R.E.S.P.e.c.T and intimate partner violence: a cross-sectional study using DHS data in Kenya

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ABSTRACT

Background Thirty per cent of all women experience intimate partner violence (IPV) in their lifetime. The aim of this study was to examine the association between the WHO’s novel R.E.S.P.E.C.T framework and IPV among women in Kenya.

Methods We used the 2014 Kenya Demographic and Health Survey (KDHS). Only women selected for the domestic violence module and who were married/ living with their partner were eligible for this study (n=3737). We created a summary score for the strategies denoted by R.E.S.P.T based on availability of questions addressing these strategies in the KDHS, and a total score that summed responses across all strategies. Each letter was assessed with Cronbach’s alpha. Multiple logistic regression models were used to investigate the relationship between R.E.S.P.T scores and IPV.

Results All strategies except for E lowered the odds of IPV. Decision-making (R) was negatively associated with experiencing IPV (OR=0.82 (0.53 to 0.72)). Land and property ownership (E) were positively associated with experiencing IPV (OR=1.25 (1.08 to 1.43)). Access to healthcare (S) was negatively associated with experiencing IPV (OR=0.55 (0.48 to 0.63)). Higher levels of wealth (P) were negatively associated with experiencing IPV (OR=0.47 (0.37 to 0.62)). Not justifying wife-beating in any scenario (T) was negatively associated with experiencing IPV (OR=0.39 (0.29 to 0.53)). After adjusting for demographics, a 1-unit increase in total R.E.S.P.T score was negatively associated with experiencing IPV (AOR=0.63 (0.57 to 0.70)) with a similar finding for IPV in the past 12 months (AOR=0.59 (0.53 to 0.66)). Younger women, higher education and Muslim religion were associated with decreased odds of experiencing IPV while living in a rural location and working were associated with increased odds of experiencing IPV.

Conclusions Our study provides initial evidence that by using the multistategy R.E.S.P.E.C.T framework, countries can dramatically lower the odds of women experiencing IPV. IPV prevention strategies must have a wide approach. The DHS can be used as a tool to monitor implementation and efficacy of this novel strategy.

INTRODUCTION

Thirty per cent of all women have experienced physical and/or sexual violence by an intimate partner.1 Intimate partner violence (IPV), a common form of violence against women (VAW) is a violation of the Declaration of Human Rights2 and the Declaration on the Elimination of Violence against Women.3 IPV negatively affects women’s physical, mental, sexual, reproductive health and well-being.1 Additionally, 38%–50% of female homicides are committed by intimate partners.4 IPV also has social and economic consequences for families, communities and societies.1 Recently, the global community has paid increased attention to IPV, but further study is needed to address its complexity and find effective intervention strategies. Although a worldwide issue, estimates of IPV rates in East Africa are among the highest globally.5

Prevention strategies often focus on women’s empowerment. Sustainable Development Goal 5 explicitly defines Gender Equality as a global priority.6 Interventions such as microfinancing7 and gender-related health schemes have been implemented.8 Research often uses household-decision making as a measure of empowerment.9 10 Drawing on evidence of effective interventions, the WHO proposed the innovative R.E.S.P.E.C.T framework in 2019. This framework expands the traditional concept of women’s empowerment and decision-making...
including seven strategies to prevent VAW:11 Relationship skills strengthened, Empowerment of women, Services ensured, Poverty reduced, Environments made safe, Child and adolescent abuse prevented, Transformed attitudes and beliefs. These strategies are described more fully in table 1.

A major component of relationship skills strengthened is decision-making. Evidence is mixed on the effects of women’s autonomous decision-making power on IPV.12 13 Some studies report that women-alone decision-making is not associated with IPV, while joint-decision making is a protective factor.14 15 Other studies have found that women-alone decision-making is an associated risk factor for IPV,16 and that women’s involvement in decision-making, both alone and joint, reduces risk of IPV.17

While the UN recommends economic empowerment for protection against VAW in its Beijing declaration,16 others posit that VAW increases when women are employed because male partners compensate for the increase in women’s economic status or independence.19

Wealth is well studied as it relates to IPV. A multicountry study in 46 low-income and-middle-income countries examined wealth quintiles and found that poorer women were more vulnerable to IPV.20 Other studies have reported similar findings.16 21 Asset ownership is less well studied. One multicountry study reported mixed results: ownership of assets was negatively associated with IPV in three countries, positively associated in five countries, and had no significant relationship in 20 countries.22 In India, researchers found land and especially house ownership to be negatively associated with IPV.23 In Nicaragua and Tanzania, asset ownership was negatively associated with IPV and women felt increased autonomy and elevated respect from their husbands because of asset ownership.24

Studies regarding the relationship between access to care and IPV are limited. One US study found survivors of IPV, both women and men, had lower rates of having health insurance, primary care providers and regular checkups compared with women and men who had not experienced IPV.25 In Bangladesh and Ethiopia, women

| Strategy                        | Description                                                                 | Question                                                                                                                                       | Alpha |
|--------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------|
| Relationship skills strengthened | This refers to strategies to improve skills in interpersonal communication, conflict management and shared decision-making | Who usually makes decisions about healthcare for yourself? Who usually makes decisions about making major household purchases? Who usually makes decisions about visits to your family or relatives? Who usually makes decisions about what food should be cooked each day? | 0.61  |
| Empowerment of women            | This refers to economic and social empowerment strategies including those that build skills in self-efficacy, assertiveness, negotiation and self-confidence | Do you own this or any other house either alone or jointly with someone else? Do you own any land either alone or jointly with someone else? | 0.85  |
| Services ensured                | This refers to a range of services including health, police, legal and social services for survivors of violence | Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not: Getting permission to go to the doctor? Getting money needed for advice or treatment? The distance to the health facility? Not wanting to go alone? | 0.59  |
| Poverty reduced                 | This refers to strategies targeted to women or the household, whose primary aim is to alleviate poverty | Wealth quintiles                                                                                                                              |       |
| Transformed attitudes and beliefs| This refers to strategies that challenge harmful gender attitudes, beliefs, norms and stereotypes | In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food? | 0.7   |

Total score 0.47
who experienced IPV had significantly lower rates of antenatal care and lower use of trained providers for delivery.²⁶ ²⁷ Yet, other US studies suggest that women who experienced IPV have increased rates of healthcare utilisation.²⁹ ³⁰

Attitudes and cultural beliefs have also garnered attention in relation to IPV. A multicountry study based on data from UNICEF’s Multiple Indicator Cluster Survey found that the belief that IPV is acceptable, at least in some circumstances, was most prevalent in Africa and South Asia.³⁰ Increased justification of IPV is associated with increased risk of experiencing IPV.¹⁷ ³¹

The R.E.S.P.T framework tackles this multifaceted problem with a multifaceted solution, aiming strategies at several risk and protective factors simultaneously. Since this novel framework was recently released, work is needed to understand how this rubric may relate to understanding patterns of IPV at a national level. We investigated the relationship between IPV and the WHO’s novel R.E.S.P.E.C.T framework using the 2014 Kenya Demographic and Health Survey (KDHS). The KDHS includes questions that measure five of the seven aspects of the R.E.S.P.E.C.T rubric (R.E.S.P.T).

METHODS

The 2014 KDHS collected demographic and health information from a representative, multistage cluster sample across Kenya’s 47 counties over a period of 6 months, from May 2014 to October 2014. Clusters were sampled with a stratified probability proportional to size approach from 96 251 areas in the 2009 Kenya Population and Housing Census using a two-stage sample design. In the first stage, 1612 areas were selected from the larger frame: 995 rural and 617 urban areas. In the second stage, 25 households were randomly selected from each cluster, resulting in 40 300 households.

A total of 36 430 households were contacted. Interviews using the full version of the women’s questionnaire were completed in half of the selected households for a total of 14 741 (47%) women. Only women selected for the domestic violence module (n=5657) and who were currently married or living with their partner (n=3866) were eligible for this study because several R.E.S.P.T variables were only asked of partnered women. The 129 women missing information for religion, ethnicity, age, urban/rural status or education were excluded for a final analytical sample of 3737 women.

Patient and public involvement

This research was performed without any public or patient involvement. Given the nature of the data, and the time and funding available, this was not feasible.

Measures

Intimate partner violence (IPV)

The DHS questions relating to IPV in the three categories of emotional violence, physical violence and sexual violence are listed in table 2.

In the 2014 KDHS, women were asked questions beginning with ‘Does/did your (last) husband/partner ever...’ Women who answered yes to any specific question were asked about frequency of the action in the last 12 months (often/sometimes/not in that time). Dichotomous variables were constructed indicating whether a woman had ever experienced any emotional violence (yes/no), any physical violence (yes/no), any sexual violence (yes/no) and any emotional, physical or sexual violence (yes/no). Similar indicator variables were created to indicate whether she had experienced these types of violence in the past 12 months.

R.E.S.P.T

We created a summary score for each dimension of R.E.S.P.T based on the set of questions addressing each

| Table 2 | Questions in the domestic violence module of the 2014 Kenya Demographic and Health Survey |
|---------|-----------------------------------------------------------------------------------------|
| Description | Question | |
| Emotional violence | Did your (last) (husband/partner) ever: | |
| ► Say or do something to humiliate you in front of others? | |
| ► Threaten to hurt or harm you or someone you care about? | |
| ► Insult you or make you feel bad about yourself? | |
| Physical Violence | Did your (last) (husband/partner) ever: | |
| ► Push you, shake you or throw something at you? | |
| ► Slap you? | |
| ► Twist your arm or pull your hair? | |
| ► Punch you with his fist or with something that could hurt you? | |
| ► Kick you, drag you or beat you up? | |
| ► Try to choke you or burn you on purpose? | |
| ► Threaten or attack you with a knife, gun or other weapon? | |
| Sexual violence | Did your (last) (husband/partner) ever: | |
| ► Physically force you to have sexual intercourse with him when you did not want to? | |
| ► Physically force you to perform any other sexual acts you did not want to? | |
| ► Force you with threats or in any other way to perform sexual acts you did not want to? | |

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E strategy was found to increase the odds of experiencing IPV, two total scores were presented, one summing all five strategies, and one without E. Models for both total scores were adjusted for.

RESULTS

Table 1 provides Cronbach’s alpha for each strategy.32 E and T had an acceptable level of internal consistency with alphas being 0.85 and 0.7, respectively. R and S had somewhat lower values of 0.61 and 0.59, respectively. P only included only one question. The total score had an alpha of 0.47. Of the 5737 women, 14% were Muslim, 64% lived in a rural setting, 64% were currently working and 82% had at least a primary level education. A total of 1197 women (32%) reported having ever experienced any type of IPV.

As shown in table 3, compared with women aged 25–39, women 15–24 had decreased odds of IPV (OR=0.77 (0.65 to 0.93)), while women aged 40–49 had increased odds of experiencing IPV (OR=1.23 (1.03 to 1.48)). Obtaining a higher level of education was associated with decreased odds of experiencing IPV (OR=0.37 (0.25 to 0.54)) and being Muslim was associated with decreased odds of experiencing IPV (OR=0.40 (0.24 to 0.67)). Living in a rural location was associated with increased odds of IPV (OR=1.33 (1.15 to 1.54)). Women currently working had increased odds of experiencing IPV (OR=1.62 (1.40 to 1.88)). A total of 910 women had experienced IPV in the last 12 months at the time of the survey. Age was not associated with IPV in the past 12 months but ratios for other demographic characteristics were similar to those observed for ever-experienced IPV.

Table 4 shows the crude ORs for each component of the R.E.S.P.T scale in women ever experiencing IPV, and those who experienced IPV in the last 12 months. All strategies except for E lowered the odds of IPV. Women with a score of 1 point for R had a 40% decreased odds of IPV (OR=0.62 (0.53 to 0.72)) compared with a score of less than 1. Women with 1 point for E had a 25% increased odds of IPV (OR=1.25 (1.08 to 1.43)) compared with a score of less than 1. Women with 1 point for S resulted in almost a halving of the odds of experiencing IPV (OR=0.55 (0.48 to 0.63)) compared with a score of less than 1. Women with 1 point for T had lower odds of experiencing IPV but the decrease was only statistically significant for those who had a score of 0.6–0.8 points (OR=0.54 (0.39 to 0.74)) or 1 point (OR=0.39 (0.29 to 0.53)). The ORs for women who reported IPV in the last 12 months were similar to those for women who ever-experienced IPV. No significant interaction was found between R and T.

After adjusting for age, religion, urban/rural status, work status and education level, a 1-unit increase in the total score was associated with a 40% decreased odds of lifetime experience of IPV (OR=0.63 (0.57 to 0.70)) with a similar finding for IPV in the past 12 months (OR=0.59 (0.53...
to 0.66)) (Table 5). The R.E.P.T. total score decreased the odds further such that a 1-unit increase in score was associated with nearly a 50% decrease in the odds of IPV lifetime experience (OR=0.54 (0.48 to 0.61)) and of IPV experience in the last 12 months (OR=0.50 (0.44 to 0.57)).

**DISCUSSION**

To the best of our knowledge, this paper is the first to analyse IPV risk based on the novel R.E.S.P.T framework using nationally representative data. A higher total score was associated with lower odds of both lifetime experience and past 12-month experience of IPV. Each 1-unit increase in the score resulted in a 40% decrease in women’s risk of experiencing IPV. Individually, strategies related to relationship skills, services ensured, poverty reduced and transformed attitudes and beliefs were associated with lower odds of IPV. Effort to increase interventions in these areas may decrease the prevalence of IPV. However, E, as measured by land and property ownership, increased women’s risk of IPV. Further investigation of reasons for this finding is warranted.

Joint and women only decision-making has been shown to decrease odds of IPV in several studies. In the continuous Peru, DHS from 2005 to 2012 each additional joint decision was associated with 9% and 16% lower odds of moderate and severe physical violence, respectively, while women-only decision-making had no effect. We found that joint-decision making was more strongly protective against IPV than women-alone decision-making. Women who were involved jointly in all four decisions had half the odds of experiencing IPV.

A Mumbai study assigned points in a similar fashion to our R scale, but scored autonomous and joint-decision making equally. That study found decision-making was only associated with IPV when considered along with justification of wife-beating; women who were both not involved in decision-making and justified abuse had more than double the risk of experiencing IPV than women who were involved in decision-making and did not justify wife-beating. We did not find a significant interaction between decision-making and justified abuse. This may reflect from between-country differences and/or differences in scale construction.

We found that joint ownership of land and a home (E) increased the odds of experiencing IPV, similar to what was observed for some countries in a 28-country study of ownership and IPV. Women in five countries (Burkina Faso, Egypt, Jordan, Mali and Nepal) were more likely to experience IPV if they owned assets, jointly or alone, than women not owning assets. Three other countries (Democratic Republic of Congo, Pakistan and Honduras) had an opposite finding, consistent with studies in India, Nicaragua and Tanzania where women’s asset...
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Ownership was protective. In contrast, increasing wealth quintile decreased the odds of IPV consistent with prior studies. More research is needed to better understand how asset ownership influences IPV risk, and the factors that account for the differences across countries. It is important to understand how to advance women’s ownership and economic status without increasing risk of IPV.

This research adds to the growing body of work on barriers to care and IPV. Studies in Bangladesh and Ethiopia found women who experience IPV had lower odds of receiving care or delivering with a skilled clinician. US studies have reported conflicting results. We found that women who had no perceived barriers had half the odds of experiencing IPV.

T, measured by questions on justification of wife-beating, was more strongly associated with reducing odds of experiencing IPV than any of the other strategies. Studies in Nigeria and India had similar results. These data suggest the importance of using a multifaceted strategy such as the R.E.S.P.E.C.T framework.

| Table 4 | Crude ORs of R.E.S.P.T scores by women who ever experienced any intimate partner violence, 2014 Kenya Demographic and Health Surveys |
|---------|----------------------------------------------------------------------------------------------------------------------------------|
|         | Any IPV (n=1197)                                                                                                               | Any IPV in the last 12 months (n=910) |
|         | N (%)                                                                                                                           | n (%) | OR (95% CI)                           | n (%) | OR (95% CI)                           |
| R       |                                                                                                                                  |       |                                       |       |                                       |
| <1      | 3489 (93.4)                                                                                                                     | 1151 (96.2) | Ref.                                  | 878 (96.5) | Ref.                                  |
| 1       | 248 (6.6)                                                                                                                       | 46 (3.8) | 0.46 (0.33 to 0.63)                   | 32 (3.5) | 0.44 (0.30 to 0.63)                   |
| E       |                                                                                                                                  |       |                                       |       |                                       |
| <1      | 1865 (49.9)                                                                                                                     | 555 (46.4) | Ref.                                  | 483 (53.1) | Ref.                                  |
| 1       | 1872 (50.1)                                                                                                                     | 642 (53.6) | 1.23 (1.07 to 1.41)                   | 427 (46.9) | 1.17 (1.01 to 1.36)                   |
| S       |                                                                                                                                  |       |                                       |       |                                       |
| 0–0.75  | 1928 (51.6)                                                                                                                     | 738 (61.7) | Ref.                                  | 579 (63.6) | Ref.                                  |
| 1       | 1809 (48.4)                                                                                                                     | 459 (38.3) | 0.55 (0.48 to 0.63)                   | 331 (36.4) | 0.52 (0.45 to 0.61)                   |
| P       |                                                                                                                                  |       |                                       |       |                                       |
| 0.2     | 983 (26.3)                                                                                                                      | 318 (26.6) |                                      | 244 (26.8) |                                      |
| 0.4     | 761 (20.4)                                                                                                                      | 314 (26.2) |                                      | 245 (26.9) |                                      |
| 0.6     | 680 (18.2)                                                                                                                      | 242 (20.2) |                                      | 178 (19.6) |                                      |
| 0.8     | 699 (18.7)                                                                                                                      | 203 (17) | as continuous                         | 154 (16.9) | as continuous                         |
| 1       | 614 (16.4)                                                                                                                      | 120 (10) | 0.47 (0.37 to 0.60)                   | 89 (9.8) | 0.47 (0.37 to 0.62)                   |
| T       |                                                                                                                                  |       |                                       |       |                                       |
| 0       | 190 (5.1)                                                                                                                       | 91 (7.6) | Ref.                                  | 69 (7.6) | Ref.                                  |
| 0.2–0.4 | 668 (17.9)                                                                                                                      | 276 (23.1) | 0.77 (0.55 to 1.06)                   | 213 (23.4) | 0.82 (0.59 to 1.15)                   |
| 0.6–0.8 | 1000 (26.8)                                                                                                                     | 332 (27.7) | 0.54 (0.39 to 0.74)                   | 267 (29.3) | 0.64 (0.46 to 0.89)                   |
| 1       | 1879 (50.3)                                                                                                                     | 498 (41.6) | 0.39 (0.29 to 0.53)                   | 361 (39.7) | 0.42 (0.31 to 0.58)                   |

IPV, intimate partner violence.

| Table 5 | Crude and adjusted ORs of R.E.S.P.T total score by women who ever experienced any intimate partner violence 2014 Kenya Demographic and Health Surveys |
|---------|----------------------------------------------------------------------------------------------------------------------------------|
|         | Crude: OR (95% CI) P value                                                                                                      | Adjusted for demographics: OR (95% CI) P value |
|         | Total score any IPV 0.72 (0.66 to 0.78) <0.0001                                                                                 | 0.62 (0.56 to 0.68) <0.0001                   |
|         | Total score 12 months 0.66 (0.60 to 0.72) <0.0001                                                                               | 0.57 (0.51 to 0.63) <0.0001                   |
|         | Crude: E OR (95% CI) P value                                                                                                     | Adjusted for demographics: E OR (95% CI) P value |
|         | Total score any IPV 0.57 (0.52 to 0.63) <0.0001                                                                               | 0.51 (0.46 to 0.58) <0.0001                   |
|         | Total score 12 months 0.56 (0.50 to 0.62) <0.0001                                                                              | 0.47 (0.41 to 0.53) <0.0001                   |

IPV, intimate partner violence.
The DHS provides a unique opportunity to assess the utility of the R.E.S.P.E.C.T intervention strategy at a nationwide level and to compare across countries. However, not every strategy has relevant questions included in the DHS while other strategies had only a limited number of questions such that assessment of the strategy was not complete. The total score had a low Cronbach’s alpha suggesting analysing strategies alone rather than as a summary score might be a better approach. Although using the DHS was an imperfect solution for data on this scale, further development of questions to improve the scale is warranted.

Limitations of this study include the cross-sectional design of the DHS that preclude establishing causal inference, the potential for social desirability bias given the sensitive nature of the questions and recall bias may have resulted in under-reporting of IPV. Nonetheless, this study had several strengths. It adds to the body of literature on many risk factors for IPV and is the first, to the best of our knowledge, to assess the utility of the WHO’s novel R.E.S.P.E.C.T framework. The DHS provides a unique opportunity to assess the utility of the R.E.S.P.E.C.T intervention strategy at a nationwide level and to compare across countries.

CONCLUSIONS
This study found that multiple strategies, together, reduced the risk of IPV providing supporting evidence for addressing IPV through a socioecological approach integrating multiple levels of influence. The R.E.S.P.E.C.T framework targets multiple levels of a woman’s life experience through this socioecological lens combining strategies from societal, community, relationship and individual levels. We encourage others to assess the WHO’s novel framework using available data from the DHS of other countries to evaluate the utility of the framework and monitor its impact as recommended interventions are put into action over time. This study provides initial evidence that by using the multistrategy R.E.S.P.E.C.T framework, we can dramatically lower the odds of women experiencing IPV.

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