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Social Inequalities in Intimate Partner Violence: A Study of Women in Kenya

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This study examines social inequalities in intimate partner violence (IPV) among women of reproductive age in Kenya. A sample comprising 3,696 women was retrieved from the Kenyan Demographic and Health Survey of 2003. The study design was cross-sectional. Chi-square tests and logistic regression were used to analyze the data. Results indicated that while high education among women reduced the risk of IPV exposure, both being employed and having a higher education/occupational status than her partner increased a woman's vulnerability to IPV. Age differences between the partners, illiteracy, and lack of autonomy and access to information increased the likelihood of IPV. Finally, being in polygamous relationships was associated with IPV exposure. The findings indicate demographic, social, and structural differences in exposure to IPV with important implications for interventions.

Keywords: intimate partner violence; social inequality; women; Kenya

Intimate partner violence (IPV), particularly against women, is now acknowledged as a societal and public health problem both in developed and developing nations. Women victimized by their intimate partner are at heightened risk of health problems manifested in somatic complaints (Campbell, 2002; Kramer, Lorenzon, & Mueller, 2004; McNutt, Carlson, & Persuad, 2002; Plitcha & Falik, 2001), psychological symptoms such as post-traumatic stress disorder, and suicidal ideation (Campbell, 2002; Golding, 1999; Petersen, Gazmararian, & Clark, 2001; Tolman & Rosen, 2001). In addition, they are at greater risk of infertility (Heise, Ellsberg, & Gottemoeller, 1999), unintended pregnancy (Pallitto & O'Campo, 2004), miscarriage (Fonck, Els, Kidula, Ndinya-Achola, & Temmerman, 2005), and morbidity and mortality (Campbell, 2002) than their nonvictimized counterparts.

With high levels of underreporting, the exact extent of IPV is unknown (WHO, 2004). A general review of the literature based on findings from developing nations suggests, however, that significant proportions of women experience some form of physical or

psychological aggression in intimate relationships. Recent nationally representative and community-based studies indicate a lifetime prevalence ranging between 11% and 52% and a yearly prevalence of 4% to 29% (Ellsberg, Pena, Herrera, Liljestrand, & Winkvist, 2000; Gage, 2005; Jewkes, Levin, & Penn-Kekana, 2002; Kishor & Johnson, 2004; Koenig et al., 2003; Lawoko, 2006; Mwenesi, Buluma, Kong'ani, & Nyarunda, 2003). Because the operational definition of IPV, time frame of measurement, and sample characteristics vary between the studies, however, it is difficult to compare prevalence across the different studies. Moreover, cultural silence around IPV may vary between different countries (Watts & Mayhew, 2004), rendering comparisons unreliable.

A myriad of research has focused on investigating risk and eliciting factors of IPV. At the community level, grade of patriarchy, ethnicity, and poverty (Jewkes, 2002; Krishnan, 2005; Levinson, 1989) are associated with increased vulnerability to IPV. At the individual level, factors such as witnessing of domestic violence during childhood are significantly associated with IPV exposure in adulthood (Bensley, Eenwyk, & Simmons, 2003; Gage, 2005; Jewkes et al., 2002; Jeyaseelan et al., 2004; Koenig, Stephenson, Ahmed, Jejeebhoy, & Campbell, 2006; Lipsky, Caetano, Field, & Larkin, 2005). Behavioral factors, such as alcohol and drug abuse (Hoffman, Demo, & Edwards, 1994; Kantor, 1993; Krishnan, 2005), have been observed as risk profiles among perpetrators.

Though social status and empowerment variables have been suggested as risk factors for IPV exposure (Ellsberg et al., 2000; Gonzales-Brenes, 2004; Krishnan, 2005), the direction of association is contradictory in the literature. The social inconsistency theory (Yllo, 1983) suggests a U-shaped relationship between social status and exposure to IPV. On the one hand, it is postulated that low-status women may be at heightened risk of IPV because of their limited resources and alternatives. On the other hand, it is argued that women of high status may threaten societal norms of male superiority, increasing the risk of aggression, particularly in societies with high levels of patriarchal practices. The inconsistency may be a reflection of differences in cultural values and societal norms between countries. An assessment of possible social inequalities in exposure to IPV is likely specific to each unique culture. This study examined social inequalities in IPV exposure among women in Kenya.

DOMESTIC VIOLENCE IN KENYA: PREVALENCE, HISTORY OF ABUSE, AND ATTITUDES TOWARDS VIOLENCE

With an estimated annual growth rate of 5.5%, GDP per capita of 1,200 USD (2006, PPP adjusted), and low life expectancy at birth for males (49.78 years) and females (48.07 years) (World Factbook, 2007), Kenya remains a developing country. Domestic violence in Kenya, like in other developing countries (Kishor & Johnson, 2004), is highly prevalent. Despite the inaction of policies that aim, among other things, at promoting equality in families, adherence to responsible parenthood, and empowerment of women (Mwanesi et al., 2003; NCPD, 2000), recent figures based on the first nationally representative data on IPV in the country indicate that almost half of the women of reproductive age have experienced violence since the age of 15 years (Mwanesi et al., 2003), and two out of three men and women reported tolerant attitudes towards IPV. These figures indicate that Kenya remains a country where control of women by men is prominent. The present study aims to investigate social inequalities in IPV among women in Kenya. The data generated could be useful in targeting interventions where they are most needed.

METHODS

Demographic and Health Surveys

The Demographic and Health Surveys (DHS) are carried out in several developing countries and receive main funding from the United States Agency for International Development (USAID). The surveys aim at monitoring demographic and health situations in the respective countries. The participating countries, however, have the main responsibility for its implementation.

The survey procedure (e.g., organization and sampling methods) and instruments used have received ethical approval from the Institutional Review Board of Opinion Research Corporation (ORC) Macro International Incorporated. The Kenyan Demographic and Health Survey 2003 (KDHS, 2003) represents the fourth in a series of 5-year follow-up surveys, and is the first nationally representative survey in the DHS series. It therefore offers a unique opportunity to understand domestic violence placed in a national context.

Sample Design

Implemented by the Kenyan Central Bureau of Statistics (KCBS) in collaboration with the Ministry of Health and the Kenyan Medical Research Institute, the KDHS 2003 utilized a two-stage sampling design. Based on the list of the enumeration areas covered in the 1999 census, 400 clusters (129 urban and 271 rural) were selected in the first phase. The second phase involved systematic sampling of households from the national database at the KCBS. Female residents/visitors at the sampled households during the survey were eligible for recruitment for the DHS. A more detailed description of the sampling procedure is reported in the KDHS final report 2003 (Otieno & Opiyo, 2003).

Participants

All women 15–49 years of age who were residents/visitors at the sampled household at the time of the survey were eligible for participation (i.e., a total of 8,195 women). The domestic violence module, however, was only administered to one woman in the household, randomly chosen, in compliance with the World Health Organization's ethical and safety recommendations for research on domestic violence (WHO, 2001). Thus, data on domestic violence were obtained from 5,878 women, constituting 98% of those eligible. For the purpose of this study, only women currently married/having a partner ($n = 3{,}969$) were included to study the association between IPV during the latest year and demographic, social, and empowerment variables.

Questionnaire

The DHS questionnaires provide detailed data on women and their husbands' backgrounds, reproductive histories, utility of family planning methods, fertility preferences, antenatal and delivery care, child care and nutrition, child mortality, adult mortality, awareness of and precaution against sexually transmitted diseases, marriage and sexual behavior, empowerment and social indicators, and domestic violence. For the current study, the domestic violence module, social and empowerment variables were of primary interest.

The domestic violence module adheres to the standards for ethical and safety recommendations for research on domestic violence set by the World Health Organization (WHO). The recommendations aim at ensuring women's safety and at the same time maximizing

disclosure of actual violence, promoted among other things by offering adequate training and support to field workers together with informed consent and guarantee of privacy to respondents (WHO, 2001).

Measures Used in the Current Study

The DHS domestic violence module was developed in consultation with several experts on domestic violence measurement, gender, and survey research (Kishor & Johnson, 2004). It is based on a modified version of the Conflict Tactics Scale (CTS; Strauss, 1990). The module covers exposure to physical, emotional, and sexual violence currently and since 15 years of age in the domestic arena.

Dependent Variable

IPV was defined as exposure to one or several of the following experiences perpetrated by current husband/partner ever/during previous year: (a) pushing, shaking, or throwing something at her, (b) slapping her or twisting her arm, (c) punching or hitting her with something harmful, (d) kicking or dragging her, (e) strangling or burning her, (f) threatening her with a weapon, (g) attacking her with a weapon, (h) humiliating her in public, (i) threatening her or someone close to her, (j) forced sexual intercourse, and (k) other forced sexual act. Thus, the questions covered physical, emotional, and sexual abuse. In the logistic regressions analyses, exposure to IPV during the previous year was used as the dependent variable.

Independent Variables

Demographics characteristics assessed included age, urban/rural resident, highest educational achievement, and occupational status. The occupational status variable was transformed to include only three categories—"not working," "agriculture employee," and "others" (consisting of professionals, technicians, managers, clerical, sales, service, and manual workers)—to enable meaningful statistical analysis.

The questionnaire also requested demographic information on *partner characteristics*. These included age, education, and profession. Based on these variables, comparative data between the couples (i.e., partner characteristics) were constructed. These included age, education, and occupational contrast. In addition, information was obtained on whether the women were in polygamous relationships (i.e., the women were asked whether or not their husbands had another/other wives).

Access to information was measured via questions on access to television, radio, and newspapers/magazines. *Literacy level* was measured as ability to read. *Autonomy in domestic decisions* was measured via questions regarding women's decision autonomy on how to spend money, health care, and visiting relatives/friends.

Demographic, partner, and empowerment variables were used as independent variables in the logistic regressions model.

Statistical Analysis

A chi-square test was used to examine differences in proportions of exposure to IPV by demographic, social, and empowerment variables. To assess the independent contribution of these variables in predicting exposure to IPV, logistic regression was run with all the variables included in the model. The magnitude and direction of association were expressed in the adjusted odds ratios and significant levels expressed as p values. For

presentational purposes, the model has been split in three separate tables. Statistical significance was assumed at $p < .05$. The SPSS version 13.0 was used for all analyses.

RESULTS

Proportion of Women Exposed to IPV by Demographic Characteristics

Of the 3,969 participants, significant proportions reported exposure to physical (25%), emotional (18%), sexual (11%), and any/all (33%) violence perpetrated by their intimate partner during the latest year. However, higher proportions of exposure were reported among rural residents regarding physical ($p < .001$), emotional ($p < .05$), sexual ($p < .001$), and overall ($p < .001$) violence (Table 1). Similarly, women employed in the agriculture sector were more likely to report exposure to physical ($p < .001$), emotional ($p < .001$), sexual ($p < .001$), and any/all ($p < .001$) violence. Exposure to physical ($p < .001$), emotional ($p < .001$), sexual ($p < .001$), and any/all ($p < .001$) violence was significantly lower reported among women with a postsecondary education (Table 1).

Demographic Factors as Predictors of Intimate Partner Violence (IPV)

As indicated by the adjusted odds ratios (OR), women with a primary and secondary education were at higher likelihood of IPV (in all its forms) than peers with a postsecondary education (Table 1). Similarly, agricultural employees exhibited higher risk of exposure than peers not working consistently across all forms of IPV (Table 1).

Proportion of Women Exposed to IPV by Partner Characteristics

As indicated in Table 2, women the same age as their husband were more likely to report exposure to sexual violence ($p < .05$) than peers who were either younger or older than their husbands. The same trend was observed for physical, emotional, and any/all violence, though this did not reach statistical significance. A higher exposure to physical ($p < .05$) and any/all IPV ($p < .05$) was reported among women with equal education as their husbands when contrasted with peers having a lower or higher education than their partners. The same trend was observed for emotional violence, though this did not reach statistical significance. On the other hand, women with a higher occupational status than their husbands reported less exposure to physical ($p < .001$), emotional ($p < .001$), sexual (nonsignificant), and any/all ($p < .001$) violence. Finally, women in polygamous relationships were more likely to report physical ($p < .001$), emotional ($p < .001$), sexual ($p < .001$), and all/any ($p < .001$) violence than peers whose husbands had no other wives and peers who were not sure.

Partner Characteristics as Predictors of IPV

As indicated by the adjusted odds ratios in Table 2, women less than 10 years younger than their husbands were at higher likelihood of sexual and all/any violence than peers the same age as their husbands even after adjusting for other potential predictors of IPV (e.g., partner characteristics, empowerment, and autonomy). For physical IPV, women older and 10 years younger than their partners were more likely to be abused than peers the same age as their husbands. Regarding educational differences, women with the same education as their husbands stood at higher risk of physical and all violence than peers with a lower education than their husbands. Women with the same occupational status as their husbands

TABLE 1. Number of Women in Each Category (*n*), Proportions Within Each Category Exposed to IPV (% of *n*), Adjusted Odds Ratios (OR) for Exposure to IPV, and Confidence Intervals (CI) of OR by Demographic Characteristics

Variable (*n*)	Physical IPV % of *n*	Physical IPV OR (CI)	Emotional IPV % of *n*	Emotional IPV OR (CI)	Sexual IPV % of *n*	Sexual IPV OR (CI)	All IPV % of *n*	All IPV OR (CI)
Age		0.99 (0.98–1.00)		1.01 (1.00–1.02)*		1.00 (0.99–1.02)		0.99 (0.98–1.00)
15–19 years (288)	25		14		9		31	
20–24 years (817)	26		16		11		34	
25–29 years (934)	27		19		12		35	
30-34 years (749)	24		16		10		32	
35–39 years (523)	25		20		12		34	
40–44 years (410)	23		19		12		32	
45–49 years (248)	18		20		9		27	
Residential area								
Urban (1,127)	20	1.0	15	1.0	8	1.0	28	1.0
Rural (2,842)	27	1.03 (0.84–1.26)	19	1.04 (0.83–1.30)	12	1.23 (0.92–1.65)	35	1.06 (0.88–1.27)
Education								
No education (771)	24	2.11 (1.16–3.84)*	16	1.39 (0.74–2.63)	10	1.39 (0.60–3.23)	28	1.47 (0.89–2.42)
Primary (2,166)	29	3.06 (1.81–5.18)***	20	2.22 (1.29–3.81)**	14	3.11 (1.52–6.34)**	38	2.41 (1.58–3.66)***
Secondary (819)	18	2.07 (1.24–3.47)**	16	1.96 (1.16–3.32)*	10	2.21 (1.10–4.43)*	29	1.85 (1.23–2.77)**
Post-secondary (213)	9	1.0	9	1.0	5	1.0	17	1.0
Occupational status							2	
Not working (1,497)	22	1.0	14	1.0	6	1.0	8	1.0
Agriculture (1,391)	30	1.42 (1.14–1.89)**	20	1.40 (1.09–1.79)**	16	2.31 (1.69–3.15)***	40	1.60 (1.31–1.96)***
Other (1,078)	21	1.01 (0.75–1.38)	19	1.42 (1.01–1.99)*	11	1.42 (0.93–2.17)	31	1.20 (0.91–1.58)

Note. The adjusted odds ratio (OR) shown for each variable has been adjusted for all other variables (i.e., demographic, partner, empowerment/autonomy variables). Age was used as a continuous variable in the regression. All other variables were used as categorical variables and the contrast category is denoted with OR = 1.0.
*$p < .05$. **$p < .01$. ***$p < .001$.

TABLE 2. Numbers Within Each Category (*n*), Proportions Within Each Category Exposed to IPV (% of *n*), Adjusted Odds Ratios (OR) for Exposure to IPV, and Confidence Intervals (CI) of OR, by Partner Characteristics

Variable	(*n*)	Physical IPV % of *n*	Physical IPV OR (CI)	Emotional IPV % of *n*	Emotional IPV OR (CI)	Sexual IPV % of *n*	Sexual IPV OR (CI)	All IPV % of *n*	All IPV OR (CI)
Age difference									
Same	(132)	16	1.0	14	1.0	5	1.0	23	1.0
Women older	(100)	27	2.12 (1.09–4.14)*	20	1.56 (0.76–3.22)	10	2.43 (0.87–6.77)	34	1.77 (0.97–3.24)
Women younger < 10	(2,669)	25	1.65 (1.02–2.69)*	18	1.33 (0.80–2.24)	12	2.45 (1.12–5.36)*	34	1.60 (1.31–1.96)*
Women younger ≥ 10	(1,052)	25	1.43 (0.87–2.37)	18	1.22 (0.72–2.10)	10	2.02 (0.90–4.51)	33	1.33 (0.86–2.08)
Education difference									
Women lower	(1,065)	23	1.0	17	1.0	10	1.0	31	1.0
Same	(2,503)	26	1.24 (1.04–1.49)*	18	1.17 (0.95–1.43)	11	1.10 (0.86–1.41)	35	1.25 (1.06–1.47)**
Women higher	(354)	21	1.13 (0.80–1.58)	16	0.99 (0.68–1.44)	11	1.18 (0.76–1.83)	31	1.19 (0.88–1.60)
Occupational difference									
Women higher	(300)	26	1.0	24	1.0	15	1.0	36	1.0
Same	(1,411)	27	0.82 (0.59–1.13)	19	0.69 (0.50–0.97)*	13	0.58 (0.38–0.86)**	37	0.87 (0.65–1.16)
Women lower	(2,219)	24	0.74 (0.51–1.07)	16	0.71 (0.47–1.05)	9	0.53 (0.33–0.86)**	31	0.77 (0.54–1.08)
Other wives									
No	(3,240)	23	1.0	16	1.0	10	1.0	31	1.0
Yes	(637)	33	1.63 (1.33–2.00)***	25	1.73 (1.38–2.17)***	13	1.53 (1.14–2.04)**	43	1.83 (1.50–2.22)***
Don't know	(87)	28	1.33 (0.81–2.20)	26	1.78 (1.07–2.98)*	15	1.23 (0.63–2.37)	40	1.48 (0.94–2.35)

Note. The adjusted odds ratio (OR) shown for each variable has been adjusted for all other variables (i.e., demographic, partner, empowerment/autonomy variables). The contrast category is denoted with OR = 1. 0.
*$p < .05$. **$p < .01$. ***$p < .001$.

were at lower risk of emotional IPV than peers with a higher status. In addition, women with the same or lower occupational status than their husbands stood at lower risk of sexual violence than peers with a higher status. Finally, contrasting with women whose husbands had no other wives, women in polygamous relationships were at higher likelihood of abuse consistently across all types of IPV.

Proportion of Women Exposed to IPV by Access to Information, Literacy, and Autonomy

As indicated in Table 3, women who read newspapers reported less exposure to physical ($p < .001$), emotional ($p < .01$), and all/any ($p < .001$) violence than peers who do not. On the other hand, a higher proportion of women who listen to radio reported exposure to sexual violence ($p < .001$) than peers who do not. Women who watch television were less likely to report physical ($p < .001$), emotional ($p < .05$), and all ($p < .001$) violence than peers who do not. Similarly, women who could read were less likely to report physical ($p < .001$), emotional ($p < .01$), and sexual ($p < .05$) violence.

Women with some grade of autonomy on health issues were less likely to report physical ($p < .001$), emotional ($p < .001$), sexual ($p < .01$), and all ($p < .001$) violence than peers without such autonomy. Similarly, women with a say on visits were less likely to report physical abuse ($p < .001$) and violence in general ($p < .001$).

Access to Information, Literacy, and Autonomy as Predictors of IPV

As indicated by the adjusted odds ratios (Table 3), women who were fully able to read were at a lower risk of emotional IPV. In addition, and consistently for all forms of IPV, women with some degree of autonomy on health issues in the domestic arena were at a lower likelihood of IPV when contrasted with peers lacking any say on health issues.

DISCUSSION

This study investigated social inequalities in IPV among women of reproductive age in Kenya. In addition to demographic and social factors associated with IPV, factors such as women's access to information and autonomy in the domestic arena were scrutinized as possible predictors of IPV. Such data may be important in identifying women particularly at risk for IPV and informing targeted interventions to manage IPV.

The results indicate that social factors are significantly associated with exposure to IPV, often in a complex manner. Women with a postsecondary education exhibit a lower likelihood of exposure to all IPV than less-educated peers. On the other hand, when women's education is contrasted with that of their intimate partners, another picture emerges. Women with equal or higher level of education than their partner are more likely to report IPV than peers with lower education than their partners. Similarly, women with a higher occupational status than their partners report a higher risk of IPV than those with a lower occupational status. These findings indicate that, per se, high status of women may act as a protective factor against IPV. However, a higher status than the male partner may increase vulnerability to abuse. It is plausible that women with a comparatively higher status than their partners are likely to be more outspoken as well as economically independent and are therefore in a position to defy societal norms of male superiority. This may increase the likelihood of IPV. These findings corroborate some work in the field suggesting that

TABLE 3. Numbers Within Each Category (*n*), Proportions Within Each Category Exposed to IPV (% of *n*), Adjusted Odds Ratios (OR) for Exposure to IPV, and Confidence Intervals (CI) of OR, by Access to Information and Autonomy

Variable (*n*)	Physical IPV % of *n*	Physical IPV OR (CI)	Emotional IPV % of *n*	Emotional IPV OR (CI)	Sexual IPV % of *n*	Sexual IPV OR (CI)	All IPV % of *n*	All IPV OR (CI)
Read newspaper								
Not at all (2,565)	27	1.0	19	1.0	11	1.0	35	1.0
Yes (1,396)	20	0.94 (0.77–1.15)	15	0.98 (0.78–1.22)	10	0.92 (0.71–1.19)	29	0.90 (0.75–1.08)
Listen to radio								
Not at all (783)	25	1.0	16	1.0	7	1.0	30	1.0
Yes (3,182)	25	1.03 (0.82–1.28)	18	1.21 (0.94–1.57)	12	1.25 (0.89–1.75)	34	1.13 (0.92–1.40)
Watch TV								
Not at all (2,726)	27	1.0	19	1.0	11	1.0	35	1.0
Yes (1,239)	20	0.96 (0.79–1.16)	15	0.94 (0.76–1.17)	11	1.33 (1.04–1.71)	30	1.05 (0.88–1.26)
Literacy level								
Cannot read fully (1,428)	28	1.0	20	1.0	10	1.0	35	1.0
Can read fully (2,535)	23	0.83 (0.67–1.03)	16	0.75 (0.59–0.95)*	12	1.07 (0.80–1.42)	32	0.87 (0.71–1.07)
Say on health								
Not at all (1,897)	28	1.0	20	1.0	12	1.0	37	1.0
Full or partial say (2,063)	21	0.74 (0.62–0.88)***	16	0.76 (0.62–0.92)**	10	0.69 (0.54–0.87)**	29	0.71 (0.61–0.84)***
Say on purchase								
Not at all (2,578)	25	1.0	18	1.0	11	1.0	34	1.0
Full or partial say (1,386)	23	1.13 (0.94–1.36)	16	0.92 (0.74–1.12)	11	1.06 (0.82–1.35)	31	1.06 (0.89–1.25)
Say on visiting								
Not at all (1,642)	28	1.0	19	1.0	12	1.0	36	1.0
Full or partial say (2,312)	23	0.89 (0.75–1.06)	17	0.96 (0.79–1.17)	11	0.95 (0.75–1.20)	31	0.92 (0.78–1.08)

Note. The adjusted odds ratio (OR) shown for each variable has been adjusted for all other variables (i.e., demographic, partner, empowerment/autonomy variables). The contrast category is denoted with OR = 1. 0.

*$p < .05$. **$p < .01$. ***$p < .001$.

women's high status may be a protective factor of IPV (Koenig et al., 2006) but provides further insight that a comparatively higher status than the intimate partner may increase exposure to IPV. The findings, however, need to be replicated in societies with dissimilar sociocultural norms before generalization can be done.

Our data suggest that women who are employed stand at a higher likelihood of IPV when contrasted with peers reporting unemployment. Unemployed women are often economically dependent on their husband, particularly in developing countries like Kenya, where social welfare support systems do not exist. In this regard, unemployed women, to a higher degree than their employed peers, conform to the societal norm in which the husband is seen as the "breadwinner" in the household, thereby reducing the risk of conflict.

Access to media was not independently associated with IPV exposure. As we know, media is a useful channel to educate women on many issues, including domestic abuse. However, if media is to be an effective tool to combat IPV, a certain level of education or literacy, evidently lacking among many women in our data, may be necessary. In other words, education may act as a mediator in information dissemination. Our results seem to point in that direction, as the highly significant association between access to media and IPV exposure in the bivariate analysis ceased to be significant when other variables (e.g., education) were adjusted for in the multivariate analysis. Another plausible explanation for the lack of association could be that issues of domestic violence and women's empowerment may not be receiving attention in the local media. Deeper insight on the role of media in IPV exposure is warranted in the research.

Except for decisions on health issues, the indicators of women's autonomy in this study were not independently associated with IPV exposure. Women's autonomy is a complex phenomenon that cannot be entirely measured by determining if women have final say on household issues or not. On the contrary, what may on the outset seem to be a question of autonomy might in essence be reflecting an instance where household decision-making is linked with traditional gender roles rather than autonomy per se. Future research regarding autonomy and IPV exposure may need to incorporate other autonomy indicators such as the woman's choices regarding, for example, family planning issues and her participation in the labor market.

Age differences between the partners are associated with IPV. Women younger or older than their husbands were at higher likelihood of physical IPV. Age disparities could reflect differences in maturity and stage in life between the partners. Such differences, if misunderstood by one or both of the partners, are likely to trigger conflict. Partners the same age are more likely to share similar interests and lifestyles, reducing the risk for conflicts. Women in polygamous relationships in our data reported a higher likelihood of IPV. This is not surprising as the husband's remarriage(s) is expected to spark marital conflict, thereby increasing the probability of assault, be it physical or emotional.

The DHS display some important advantages when compared with other surveys. First, they are often nationally representative, allowing for conclusions to cover the entire nation. Second, the sampling methodology and instruments used adhere to ethical standards for research in domestic violence as approved by the ORC. In addition, data collectors are trained to adhere to regulations for interview completion in line with the WHO's recommendations for safety precautions for collection of domestic violence data. These factors notwithstanding, weaknesses of the DHS domestic violence module deserve some acknowledgment. Research based on data from Nicaragua and Colombia suggest that DHS surveys still underestimate the extent of IPV when compared with other surveys like the WHO's multicountry survey on gender-based violence and other specialized violence surveys (Ellsberg et al., 2000; Morisson & Orlando, 2004). Thus, the frequencies reported here may represent an underestimation.

Second, our measure of autonomy can be questioned. As argued previously, women's power in the domestic arena is likely to coincide with the roles their husbands expect them to play in the household. Future research should incorporate broader measures of autonomy that go beyond decisions in the domestic arena.

Finally, the cross-sectional design of the current study does not allow for causal inference. While social status and autonomy variables are likely to be risk factors for IPV, the reciprocal is as likely—that is, that these variables may be a consequence of IPV. Study designs of longitudinal nature are necessary to firmly establish causal links.

Our results have some implications for prevention of IPV in Kenya as well as in other countries with similar socioeconomic characteristics and cultural values. Intervention should target primarily socially vulnerable women (illiterate and low educated) possibly via mass media campaigns against IPV. As pointed out recently (Lawoko, 2006), there is a need for a concerted effort to increase awareness in order to change attitudes towards IPV in developing countries. Along with such efforts, however, structural changes to improve literacy and education levels in society at large (e.g., universal primary and secondary education) are necessary if educational campaigns against IPV are to be successful.

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