 1981). In-depth data from 40 families in the U.S., however, have shown that unemployed and poorly educated women are less likely to seek outside intervention after spousal beatings than employed women with more schooling (Gelles, 1976). Moreover, a study of cohabiting adults in the U.S. has shown that women's psychological dependence, or their perception that wives would be hurt more than husbands by divorce, is positively associated with minor physical violence (Kalmuss & Straus, 1982). The same study also showed that women's economic dependence, as measured by whether the wife was employed, had young children, and earned 25% or less of total income, is positively associated with severe physical violence (Kalmuss & Straus, 1982). In rural Bangladesh, participants in programs that facilitate group-based savings and provide credit to women have had a two-thirds lower risk of domestic violence compared to nonparticipants (Schuler, Hashemi, Riley, & Akhter, 1996), but cases of aggravated violence also have been observed among participants (Schuler, Hashemi & Badal, 1998). In another study of married women in rural Bangladesh, the risk of physical beating was not associated with individual membership in a savings program, but declined as the percentage of members in the community increased (Koenig et al., 2003).

Other critics of Goode (1971) have argued that models of domestic violence against women need to distinguish those relationships in which the distribution of resources between partners disrupts "culturally defined...status expectations" (e.g., Anderson, 1997; MacMillan &

Gartner, 1999, p. 948). According to status-inconsistency theorists, if the psychological and/or economic resources of a woman exceed either those of her male partner or some culturally acceptable level, atypical disadvantages in the partner's status will threaten his masculine identity and motivate him to use violence to reinstate his dominance (Figure 1) (e.g., Connell, 1995; Thoits, 1992). Among currently or previously married women in Kentucky, life-threatening violence has been more common among wives whose educational and occupational attainments exceeded those of the husband (Hornung et al., 1981). In the U.S. more generally, men have been more likely to be physically violent toward female partners with higher incomes, but not with more education (Anderson, 1997). In Canada, the adjusted probability that a man will use coercive tactics to control his partner has been greatest when the female partner was working for pay and the man was not (MacMillan & Gartner, 1999). Absolute differences between spouses in years of education and scores for occupational prestige, however, were not associated with a husband's physical abuse of his wife in Bangkok, Thailand after adjusting for the household's socioeconomic status and other factors (Hoffman et al., 1994).

Discrepancies in the above findings may have resulted from differences across studies in the samples, analytic methods, and measures used (MacMillan & Gartner, 1999; Weis, 1989). Scholars have argued that the concept of violence is multidimensional, and each dimension may be variously associated with absolute and relative resources (e.g., Kalmuss & Straus, 1982; MacMillan & Gartner, 1999). Reporting on violence also may be linked to group differences in the acceptability of violence (Anderson, 1997; Arias & Beach, 1987). Further, using absolute differences in partners' years of education or scores for occupational prestige to measure status inconsistency disallows nonlinear effects (e.g., Hoffman et al., 1994). An alternative measure of status inconsistency might distinguish women who have more of a resource from those having

the same amount or less of that resource than their partner (e.g., Anderson, 1997).

Discrepancies in findings also may have resulted from omitting contextually relevant causes of domestic violence against women. Where multigenerational coresidence and extended kinship are common, several features of family organization may precipitate or impede such violence (Figure 1) (Hoffman, et al., 1994; Kabeer, 1999; Warner, Lee, & Lee, 1986). The custom of patrilocal residence, whereby a son remains in the father's house and a daughter moves out after marriage, may reduce a woman's power because the coresiding husband and parents-in-law share authority over her actions (Warner et al., 1986). In rural Bangladesh, women living with senior marital relatives have had less family power (Balk, 1997), but a lower likelihood of physical abuse as well (Koenig et al., 2003). Women living near their natal or biological kin also may be better able to negotiate conflicts in the marital home (Kabeer, 1999; Moors, 1995; Morsy, 1993). Research in India has shown that women with closer ties to natal kin have more control over finances, decision-making power, and mobility (Bloom, Wypij, & Das Gupta, 2001), and the presence of the wife's family has been negatively associated with domestic violence against women in South India and Cambodia (Nelson & Zimmerman, 1996; Rao, 1997). Finally, in societies where endogamous marriage occurs, endogamously married women may be protected from domestic violence for several reasons. Namely, the socioeconomic background of the spouse is more certain, spousal differences in age tend to be smaller, the socioeconomic resources of women's kin are more accessible, and parents tend to value daughters who are available to provide support (Bittles, 1994; Dyson & Moore, 1983; Hoodfar, 1997).

The empirical literature suggests other determinants of domestic violence against women for which analyses should control. These determinants include a woman's religious affiliation, age group, location of residence, duration of marriage, and experience of a child's death. Among

women and men in the U.S., being Catholic rather than nonreligious has been associated with less tolerance for wife beating (Ulbrich & Huber, 1981), and in Egypt, attitudes about women's roles as well as the frequency of practices such as female genital cutting have varied between Muslims and Christians (Yount, 2002, 2004). Several national surveys of married women outside the West have shown that women's higher age and rural residence are associated with lower likelihoods of experiencing spousal abuse in the prior year but that duration of marriage has inconsistent effects on such abuse (Kishor & Johnson, 2004). In León, Nicaragua a higher lifetime prevalence of physical or sexual abuse has been observed among the mothers of children who died before age five years (Asling-Monemi, Pena, Ellsberg, & Persson, 2003).

In sum, the causes of domestic violence against women are poorly understood in non-Western settings, and are especially understudied in the Middle East. Cross-cultural research also has not accounted simultaneously for the potential influence of the household's economic status, wife's socioeconomic dependence or status inconsistency in marriage, and family organization in social context. To fill these gaps in research, I undertake an integrated test of the effects of these variables on recent episodes of physical abuse in a representative sample of 2,522 married women of reproductive age in Minya, Egypt. To enhance interpretation of this analysis, I explore the effects of these variables on available attitudinal measures that are depicted in Figure 1. Although data on spousal stress are unavailable, the discussion above motivates the following hypotheses:

H₁: Women in poorer households will be more likely to experience physical abuse.

H₂: Women with children and without financial alternatives to marriage will be more likely to experience and to justify physical abuse, and less likely to see reasons for divorce.

H₃: Women who have a higher status than their husband will be more likely to experience

physical abuse.

H₄: Women living with marital kin will be more likely to experience physical abuse, and women in endogamous marriages and living near natal kin will be less likely to experience such abuse.

The Research Setting

A description of the setting is useful to contextualize these four hypotheses. In Egypt, familial solidarity is based on bonds connecting male members of the same paternal lineage, so older married men often are family heads, and brothers share authority in family decisions. Beliefs in gender complementarity in Egypt reinforce the poor representation of women in public life (Hoodfar, 1997). For example, despite increasing access to education among girls, a higher percentage of girls than boys never attend school (14.4% vs. 7.8%) (El-Zanaty & Way, 2001), and less than half of ever-married women of reproductive age agree that education should prepare women for work (El-Zanaty et al., 1996). As a result, men still represent over two thirds of the formal work force and hold a majority of public offices (World Bank Group, 2002; United Nations Development Program [UNDP], 2003). Islamic laws pertaining to inheritance favor men, husbands, and sons over women, wives, and daughters (An-Na'im, 2002).

Ethnographic research in poor neighborhoods of Cairo has shown that concerns about women's dependence and status inconsistency in marriage are salient among women and men (Hoodfar, 1997). In this research, some informants argued that marriages reflecting the socioeconomic asymmetries observed in society are preferable. Male informants agreed that marrying a woman of higher social standing would "test their dignity" (Hoodfar, 1997, p. 59). Other informants warned, however, that marrying "too far up" could be problematic for women.

Four other characteristics of family organization in Egypt may influence the treatment of

married women, as well as their attitudes about divorce and physical abuse of wives. First, although having children enhances the social identity of Egyptian women (Rugh, 1984), laws governing divorce in Egypt ultimately grant child custody to the husband. Thus, a woman's dependence on marriage to retain custody of her children may discourage thoughts of divorce and increase her tolerance for abuse. Second, endogamous marriages comprise roughly one third of marriages in Egypt (El-Zanaty et al., 1996). Such marriages may protect women for the reasons described above; endogamous marriage may benefit men, however, because related spouses "jointly owe their obligations" to the same male relatives (Rugh, 1984, p. 145). Third, over half of ever-married Egyptian women aged 15 – 49 years in 1995 lived with their husband's family at the start of marriage (El-Zanaty et al., 1996). Finally, despite the frequency of living with marital kin, married women often maintain ties with their natal family (Rugh, 1984).

The above forms of gender inequality and kinship are especially pronounced in *Upper* or Southern Egypt (El-Zanaty et al., 1996; El-Zanaty & Way, 2001). In the year 2000, 52% of ever-married women of reproductive age had no schooling, and 15% were working for cash (El-Zanaty & Way, 2001). Also in 2000, 48% of marriages were endogamous, and ever-married women at the end of their reproductive years had 6.0 children, on average (El-Zanaty & Way, 2001). Compared to their spouse in 1995, 66% of women were at least 5 years younger, 42% had less schooling, and 15% had more schooling (El-Zanaty et al., 1996).

Minya, the site of this study, is a poor, agrarian Upper Egyptian governorate that begins about 200 kilometers south of Cairo and extends about 80 kilometers along the Nile. About 20% of the population lives in urban areas, but the habitable land is at most 30 kilometers wide and lies mostly on the west bank of the river (UNDP, 2003). Roughly 80% of residents are Muslim, and about 20% are Coptic Christian, which is the main Christian sect in Egypt that evolved from

the teachings of Saint Mark in the first century A.D. In 1995, 55% of adult women (aged 20 – 24 years) compared to 16% of adult men had no education, and 11% of ever-married women aged 15 – 54 years were working for cash (Langsten & Hill, 1996). In the same year, 51% of married women aged 15 – 54 years were married to a blood relative (Langsten & Hill, 1996). The risk of mortality among children aged less than five years was higher for girls than boys, in part because girls have received poorer care (Yount, 2001). Thus, Upper Egypt and Minya governorate in particular are settings where the educational system and labor market remain highly patriarchal, and where most women rely on their family's socioeconomic resources.

METHOD

Study Population and Data

This analysis is based on data from a representative sample of households in seven districts in Minya governorate (two districts were excluded for reasons of security). Data collection for this study was implemented with the Two Governorate Linkages Survey, a five-round longitudinal study of child morbidity and women's reproductive experience that was undertaken in Qaliubia and Minya governorates during 1995 – 1997 (Langsten & Hill, 1996). In Minya, multistage, cluster-sampling procedures were used to identify a target sample of 40 households in each of 2 clusters in 38 primary sampling units (villages or urban neighborhoods), and 3,125 households were included over the course of the study.

Trainees for the survey interviews were female residents of Minya who had completed at least secondary schooling. The training session lasted one week and included didactic explanations of the questionnaire and techniques of structured interviewing, daily tests and exercises, role plays, and mock interviews with women having the characteristics of eligible study participants. A subset of the best trainees was selected to complete the fieldwork. Two

local supervisors oversaw daily operations of the fieldwork and conducted periodic reinterviews to check the consistency of reporting on selected questions. For the duration of data collection, project investigators made weekly trips from Cairo to meet with resident supervisors and interviewers, to review questionnaires, and to conduct retraining sessions as needed.

Of the questionnaires administered, a household listing permitted recording of age, gender, relationship to household head, education, and main occupation for each member; births and migrants at each round; and survival status, marital status, and work status of each member for the round of first residence and subsequent rounds. A household characteristics questionnaire included questions about the dwelling; access to electricity, water, and sanitary facilities; and ownership of consumer goods and durables. A woman's questionnaire included questions on age, age at marriage, marital status, education, work, pregnancies and fertility, health knowledge and practices, and use of contraception and was administered to all ever-married women aged 15 – 54 years or any main caretaker of a child aged less than 5 years. A child's questionnaire focused on the health and nutritional status of resident children aged less than 5 years.

A women's status module was adapted from one developed for a national survey in Egypt (El-Zanaty et al., 1996). This module included questions on gender preferences, perceptions of child illness, marital history, mobility, decision making, and work. This module also included questions about any beating in *adulthood* (the age of physical maturity), any *severe* beating in adulthood (e.g., that required a doctor, whether or not one was sought), times beaten in the year before interview, help seeking after episodes of abuse, and safe places to go to avoid abuse. Before round five of the larger survey, separate consent was obtained to administer this module to all women in Minya who had received the woman's questionnaire described above. Women were informed prior to participation that some questions might be sensitive, that their

participation was voluntary, that they may refuse to answer any question, and that they may end the interview at any time. Interviewers were instructed to administer the module in private.

The total eligible sample for the women's status module included 3,194 women aged 15 – 54 years. Two hundred forty-two (8%) never married or currently unmarried women were dropped from the analysis. Another 292 (9%) eligible women who did not complete the module, 75 (2%) eligible women with missing data on attitudes toward and experiences of beating in the prior year, and 63 (2%) eligible women with item nonresponse for covariates of interest were dropped from the analysis. This analysis thus was based on married women aged 15 – 54 years in Minya with complete data on relevant variables ($N = 2,522$).

Dependent Variables

The first outcome measures whether the respondent reported to have been beaten in the year before interview. This outcome indicates exposure to physical abuse that likely succeeded the timing of covariates in the analysis. Physical violence in the prior year also was frequent enough among women in Minya that multivariate analysis of this outcome was possible. The second and third outcomes measure women's tolerance for physical abuse of wives and their expectations about a woman's likelihood of seeking divorce. The second outcome indicates whether the respondent reported that a husband is *never*, *seldom/sometimes*, or *often justified* in beating his wife. The third outcome measures the extent to which a respondent expected that a wife would seek a divorce in response to circumstances that locally signify an unsatisfactory marriage and/or a negligent husband. This measure is based on women's responses to questions about whether a wife would be *unlikely*, *somewhat likely*, or *very likely* to ask for a divorce if the couple is unable to have children, the couple is unable to have a son, the husband is disrespectful of the wife's parents or senior relatives, the husband fails to support the family, the husband

beats his wife regularly, the husband flirts with other women, and the husband is sexually unfaithful. A principal components analysis of these items was performed, and the first principal component accounted for 46% of the variance in the original items (not shown; available upon request). Scoring coefficients for the first principal component were used to derive a score reflecting each woman's overall expectation about the likelihood that a wife would seek divorce for the above reasons. Because the distribution of these scores was slightly right-skewed, women's scores were grouped into quartiles and a four-category, ordinal measure of women's overall expectations about a wife's likelihood of seeking divorce was constructed.

Independent Variables

An exogenous score for household wealth was developed from responses to questions about the assets and amenities of each respondent's household. Questions about assets ascertained whether the respondent's household (often the male member(s)) owned each of the following items: bicycle, motorcycle, private car, transport equipment, residential building, commercial building, farmland, other land, poultry, livestock, and farm tools. Questions about amenities of the respondent's household ascertained the following information: availability of electricity, type of flooring, number of rooms, source of water, and type of toilet. Using a method developed by Filmer and Pritchett (1999), each of the above items was recoded and included in a principal components analysis (not shown; available upon request). The first principal component accounted for 15% of the total variance in the original items. I used estimated scoring coefficients for this component to compute a score for household wealth for each respondent.

Exogenous measures of a woman's economic and social dependence on her husband include whether the respondent ever worked for cash or kind, the respondent's number of living sons, and the respondent's number of living daughters. An exogenous measure for women's

relative economic dependence or status inconsistency in marriage includes whether the respondent had more years of schooling, the same amount of schooling, 1 – 5 fewer years of schooling, or 6 – 17 fewer years of schooling compared to her husband. The category denoting a woman's greater educational attainment than her husband captures status inconsistency, or atypical discrepancies in the educational attainment of spouses. Categories denoting a woman's lesser educational attainment than her husband capture women's fewer professional opportunities. A second exogenous measure of status inconsistency captures relative financial contributions to the marriage and indicates whether the husband paid less of the marital expenses (the atypical situation in Egypt), or paid the same amount or more. Measures of family organization include whether the respondent lived with a parent-in-law, brother-in-law, or husband; whether her husband was a blood relative; and whether her natal family lived in the same neighborhood or village. Demographic controls include the respondent's age (< 25, 25 – 34, \geq 35 years); religion (Christian vs. Muslim); duration of marriage (0 – 4, 5 – 9, 10 – 14, \geq 15 years); numbers of deceased sons and daughters (0, 1, \geq 2), and residence (urban vs. rural).

Descriptive and Multivariate Analyses

In the descriptive analysis, I computed relative frequency distributions of covariates that depict the major characteristics of married women of reproductive age in Minya. For these women, I estimated the reported prevalence of having ever been beaten during adulthood and of having ever been severely beaten during adulthood. Also presented are estimates for the percentage of women who sought help for any beatings in adulthood and who reported having a safe place to go to avoid abuse. Finally, I estimated the prevalence of any beating in the year before interview, the relative distribution of women by number of reported beatings in the prior year, and the relative distribution of women by reports that a husband is *never*, *seldom* or

sometimes, or *often* justified in beating his wife.

Logistic regression was used to estimate the adjusted effects of covariates on the log odds of having been beaten in the prior year:

$$\text{logit}(b_i) = \alpha + \beta_H H_i + \sum_{k=1}^K \beta_k S_{k,i} + \sum_{l=1}^L \beta_l F_{l,i} + \sum_{m=1}^M \beta_m D_{m,i} \quad (1)$$

where b_i indicates the probability that respondent i was beaten in the prior year, H_i indicates household socioeconomic status, S_i denotes variables measuring a woman's socioeconomic dependence on marriage or status inconsistency vis-à-vis her husband (indexed $k = 1, \dots, K$), F_i indicates measures for family organization (indexed $l = 1, \dots, L$), and D_i indicates other demographic controls (indexed $m = 1, \dots, M$). Ordinal logistic regression then was used to estimate the adjusted effects of the same variables on the proportional log odds of reporting that a husband is more often justified in beating his wife and that a woman is more likely to ask for a divorce for specified reasons (McCullagh & Nelder, 1989). Here, the proportional odds model is given by:

$$\log\{j_{ip}/(1 - j_{ip})\} = \theta_p - (\beta_H H_i + \sum_{k=1}^K \beta_k S_{k,i} + \sum_{l=1}^L \beta_l F_{l,i} + \sum_{m=1}^M \beta_m D_{m,i}) \quad (2)$$

where i indexes the respondent, p indicates the category of the outcome, j_{ip} denotes the cumulative probability of reporting that wife beating is justified or that women are likely to seek divorce up to and including category p . In all multivariate analyses, robust standard errors were estimated for model coefficients to account for within-cluster correlation of responses resulting from the multistage, clustered sample design (Rogers, 1993; Williams, 2000).

Finally, estimated coefficients from the model represented by equation (1) were used to compute predicted probabilities of physical abuse. The purpose of this step was to assess the extent to which family organization and socioeconomic dependence on marriage drive the risk of

experiencing physical abuse among married women of all economic backgrounds in this setting. The basic idea was to estimate predicted probabilities of experiencing physical abuse in a 12-month period, by level of household wealth, for the two hypothetical groups of women having characteristics associated with the *highest* likelihood and the *lowest* likelihood of abuse. This task was accomplished by (a) assigning the subgroup of women at each level of wealth those characteristics that were at least marginally associated with a higher (or lower) likelihood of abuse, (b) allowing nonsignificant covariates to assume their observed values for each woman in the subgroup, (c) estimating and exponentiating the linear prediction for each woman in the subgroup, and (d) computing average predicted probabilities for each wealth subgroup having more than one woman (The average number of women per wealth subgroup was 30, and the range across subgroups was 1 – 115.). Confidence intervals for these predictions were computed in the same manner to assess whether predicted probabilities of abuse differed significantly for the two hypothetical groups of women at each level of household wealth.

RESULTS

Characteristics of the Study Sample

Table 1 presents characteristics of married women of reproductive age in Minya. Compared to other women in the governorate, 37% were living in relatively poor households (score for household wealth < 0), and 46% were living in relatively wealthy homes (score > 0). Scores for household wealth were moderately correlated with the number of years of schooling among respondents' husbands (.47, not shown). Forty-five percent of husbands had no schooling, and 28% of husbands had completed at least secondary school.

Socioeconomic dependence of women on marriage was widespread. Only 15% of respondents had ever worked for cash or kind. Fifty-one percent of respondents had at least two

living sons, and 47% had at least two living daughters. Sixty-five percent of respondents had no formal schooling, and only 17% had at least some secondary schooling. Compared to their husband, 51% of respondents had the same amount of schooling (often both had none). Just over one fifth (21%) of respondents had 1 – 5 fewer years of schooling, and 19% of respondents had 6 – 17 fewer years of schooling. Most respondents (97%) reported that their husband had contributed more to the expenses of the marriage. Despite high levels of dependence among married women, status inconsistencies were apparent, as 10% of respondents had more schooling than their husband.

Regarding family organization and other demographic characteristics, over 95% of respondents reported that their marriage was arranged (and although not shown, 27% reported that they could not have refused the arranged marriage). Fifty-one percent of respondents were married to a blood relative, and 15%, 24%, and 92% of respondents lived with a parent-in-law, brother-in-law, and spouse, respectively. Three quarters of respondents had biological family living in the same village or neighborhood. Forty-one percent of respondents were aged 35 years or older, and 47% had been married to their current spouse for 15 or more years. A large minority of respondents was Christian (23%, of whom almost all were Copts). About 18% of respondents were living in urban areas. Roughly one quarter of respondents reported that at least one son and at least one daughter had died.

(Table 1)

Prevalence of Physical Abuse, Help Seeking, and Attitudes About Wife Beating

Table 2 provides estimates for various indicators of physical abuse among married women in Minya. Twenty-seven percent of respondents reported that they had ever been beaten during adulthood. Four percent reported that they had experienced a severe beating in adulthood.

Thirty-eight percent of women who had ever experienced a beating in adulthood did not talk to someone after the beating to get help, and 44% reported that they did not have a safe place to go to avoid being beaten. Over 9% of respondents experienced a beating in the prior year, and 5% reported three or more beatings in the prior year. Only 27% of respondents reported that a husband is *never justified* in beating his wife, whereas 52% reported that a husband is *seldom/sometimes justified*, and 21% reported that a husband is *often justified*.

(Table 2)

Determinants of Physical Abuse and Attitudes About Wife Beating and Divorce

Table 3 presents adjusted log odds and odds ratios that respondents were beaten in the prior year. Table 3 also presents proportional log odds and odds ratios that respondents reported (a) a husband to be more often justified in beating his wife and (b) a wife to be more prone to ask for a divorce. As expected (hypothesis 1), household wealth was strongly negatively associated with beatings in the prior year: An increase of one unit in the score for household wealth was associated with a 17% lower likelihood that women experienced a beating. Moreover, a one unit increase in the score for household wealth was associated with a 19% lower likelihood of reporting that a husband is more often justified in beating his wife. Household wealth also was marginally positively associated with women's likelihood of reporting that a wife is more prone to seek a divorce.

Regarding expectations about the effects of a woman's socioeconomic dependence on marriage (hypothesis 2), prior work for cash or kind was not associated with the likelihood of having been beaten, nor of reporting that a wife is more prone to seek a divorce. Women who had ever worked for cash or kind, however, were 42% less likely to report that a husband is more often justified in beating his wife. Moreover, compared to women with the same amount of

schooling as their husband, women with 6 – 17 *fewer* years of schooling were 49% more likely to have been beaten. Women with 6 – 17 fewer years of schooling also were marginally more likely to report that a husband is more often justified in beating his wife. Women with 1 – 5 fewer years of schooling were no more likely to have been beaten, and were 24% more likely to report that a wife is more prone to seek divorce. Compared to women without sons, women with two or more sons were (a) 63% more likely to have been beaten, (b) marginally more likely to report that a husband is more often justified in beating his wife, and (c) marginally less likely to report that a wife is more prone to seek a divorce. Having daughters was not associated with either the likelihood of a beating or attitudes about seeking divorce or beating wives.

Regarding expectations about the effects of a woman's status inconsistency relative to her husband (hypothesis 3), women with *more* schooling than their husband were not more likely to have been beaten, and were marginally more likely to report that a woman is more prone to seek a divorce. (In estimated models not shown, having relatively more schooling was associated with a marginally lower likelihood of having been beaten, but these results are not presented because they were not robust across all estimated models.) Surprisingly, women who had paid the same amount or more of the marital expenses were more likely to report that wife beating is justified.

In general, measures for marital and natal family organization were associated in the expected ways with the physical abuse of married women in Minya (hypothesis 4). Although living with a parent-in-law was not associated with either recent beatings or women's attitudes about divorce or wife beating, women who were living with a brother-in-law were marginally more likely to have been beaten and to report that a husband is more often justified in beating his wife. Living with one's husband also was associated with a marginally higher likelihood of having been beaten but was not associated with attitudes about divorce or wife beating. Women

who had natal family living in the same neighborhood or village were 37% less likely to have been beaten than women without natal family living nearby. Although being married to a blood relative was not associated with the likelihood of having been beaten, endogamously married women were 26% more likely than nonendogamously married women to report that a husband is more often justified in beating his wife. Women in endogamous marriages also were 18% less likely to report that a wife is more prone to seek divorce.

Regarding the effects of demographic controls, women aged 35 years or older were 59% less likely than their younger counterparts to have been beaten in the prior year, but the attitudes of older and younger women about beating wives and seeking divorce were similar. None of the other demographic controls was associated with the likelihood of having been beaten, but several were associated with women's attitudes about beating wives and seeking divorce. Women married for 15 or more years were marginally more likely to report that a husband is more often justified in beating his wife. Christian women and women living in urban areas were 23% and 58% less likely than their respective counterparts to report that a husband is more often justified in beating his wife. Because divorce generally is not accepted among Coptic Christians in Egypt, Christian women also were 87% less likely than Muslim women to report that a woman is more prone to seek a divorce.

(Table 3)

Predicted Probabilities of Physical Abuse

Figure 2 displays predicted probabilities of physical abuse for a 12-month period. Estimates are presented by level of household wealth for the two hypothetical groups of women having characteristics associated with the highest and lowest risks of physical abuse, according to significant and marginally significant coefficients in the model for abuse in Table 3.

Characteristics associated with the highest risk of physical abuse include having at least two living sons, having 6 – 17 fewer years of schooling than one’s husband, living with one’s husband and any brothers-in-law, living without family in the same neighborhood or village, and being aged less than 25 years. Characteristics associated with the lowest risk of physical abuse include having no living sons, having more schooling than one’s husband, living without one’s husband and any brothers-in-law, having family in the same village or neighborhood, and being aged 35 years or older. Predicted probabilities of abuse at each level of household wealth are significantly different. (Confidence intervals not shown in Figure 2; available upon request.)

The top line in Figure 2 shows a strong, negative association between the predicted probability of experiencing physical abuse and household wealth among women having characteristics associated with the highest risk of physical abuse. The predicted probability of physical abuse exceeds .40 among high-risk women living in relatively poor households (scores in the range of -3.5 – -2.5). High-risk women living in relatively wealthy households (scores in the range of 3.0 – 5.0), however, still have a .15 – .20 predicted probability of experiencing physical abuse. By contrast, women having characteristics associated with the lowest risk of physical abuse have a .05 or lower predicted probability of experiencing physical abuse, regardless of the household’s level of wealth. These findings highlight that socioeconomic dependence on marriage and family organization strongly drive the risk of experiencing physical abuse among married women of all economic backgrounds in this setting.

(Figure 2)

CONCLUSION

This paper advances our understanding of the influence of household wealth, a woman’s socioeconomic dependence or status inconsistency in marriage, and local family organization on

the physical abuse of married women in Minya, Egypt. Findings also may inform an understanding of the causes of physical abuse against married women in settings that maintain similar inequalities in the socioeconomic resources of women and men. Reports from married women of reproductive age in Minya indicate that 27% have experienced at least one beating in adulthood. This estimate is consistent with that from the 1995 Demographic and Health Survey in Egypt, which indicated that one third of ever-married Egyptian women of reproductive age had been beaten since marriage (El-Zanaty et al., 1996). The estimate for Minya is lower than most available estimates of lifetime physical abuse from Sub-Saharan Africa and Latin America (Kishor & Johnson, 2004), but is higher than most available estimates from Europe and the U.S. (Watts & Zimmerman, 2002). The frequency of severe beating in Minya also is notable, with 4% of married women reporting that they had been beaten in adulthood to the extent that a doctor was needed (whether or not one was sought).

Regarding the determinants of physical abuse among married women in Minya, multivariate findings support hypothesis 1 and show that women in wealthier households were less likely to have been beaten in the prior year. This finding is consistent with Goode's (1971) adaptation of resource theory to the question of domestic violence against women. This finding also corroborates empirical evidence from Western and non-Western contexts showing that the household's or husband's socioeconomic status is negatively associated with various forms of domestic violence against women (e.g., Hoffman et al., 1994; Koenig et al., 2003; Smith, 1990). Because data on levels of stress were unavailable for the marital kin of women in this sample, however, it was not possible to evaluate whether stress mediated the relationship between the household's or husband's economic status and physical abuse of married women in Minya (see Dutton, 1988; Gelles, 1974).

Findings also support hypothesis 2, which concerns the net effects of women's socioeconomic dependence on their experiences of physical abuse and attitudes about wife abuse and divorce. First, having fewer years of schooling than one's husband, and thus fewer economic alternatives to marriage, was associated with a higher likelihood of having been beaten in the prior year and of reporting that a husband is more often justified in beating his wife. Second, women with two or more living sons were more likely to have been beaten, marginally more likely to report that a husband is more often justified in beating his wife, and less likely to report that a wife is more prone to seek divorce for identified reasons. Differences in the effects of having sons in Minya versus having sons in India or Bangladesh (Koenig et al., 2003; Rao, 1997; Schuler et al., 1996) may be attributable to differences in divorce laws across these settings. As already noted, mothers in Egypt depend on sons for financial support in old age, yet Egyptian law ultimately grants custodial rights to husbands in cases of divorce. Thus, motherhood enhances a woman's social identity, but also secures her dependence on marriage to maintain custody of her children. In India and Bangladesh, all major religions have their own laws governing a person's rights in marriage, divorce, guardianship, and other personal matters (Huda, 1981; Parashar, 1992). Thus, although divorce may have many negative consequences for Indian and Bangladeshi women, its implications for their custodial rights may vary more than in Minya.

Regarding the effects of status inconsistency between a woman and her husband (hypothesis 3), the number of respondents who had more schooling ($n = 242$) or who paid as much or more of the marital expenses ($n = 65$) may have been insufficient to detect significant differences in the likelihood of recent physical abuse for these groups. Yet, having more schooling than one's husband was associated with a marginally higher likelihood of reporting that a woman is more prone to seek a divorce. The latter finding suggests that women with

relatively more schooling may see alternatives to marriage and thus may be less prone to abuse. This finding corroborates the view of informants in urban Cairo that women who marry lower-status men will “question their authority as head of the household” (Hoodfar, 1997, p. 74).

Regarding the effects of family organization (hypothesis 4), findings show that women living farther from natal family and living with senior marital relatives were more likely to have been beaten in the prior year. Both findings corroborate the idea that isolation from supportive kin is an important independent determinant of a married woman’s risk of experiencing physical abuse (Gelles, 1985). At the same time, the finding that endogamous marriage was unrelated to physical abuse in Minya suggests that endogamous marriage is not protective for women, as expected (Dyson & Moore, 1983; Hoodfar, 1997; Rugh, 1984). Moreover, endogamously married women were more likely to report that a husband is more often justified in beating his wife and were less likely to report that a woman is more prone to seek a divorce. The association of endogamous marriage and these attitudes suggests that the obligations of related spouses to common male relatives may foster more tolerance for mistreatment and may impair a woman’s perceived ability to seek divorce. Overall, findings suggest that cross-cultural research on domestic violence against women should account for contextually relevant family characteristics, especially where extended forms of kinship are common.

Predicted probabilities of physical abuse that were derived from multivariate analyses reveal important implications for theory about the forces driving married women’s risk of physical abuse in settings such as Minya, Egypt. Most notably, *the likelihood of physical abuse may be substantially higher for women who are economically dependent on marriage and who lack access to social support than for women who are economically independent and who have access to such support, regardless of the level of household wealth.* Thus, although greater

household wealth may have a net negative effect on the likelihood that married women experience physical abuse, having access to social and economic resources outside of marriage may offer women the most consistent protection against such abuse.

The findings presented above inform several recommendations for policy. In general, changes in policy might focus on the sources of women's socioeconomic dependence on marriage. Establishing community-based sources of support would provide recourse for abused women who live far from natal family. Such services already are needed for the large percentage of abused women who neither seek help nor have safe places to go to avoid being beaten, and the need for such services may escalate if increasing percentages of married women live far from natal kin. Given that the laws in Egypt still award custody of children to husbands in cases of divorce (An-Na'im, 2002), reforms that leave decisions about child custody to the discretion of a judge also may alleviate women's reliance on abusive marriages to retain custody of their children. Further efforts also could be made to reduce disparities in women's and men's access to education so that equal opportunity, at least in this respect, is the normative backdrop against which women and men choose their mate in marriage.

Findings from this analysis, and certain limitations, also provide new ideas for research. First, because frequent beatings in the prior year were rare in Minya, multivariate analysis of recent, regular abuse was not possible. New studies of domestic violence in Egypt could include a wider range of questions about the nature, severity, and timing of physical, sexual, and psychological abuse to ensure accurate estimates of the overall prevalence of domestic violence against women, and its various types. Second, only female respondents reported on the occurrence of beatings, and studies have shown that reports of physical abuse can be unreliable (Anderson, 1997). Thus, if ethically feasible, new studies might include interviews with

husbands and wives about the occurrence of domestic violence, and analyses can assess the effects of covariates on domestic violence against women that are confirmed by one or both partners. Third, this study was undertaken before divorce laws in Egypt changed to make it easier for a woman to obtain a divorce without her husband's consent. Proponents of this law have argued that women need to be able to escape marriages in which they are abused but are unable to prove such abuse to a judge's satisfaction (Cuno, 2003). Thus, new studies might evaluate the association of women's socioeconomic dependence with their attitudes about abuse and their experiences of abuse in this new legal environment.

Fourth, the collection of data for this analysis occurred during the final round of a larger longitudinal study in Minya, and so data on women's attitudes as reported at interview may be endogenous to physical abuse that occurred in the prior year. Problems of temporality in the measurement of attitudes that could mediate the relationship between underlying variables and episodes of domestic violence precluded formal path analysis using these data. Other scholars have faced similar limitations on drawing causal inferences from analyses of cross-sectional data (e.g., MacMillan & Gartner, 1999). Thus, new studies might follow a prospective design that involves the measurement of underlying and proximate attitudinal variables at reasonable times prior to the measurement of domestic violence. Fifth, some variables that may be associated with domestic violence against women were not available, including poverty-induced stress among men, men's ideals about their familial roles, exposure of either partner to domestic violence in childhood (Kishor & Johnson, 2004; Ulbrich & Huber, 1981), and chronic use of drugs or alcohol by either partner (McKenry, Julian, & Gavazzi, 1995). Although asking questions about the abuse of drugs or alcohol might be difficult in Egypt, new studies could include interviews with husbands about their reactions to economic hardship and their ideals about men's family

roles. New studies also could include interviews with husbands and wives about their experiences of maltreatment or observations of domestic violence in childhood.

Finally, this analysis focused on recent physical abuse among married women only. The prevalence of domestic violence and its determinants, however, could differ among widowed and especially divorced women. Fortunately, only 2% of the original sample of women was divorced at the time of the survey, and the lifetime prevalence of physical abuse was similar among divorced and married women (28% vs. 29%, respectively). To study domestic violence among all women, new studies could include marital histories and questions about the timing of major acts of violence. Implementing the above recommendations for research would help to assess the robustness of the findings here – that socioeconomic dependence and social isolation are important causes of domestic violence against women from all economic strata.

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