

Pathways between childhood trauma, intimate partner violence, and harsh parenting: findings from the UN Multi-country Study on Men and Violence in Asia and the Pacific



Emma Fulu, Stephanie Miedema, Tim Roselli, Sarah McCook, Ko Ling Chan, Regine Haardörfer, Rachel Jewkes, on behalf of the UN Multi-country Study on Men and Violence study team*



Summary

Background Although childhood trauma and violence against women are global public health issues, few population-based data from low-income and middle-income countries exist about the links between them. We present data from the UN Multi-country Study on Men and Violence in Asia and the Pacific, exploring the pathways between different forms of childhood trauma and violence against women.

Methods In this multicountry study, we interviewed multistage representative samples of men and women, aged 18–49 years, in Asia and the Pacific, using standardised population-based household surveys. Men were interviewed in six countries, and women in four. Respondents were asked questions about their perpetration or experience of intimate partner violence or non-partner sexual violence, childhood trauma, and harsh parenting (smacking their children as a form of discipline). We used maximum likelihood multivariate logit models to explore associations between childhood trauma and violence against women, and fitted path models to explore associations between experience and perpetration of child maltreatment.

Findings Between Jan 1, 2011, and Dec 1, 2012, 10 178 men and 3106 women completed interviews in this study, with between 815 and 1812 men per site and 477 and 1103 women per site. The proportion of men who experienced any childhood trauma varied between 59% (n=478, 95% CI 54·0–63·3; Indonesia rural site) and 92% (n=791, 89·4–93·8; Bougainville, Papua New Guinea). For women, the results ranged from 44% (n=272, 37·7–50·8; Sri Lanka) to 84% (n=725, 80·7–86·8; Bougainville, Papua New Guinea). For men, all forms of childhood trauma were associated with all forms of intimate partner violence perpetration. For women, all forms of childhood trauma were associated with physical intimate partner violence, and both physical and sexual intimate partner violence. There were significant, often gendered, pathways between men's and women's perpetration and experiences of childhood trauma, physical intimate partner violence, harsh parenting, and other factors.

Interpretation The data point to both a co-occurrence and a cycle of abuse, with childhood trauma leading to violence against women and further child maltreatment, which in turn increases the risk of experience or perpetration of violence during adulthood. Efforts to prevent both forms of violence would benefit from a meaningful integrated approach. Interventions should promote positive parenting, address inequality and the normalisation of violence across the life course, and transform men's power over women and children.

Funding Partners for Prevention. National studies were funded by the UN Population Fund in Bangladesh and China, UN Women in Cambodia and Indonesia, UN Development Programme in Papua New Guinea, and CARE in Sri Lanka.

Copyright © The Authors. Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND license.

Introduction

Child maltreatment and violence against women are global public health issues.^{1,2} In 2015, the Sustainable Development Goals established international development targets for all member states of the UN. These targets include one on the elimination of all forms of violence against women and girls (target 5.2), and another on ending abuse, exploitation, trafficking, and all forms of violence against, and torture of, children (target 16.2). Governments and multilateral agencies

need scientific evidence that can guide programmes and policies to achieve these ambitious targets.

In Asia and the Pacific, violence against women and child maltreatment are pervasive,^{3–5} although there are scant population-based statistics on child maltreatment across the region.⁶ Violence against children and violence against women have generally been addressed separately. More recently, researchers in the region have focused on violence against women as a consequence of child maltreatment, with evidence showing that the association

Lancet Glob Health 2017; 5: e512–22

See [Comment](#) page e472

*Members of the study team listed at the end of the paper

The Equality Institute, Melbourne, VIC, Australia (E Fulu PhD, S McCook MA); Department of Sociology (S Miedema MA) and Department of Behavioral Sciences and Health Education, Rollins School of Public Health (R Haardörfer PhD), Emory University, Atlanta, GA, USA; Independent Statistics Consultant, Brisbane, QLD, Australia (T Roselli BSc); Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, China (K L Chan PhD); and Gender and Health Research Unit, South African Medical Research Council, Pretoria, South Africa (Prof R Jewkes MBBS MD)

Correspondence to: Dr Emma Fulu, The Equality Institute, Melbourne, VIC 3070, Australia
emma@equalityinstitute.org

Research in context

Evidence before this study

We searched PubMed and Google for references using the following search terms: “intimate partner violence”, “marital rape”, “sexual coercion”, “perpetration”, “etiology”, “aetiology”, “risk factors”, “child abuse”, “child sexual abuse”, “child maltreatment”, “harsh parenting”, “physical discipline”, and “intergenerational violence”. We sought published papers or reports with empirical research from 1990 onwards, from any country, published in English, and drew on previous systematic reviews. This literature review found that childhood trauma, intimate partner violence, low socioeconomic status, harsh or inconsistent parenting skills, attitudes condoning violence, and inequitable gender attitudes are key risk factors that link different forms of childhood trauma with violence against women. However, our literature review found few population-based statistics on child maltreatment in the Asia–Pacific region, and limited evidence on the pathways between child maltreatment and intimate partner violence.

Added value of this study

The results from this large multicountry study show that, to varying degrees, childhood trauma is highly prevalent among women and men in the general population, across the Asia–Pacific region. Our findings indicate that there are strong

links between childhood experiences of maltreatment and the perpetration or experience of violence against women in adulthood, and that the cycle of violence is facilitated and fuelled by gender inequality. Importantly, the findings show the pathways through which experiences of childhood trauma contribute to violence against women and further child maltreatment. Additionally, they also stress the need for these two issues to be addressed.

Implications of all the available evidence

The 2015 Sustainable Development Goals include specific targets about the elimination of violence both against women and against children, and governments and multilateral agencies are eager for scientific evidence that can guide programmes and policies to achieve these ambitious targets. These findings are particularly pertinent because they provide a major advance in our understanding of violence against women and children, and have important implications for violence prevention strategies. The data from this population-based study suggest that gender inequitable social norms and attitudes, and the normalisation of violence, must be overcome to properly address the cycle of abuse in families. Interventions should promote positive parenting, address inequality and the normalisation of violence across the life course, and transform men’s power over women and children.

is complex and varied.⁷ A narrative review of evidence on intersections between violence against children and violence against women, with an emphasis on low-income and middle-income countries, identified a number of important intersections between these two types of violence. These include co-occurrence within the same household, shared risk factors, and common and compounding consequences across the lifespan.⁸

Research about childhood trauma and its interface with violence against women is concentrated in high-income countries.⁹ Child sexual abuse is the most researched and consistent predictor of adult sexual revictimisation¹⁰ and of risky sexual behaviours, which might act as mediating factors in women’s trajectories towards adult experiences of sexual violence.⁷ Child sexual abuse has also been associated with women’s experiences of intimate partner violence in high-income¹¹ and low-income and middle-income settings.¹² There is some evidence of the associations between physical child abuse and adult experiences of violence from studies with women in Latin America.¹³ Children who witness abuse between their parents are more likely to experience or perpetrate violence as adults,^{4,11–14} although this is not consistent across settings.^{4,15} Men who experience childhood emotional abuse and neglect,¹⁶ and childhood sexual abuse,¹⁷ are also at increased risk of perpetration of rape, intimate partner violence, and sexual assault.^{4,15}

The pathways from childhood trauma to adulthood experiences and perpetration of violence are complex and multifaceted.¹⁸ There is some evidence that women who experience intimate partner violence are more likely to physically abuse their children than women who do not experience abuse.¹⁸ Furthermore, children who grow up witnessing abuse are at increased risk of being physically and sexually abused themselves.¹⁹ The evidence about the overlaps between experiences of witnessing violence, child maltreatment, and violence against women does not adequately capture or explain the relationship between these different types of violence.

In this Article, we present comparable population prevalence data from men and women who report different types of childhood trauma, including emotional abuse and neglect, physical abuse, sexual abuse, and witnessing abuse of their mother, and their reports of using physical discipline against their own children. Using structural equation modelling, we show the pathways through which one’s childhood experiences of violence can lead to violence against women and child maltreatment during adulthood. The aim of this study was to move beyond simply looking at linear associations between violence against children and violence against women, and to disentangle the complex and intersecting pathways and risk factors that connect these experiences of violence.

Methods

Study design and participants

This Article presents data from the UN Multi-country Study on Men and Violence, which was developed by Partners for Prevention, a UN Development Programme, UN Population Fund, UN Women, and UN Volunteers regional joint programme for the prevention of gender-based violence in Asia and the Pacific. The study was done in nine diverse (rural and urban) sites across six countries in Asia and the Pacific region from 2010 to 2013: Bangladesh, Cambodia, China, Indonesia, Papua New Guinea, and Sri Lanka.

In all sites, we systematically selected households from census enumeration areas and randomly selected a representative sample of men aged 18–49. Further details on the sampling methodology have been published elsewhere.⁴ We established a minimum sample size of 1000 for the required levels of statistical power to meet the primary study objectives; however, in some countries the research teams chose to use larger samples. In four sites (Cambodia, China, Papua New Guinea, and Sri Lanka), we also collected data from a representative sample of randomly selected women aged 18–49 years, with a minimum sample size of 1000.

We followed ethics and safety guidelines for research about perpetration of violence by men and WHO guidelines for research about violence against women.^{19,20} Ethics approval was provided by the Medical Research Council of South Africa; the College of Humanities, Beijing Forestry University, China; Medical and Health Research Ethics Committee, Ministry of National Education, Indonesia; International Centre for Diarrhoeal Disease Research, Bangladesh; National Ethics Committee for Health Research of Cambodia; and the Faculty of Medicine at the University of Colombo, Sri Lanka. The South African Medical Research Council (SAMRC) Ethics Committee was used to obtain ethics approval in Papua New Guinea because the SAMRC was the principal investigation team in Papua New Guinea, where no other suitable ethics board existed at the time.

Procedures

We conducted standardised population-based household surveys, using multistage representative sampling. To protect women and men providing sensitive disclosure, we presented the study in communities as a family and health study. We informed participants of the purpose and nature of the study with a detailed information sheet and consent form, which they signed to indicate consent. No household lists with identifying details of respondents were kept. All interviews were conducted face-to-face in local languages by trained sex-matched interviewers using personal digital assistants to enter data. Questions for men about sexual violence perpetration were self-administered using the audio-enhanced function of the personal digital assistants. In China the entire survey was self-administered to ensure privacy.

We collected data from men and women on their own experiences and perpetration of different types of intimate partner violence, their experiences of violence as children, and their use of physical punishment against their own children. The men's questionnaire included eight sections and covered perpetration of violence against women, legislation about violence against women, knowledge of policies regarding violence against women, sociodemographic characteristics and employment, childhood experiences, gender attitudes, fatherhood, health and wellbeing, and sexuality. The women's questionnaire contained 11 sections, which included questions on sociodemographic characteristics; childhood experiences; gender attitudes; physical, mental, and reproductive health; motherhood; experiences of violence; and related consequences and coping strategies.

Intimate partner violence was measured with a series of behaviour-specific questions related to a current or former intimate partner that were based on the WHO Multi-country Study on Women's Health and Domestic Violence questionnaire for women, and a South African survey that was adapted for men (appendix).^{3,4} At the end of the series of questions about each type of violence, men were asked about their perpetration in the past 12 months. The questions about sexual intimate partner violence focused on forced and coerced sex, were framed around specific acts, and asked about the frequency of perpetration (once, a few times, or many times).

We measured gender attitudes by asking study participants whether they strongly agreed, agreed, disagreed, or strongly disagreed with a number of gender-related statements (appendix p 2). We created a continuous summary score on the basis of respondents' level of agreement with these statements. We also created tertiles to categorise respondents' scores into groupings of low, medium, and high levels of gender equitable attitudes and beliefs (appendix pp 4–5). We used the continuous variable when fitting individual path models.

We used a modified version of the Childhood Trauma Questionnaire²⁰ to measure the experiences of women and men, before age 18 years, of four dimensions of childhood trauma: childhood emotional abuse or neglect, physical abuse, sexual abuse, or witnessing abuse of mother (appendix p 1). Experience of child maltreatment included physical abuse, sexual abuse, and emotional abuse and neglect, whereas witnessing abuse of the mother was treated separately. Any childhood trauma was used to measure any experience of child maltreatment or witnessing abuse of mother. Chronbach's α was 0.696 for male data and 0.743 for female data.

Finally, the survey asked respondents whether they ever punished their children (biological or otherwise younger than 18 years living with them) by smacking or beating them, or whether their partner punished the children by smacking or beating them. The possible response categories were never, sometimes, often, or very often (appendix p 6).

See Online for appendix

The measures of intimate partner violence and child maltreatment have been validated and used extensively in the Asia–Pacific region.²⁷ In all sites the questionnaires were translated into local languages, translated back into English, and were pretested and cognitive tested to ensure the questions were understood as intended.

Data entry and statistical analysis

For each country, we present the population prevalence of childhood trauma by site, except when the sample was nationally representative. For the calculation of population prevalence, 95% CIs, and all other analyses, we took into account the complex survey design by using the Taylor’s linearisation method for survey estimates available in Stata 13.1.

When presenting the associations between childhood trauma and different forms of violence against women, we pooled the data from all countries, adjusted by age, marital status, education level, socioeconomic status

(using a proxy measure of food insecurity and difficulty mobilising resources), and study site. We used Pearson’s χ^2 tests to analyse bivariate relationships between categorical variables. From information obtained from the bivariate analysis, we fitted maximum likelihood multinomial logit models for complex survey data to compare factors associated with mutually exclusive outcomes: physical violence only, sexual violence only, both physical and sexual violence, and multiple emotional or economic intimate partner violence only, in which never having committed any of these forms of intimate partner violence was the base condition. We recognise that children often experience multiple forms of maltreatment. However, analysis of the data with mutually exclusive outcomes enabled us to independently look at the associations between different forms of childhood trauma and experiences and perpetration of intimate partner violence, which previous studies have not been able to do.

	Total	Emotional child abuse or neglect only	Physical child abuse only	Sexual child abuse only	Physical and sexual child abuse	Witnessed abuse of mother	Any childhood trauma*
Men’s reports							
Bangladesh (rural site)	1143	587 (51.4%, 47.7–55.0)	76 (6.7%, 5.5–8.1)	174 (15.2%, 13.0–17.8)	72 (6.3%, 4.8–8.3)	260 (22.8%, 19.6–26.3)	927 (81.0%, 78.4–83.6)
Bangladesh (urban site)	1252	472 (37.7%, 33.7–41.9)	85 (6.8%, 5.3–8.6)	304 (24.3%, 20.8–28.2)	157 (12.5%, 10.1–15.5)	400 (32.0%, 27.1–37.2)	1039 (83.0%, 79.7–85.8)
Cambodia	1812	571 (31.5%, 29.2–34.0)	665 (36.7%, 34.2–39.3)	120 (6.6%, 5.6–7.9)	149 (8.2%, 6.9–9.8)	433 (23.9%, 21.6–26.3)	1535 (84.8%, 82.8–86.5)
China (urban/rural site)	998	385 (38.8%, 35.8–41.9)	196 (19.8%, 17.5–22.2)	61 (6.2%, 4.9–7.7)	61 (6.2%, 4.6–8.1)	209 (21.1%, 18.0–24.4)	717 (72.3%, 69.1–75.2)
Indonesia (rural site)	815	289 (35.5%, 31.9–39.9)	133 (16.3%, 12.9–20.5)	36 (4.4%, 2.6–7.4)	15 (1.8%, 1.1–3.2)	67 (8.2%, 6.0–11.2)	478 (58.7%, 54.0–63.3)
Indonesia (urban site)	868	303 (35.0%, 32.2–37.8)	264 (30.5%, 26.9–34.2)	37 (4.3%, 2.8–6.5)	22 (2.5%, 1.6–4.1)	80 (9.2%, 7.0–12.0)	633 (73.0%, 67.9–77.6)
Indonesia (Jayapura)	893	242 (27.1%, 22.3–32.8)	372 (41.8%, 35.0–48.9)	26 (2.9%, 1.8–4.7)	76 (8.5%, 7.1–10.3)	220 (24.8%, 20.5–29.5)	736 (82.7%, 78.4–86.3)
Papua New Guinea (Bougainville)	864	148 (17.2%, 14.3–20.5)	362 (42.0%, 37.9–46.4)	54 (6.3%, 4.7–8.4)	219 (25.4%, 22.0–29.3)	484 (56.2%, 52.5–59.9)	791 (91.9%, 89.4–93.8)
Sri Lanka	1533	287 (19.0%, 17.0–21.1)	436 (28.8%, 25.3–32.6)	75 (5.0%, 3.6–6.9)	140 (9.3%, 7.7–11.1)	464 (30.7%, 27.3–34.4)	986 (65.1%, 61.7–68.4)
Total for combined sample of men	10 178	3284 (32.4%, 31.2–33.6)	2589 (25.5%, 24.3–26.8)	887 (8.7%, 8.0–9.5)	911 (9.0%, 8.3–9.7)	2617 (25.8%, 24.5–27.2)	7842 (77.3%, 76.2–78.4)
Women’s reports							
Cambodia	477	127 (27.3%, 23.7–31.2)	223 (47.9%, 41.3–54.7)	8 (1.7%, 0.8–3.5)	9 (1.9%, 0.8–4.7)	101 (21.6%, 17.2–26.9)	375 (80.5%, 75.2–85.1)
China (urban/rural site)	1103	345 (33.7%, 31.3–36.2)	99 (9.7%, 7.6–12.3)	55 (5.4%, 4.4–6.6)	23 (2.3%, 1.5–3.3)	208 (20.0%, 17.4–23.0)	568 (55.5%, 51.8–59.0)
Papua New Guinea (Bougainville)	873	251 (29.1%, 25.6–32.8)	347 (40.2%, 36.6–44.0)	23 (2.7%, 1.9–3.7)	76 (8.8%, 6.9–11.2)	428 (49.6%, 45.5–53.7)	725 (84.0%, 80.7–86.8)
Sri Lanka	653	111 (18.1%, 13.2–24.2)	117 (19.0%, 14.4–24.7)	11 (1.8%, 0.9–3.6)	9 (1.5%, 0.6–3.7)	94 (15.1%, 12.0–19.0)	272 (44.2%, 37.7–50.8)
Total for combined sample of women	3106	834 (28.1%, 26.3–29.9)	786 (26.5%, 24.2–29.0)	97 (3.3%, 2.7–3.9)	117 (3.9%, 3.2–4.9)	831 (27.8%, 25.6–30.2)	1940 (65.4%, 62.7–67.9)
Data are n (% 95% CI). See appendix (p 1) for the specific acts included in each category of childhood trauma. *Includes respondents who reported experiencing at least one act of child maltreatment (physical abuse, sexual abuse, or emotional abuse or neglect), or if they reported witnessing any abuse of their mother by her husband or partner, before age 18 years.							
Table 1: Proportion of participants reporting experiences of childhood trauma, by sex and site							

Lifetime prevalence was used in all regression analyses to give more power to the analysis and to avoid suggesting that previously violent men are in some way the same as never violent men. Backwards elimination was used initially for variables of $p=0.2$ or greater, and for the fully adjusted parsimonious models generated for each country the final model variables were retained at $p\leq 0.05$.

We fitted individual path models of pathways to men's and women's use of harsh parenting practices using Stata 13.1. Sites included in the models include those where all relevant survey questions were asked. Alcohol abuse was defined as the respondent having alcohol abuse problems based on the AUDIT scale, which combines questions on frequency of drinking, number of drinks usually consumed, frequency of binge drinking (six or more drinks), and feelings of guilt or remorse after drinking and failure to do what was normally expected of oneself because of drinking. Lifetime sexual partners were defined as the number of different people the respondent had sex with in their lifetime, including their spouse or long-term partner, casual or one-off partners, or sex workers. The models were estimated with full information maximum likelihood estimation to allow for modelling of missing data, and they accounted for the clustering of participants in countries. We used backwards elimination to exclude endogenous variables that did not mediate any path (with significance set at $p<0.05$) from socioeconomic status to harsh parenting practices. Final models adjusted standard errors for clustering of participants in countries.

Role of the funding source

The funding sources did not play a role in the design, conduct, analysis, or writing up of the study. The

corresponding author had full access to the data and had final responsibility for the decision to submit for publication.

Results

The survey was done between Jan 1, 2011, and Dec 1, 2012. We included 10 178 men (between 815 and 1812 per site) and 3106 women (between 477 and 1103 per site). The proportion of enumerated and eligible men and women (aged 18–49) that were interviewed per site was mostly between 95% (men in Indonesia, rural site) and 83% (men in China, urban/rural site). It was lower for men in urban Bangladesh (73%) and in Sri Lanka (74% for women and 59% for men). The sample characteristics have been described elsewhere.⁴ The appendix (pp 4–5) includes information about participants' demographic characteristics, including marriage or cohabitation and co-residing children under age 18 years.

Table 1 shows the proportion of men and women in each site who disclosed experiencing different forms of childhood trauma when they were under the age of 18 years. The proportion of men who experienced any form of childhood trauma varied from 59% (in the Indonesia rural site) to 92% (in Bougainville, Papua New Guinea). Between 17% (Bougainville, Papua New Guinea) and 51% (Bangladesh, rural site) of men reported experiencing emotional abuse or neglect without other forms of abuse. Between 7% (Bangladesh rural site) and 42% (Bougainville, Papua New Guinea) reported experiencing physical abuse without sexual abuse, and between 3% (Indonesia, Jayapura) and 24% (Bangladesh, urban site) experienced sexual abuse without physical abuse. The proportion of men who reported

	Total	No-one smacks children	Mother smacks children	Father smacks children	Both smack children
Men's reports					
Bangladesh (rural site)	704	431 (61.2%, 57.0–65.3)	..	273 (38.8%, 34.8–43.0)	..
Bangladesh (urban site)	804	295 (61.5%, 56.2–66.5)	..	185 (38.5%, 33.6–43.8)	..
Cambodia	1130	482 (42.7%, 39.8–45.6)	253 (22.4%, 20.0–25.0)	82 (7.3%, 5.8–9.1)	313 (27.7%, 24.7–31.0)
China (urban/rural site)	436	173 (39.7%, 35.6–43.9)	57 (13.1%, 9.6–17.6)	45 (10.3%, 8.2–12.9)	161 (36.9%, 33.1–40.9)
Indonesia (rural site)	347	293 (84.4%, 77.8–89.4)	17 (4.9%, 2.3–10.3)	8 (2.3%, 1.3–4.0)	29 (8.4%, 5.0–13.7)
Indonesia (urban site)	373	293 (78.6%, 70.2–85.1)	19 (5.1%, 3.3–7.9)	29 (7.8%, 5.3–11.4)	32 (8.6%, 5.1–14.0)
Indonesia (Jayapura)	210	111 (52.9%, 42.3–63.2)	29 (13.8%, 8.6–21.4)	22 (10.5%, 5.9–18.0)	48 (22.9%, 15.4–32.5)
Papua New Guinea (Bougainville)	213	29 (13.6%, 9.0–20.1)	16 (7.5%, 4.8–11.6)	11 (5.2%, 2.8–9.3)	157 (73.7%, 67.1–79.4)
Sri Lanka	244	68 (27.9%, 21.5–35.3)	25 (10.2%, 6.8–15.2)	17 (7.0%, 4.4–10.9)	134 (54.9%, 46.3–63.2)
Total for combined sample of men	4137	2175 (52.6%, 50.6–54.5)	416 (10.1%, 9.1–11.1)	214 (5.2%, 4.5–5.9)	1332 (32.2%, 30.5–34.0)
Women's reports					
Cambodia	337	87 (25.8%, 22.2–30.0)	149 (44.2%, 38.7–49.6)	10 (3.0%, 1.8–5.0)	91 (27.0%, 22.3–32.5)
China (urban/rural site)	570	195 (34.2%, 30.4–38.2)	136 (23.9%, 19.8–28.5)	38 (6.7%, 4.6–9.5)	201 (35.3%, 30.2–40.6)
Papua New Guinea (Bougainville)	343	22 (6.4%, 3.9–10.5)	58 (16.9%, 13.4–21.1)	10 (2.9%, 1.6–5.2)	253 (73.8%, 68.2–78.6)
Sri Lanka	263	69 (26.2%, 20.0–33.6)	61 (23.2%, 18.7–28.5)	15 (5.7%, 3.2–10.0)	118 (44.9%, 38.1–51.8)
Total for combined sample of women	1513	373 (24.7%, 22.5–27.0)	404 (26.7%, 24.2–29.2)	73 (4.8%, 3.8–6.1)	663 (43.8%, 40.8–47.0)

Data are n (%; 95% CI). Cells are empty where questions were not asked in those sites; men in Bangladesh were not asked whether their wife or partner ever smacks or beats their children.

Table 2: Proportion of participants reporting whether they or their partner smacks their children as a form of discipline, by sex and site

	Physical IPV only		Sexual IPV only		Both physical and sexual IPV		Frequent emotional or financial IPV	
	RR (95% CI)	p value	RR (95% CI)	p value	RR (95% CI)	p value	RR (95% CI)	p value
Emotional childhood abuse or neglect only	2.22 (1.88–2.62)	<0.001	2.13 (1.72–2.64)	<0.001	3.07 (2.29–4.11)	<0.001	2.28 (1.78–2.92)	<0.001
Physical childhood abuse only	3.36 (2.76–4.10)	<0.001	2.42 (1.91–3.07)	<0.001	6.58 (4.93–8.79)	<0.001	2.98 (2.30–3.88)	<0.001
Sexual childhood abuse only	3.44 (2.65–4.47)	<0.001	3.53 (2.42–5.13)	<0.001	8.57 (5.79–12.68)	<0.001	3.83 (2.63–5.57)	<0.001
Physical and sexual child abuse	4.49 (3.27–6.17)	<0.001	4.56 (3.38–6.17)	<0.001	13.70 (9.24–20.29)	<0.001	3.28 (2.17–4.95)	<0.001
Witnessed abuse of mother	1.84 (1.57–2.15)	<0.001	1.35 (1.11–1.63)	0.002	2.31 (1.91–2.79)	<0.001	1.34 (1.10–1.63)	0.004

Data are adjusted relative RRs (95% CI) and p values, unless otherwise indicated. Data are adjusted for marital status, age group, education, socioeconomic status, and country site. Reference category is no IPV perpetration. IPV=intimate partner violence. RR=risk ratio.

Table 3: Associations between men’s experiences of childhood trauma and their perpetration of intimate partner violence, for combined data

	Physical IPV only		Sexual IPV only		Both physical and sexual IPV		Frequent emotional or financial IPV	
	RR (95% CI)	p value	RR (95% CI)	p value	RR (95% CI)	p value	RR (95% CI)	p value
Emotional childhood abuse or neglect only	1.87 (1.47–2.39)	<0.001	2.15 (1.42–3.26)	<0.001	2.55 (1.78–3.65)	<0.001	2.04 (1.39–3.00)	<0.001
Physical childhood abuse only	2.76 (2.04–3.74)	<0.001	2.42 (1.51–3.88)	<0.001	4.78 (2.99–7.66)	<0.001	1.78 (1.13–2.80)	0.013
Sexual childhood abuse only	3.01 (1.60–5.65)	0.001	4.49 (2.08–9.69)	<0.001	6.87 (3.42–13.79)	<0.001	2.39 (0.89–6.37)	0.082
Physical and sexual child abuse	4.66 (2.16–10.07)	<0.001	2.87 (0.95–8.69)	0.063	16.43 (7.20–37.47)	<0.001	6.38 (2.96–13.75)	<0.001
Witnessed abuse of mother	1.61 (1.24–2.09)	<0.001	1.26 (0.87–1.82)	0.219	2.20 (1.64–2.96)	<0.001	1.17 (0.79–1.72)	0.430

Data are adjusted relative RRs (95% CI) and p values, unless otherwise indicated. Data are adjusted for marital status, age group, education, socioeconomic status, and country site. Reference category is no IPV experience. IPV=intimate partner violence. RR=risk ratio.

Table 4: Associations between women’s experiences of childhood trauma and their experiences of intimate partner violence, for combined data

experiencing both physical and sexual abuse ranged from 2% in the Indonesia rural site to 25% in Bougainville, Papua New Guinea. Between 8% (Indonesia, rural site) and 56% (Bougainville, Papua New Guinea) of men had witnessed the abuse of their mother as a child.

The proportion of women who experienced any form of childhood trauma varied between 44% (in Sri Lanka) to 84% (in Bougainville, Papua New Guinea; table 1). The proportion who experienced physical abuse without sexual abuse ranged from 19% (Sri Lanka) to 48% (Cambodia), and between 2% (Cambodia) and 5% (China, urban/rural site) experienced sexual abuse only. From 2% (China, urban/rural site, and Sri Lanka) to 9% (Bougainville, Papua New Guinea) of women experienced both physical and sexual abuse as children. In sites where both men and women were interviewed (Cambodia, China, Papua New Guinea, and Sri Lanka), reported experiences of child sexual abuse were generally higher for men than for women (however, in China, the 95% CIs overlap).

About three-quarters of all women reported that either they or their partner smacked their children at least

sometimes (table 2). Men reported slightly lower proportions than women overall, but in five sites, approximately half or more of the men surveyed reported that they, their partner, or both parents used physical discipline against their children. Harsh parenting was most common in Bougainville, Papua New Guinea, for men and women, and least common in urban and rural sites in Indonesia for men and in the China site for women. In Cambodia, men were more likely than women to report that either they, their partner, or both smacked their children. However, in all other sites where both men and women were interviewed, the 95% CIs for any harsh parenting overlapped. More detail on reported smacking of children is provided in the appendix (p 6).

Multinomial regression analysis of associations between men’s childhood experiences of violence and perpetration of different forms of intimate partner violence showed that all forms of childhood trauma were significantly associated with all forms of intimate partner violence perpetration independently (table 3). Whereas all associations between childhood trauma and intimate partner violence

perpetration were significant independently, the relative risk ratios (RRs) varied according to the type of trauma experienced. Relative RRs were lowest for men who have witnessed abuse of their mother, higher for those who had experienced emotional abuse or neglect only, again higher for those who had experienced physical abuse, even higher for sexual abuse, and highest for those who had experienced both physical and sexual abuse.

All forms of childhood trauma were significantly associated with women's experiences of physical intimate partner violence and experiences of both physical and sexual intimate partner violence (table 4). Witnessing abuse of the mother was not significantly associated with women's experiences of sexual only intimate partner violence, or frequent emotional or financial intimate partner violence.

The appendix provides the prevalence data for the different categories of intimate partner violence perpetration and victimisation used in the analysis for tables 3 and 4. The appendix also presents the prevalence of different types of childhood trauma by social and demographic characteristics for men and women respectively.

Figure 1 presents a structural equation model based on the combined data from men across the seven sites where all questions were asked. Men in Bangladesh were not asked whether their wife or partner ever smacks or beats their children and for this reason they were excluded from the model. The figure illustrates the statistically significant associations between men's experiences of child maltreatment, witnessing abuse of their mother, their perpetration of physical intimate partner violence, their use of harsh parenting practices, and other related factors. The appendix (p 9) presents the unstandardised and standardised estimates of path coefficients, and the variances of the disturbances and equation-level goodness-of-fit for the men's path model.

Figure 2 presents a structural equation model based on the combined data from women across the four sites where women were interviewed. The figure illustrates the significant pathways and associations between women's experiences of child maltreatment, witnessing abuse of their mother, their experiences of physical intimate partner violence, their use of harsh parenting practices, and other related factors. The appendix (p 10) shows the unstandardised and standardised estimates of path coefficients, and the variances of the disturbances and equation-level goodness of fit for the women's path model.

Disturbances (errors associated with the endogenous variables) were included in the models. They are not shown in the diagram for clarity. They are implicitly shown in the appendix (pp 9–10) as r^2 results and disturbances are (as in regression) $1-r^2$.

Before adjusting standard errors for clustering of participants in countries, model fit was very good for both the men's model ($p(\chi^2)=0.001$, root mean square

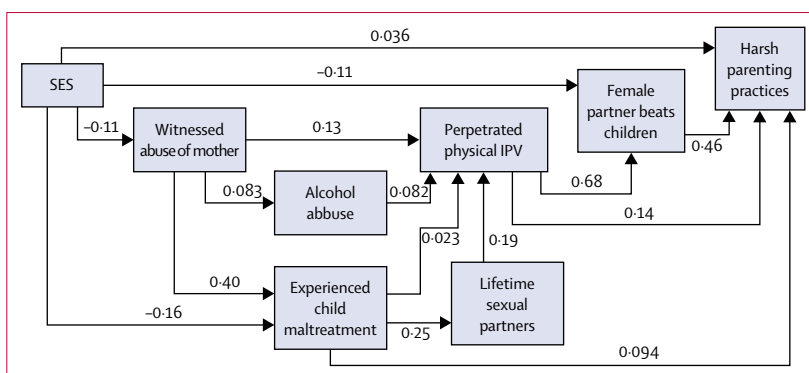


Figure 1: Structural equation model of pathways to men's use of harsh parenting practices
IPV=intimate partner violence. SES=socioeconomic status.

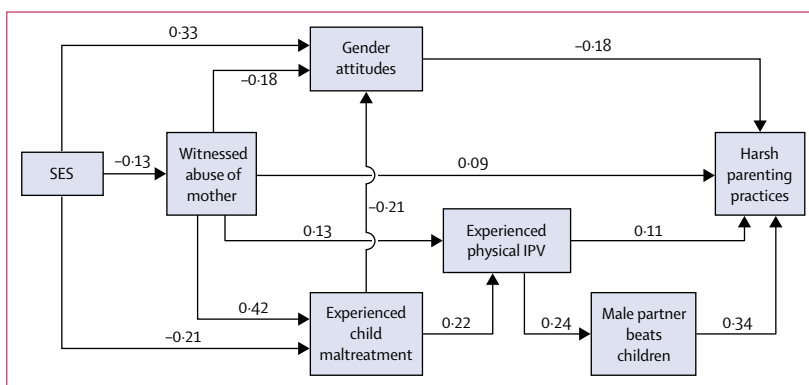


Figure 2: Structural equation model of pathways to women's use of harsh parenting practices
IPV=intimate partner violence. SES=socioeconomic status.

error of approximation (RMSEA)=0.016, comparative fit index (CFI)=0.997, TLI=0.988) and the women's model ($p(\chi^2)=0.001$, RMSEA=0.038, CFI=0.986, TLI=0.958). After adjusting for clustering, the coefficient of determination was 0.125 for men and 0.151 for women.

Men's harsh parenting practices are most strongly associated with their female partner's use of harsh parenting against their children, which itself is associated with his perpetration of physical intimate partner violence (figure 1). Men's harsh parenting practices are also associated with low socioeconomic status and experience of child maltreatment.

Low socioeconomic status is associated with men's experiences of child maltreatment, witnessing their mother being abused, harsh parenting practices, and his female partner beating their children. There was no direct association between low socioeconomic status and men's perpetration of physical intimate partner violence. Rather, men's perpetration of physical intimate partner violence was associated with witnessing his mother being abused, alcohol abuse, a higher number of sexual partners than the reference group, and experiences of child maltreatment. The pathways between men's own experiences of childhood trauma (witnessing abuse and

experiencing maltreatment) and perpetration of physical intimate partner violence were mediated by alcohol abuse and a higher number of lifetime sexual partners.

Women's harsh parenting was most strongly driven by their male partner beating their own children, which mediated the association between her partner's violence towards her and her own harsh parenting practices (figure 2). In turn, women's risk of experiencing physical intimate partner violence was associated with their experiences of child maltreatment and witnessing their mother being abused (and correlated with inequitable gender attitudes). Furthermore, harsh parenting practices were influenced by women's inequitable gender attitudes, which were associated with witnessing mother's abuse and low socioeconomic status.

Low socioeconomic status was associated with women's experiences of child maltreatment, witnessing their mother being abused, and having more inequitable gender attitudes. All of the pathways between low socioeconomic status and harsh parenting practices were mediated by women's own experiences of trauma and abuse throughout their life-course. Although there was a direct path between witnessing abuse of their mother and harsh parenting practices, the strongest pathways were through women's experiences of child maltreatment and experience of physical intimate partner violence.

Discussion

Experiences of childhood trauma were extremely prevalent in the Asia-Pacific region, although rates varied substantially by site and type of abuse. Generally, emotional abuse and neglect were the most common forms of abuse, followed by physical and then sexual abuse. This pattern was broadly consistent with other Asia-Pacific regional studies of child abuse.²¹ Respondents also reported high rates of witnessing abuse of their mother as a child.

In particular, men's experiences of child abuse were high across the region, with higher rates of childhood sexual abuse for men than for women reported in almost all sites. This finding contrasts with the published medical literature from high-income countries, although studies in Zanzibar, China, and Malaysia have also found higher rates of sexual victimisation among boys,^{22–25} and studies in Taiwan, Vietnam, and Thailand have shown no significant gender difference.^{20,26,27} It is possible that women were reluctant to report their experiences of abuse because of fear or shame brought upon themselves and their families.^{22,23} However, it has been suggested that experiences of sexual violence are equally, if not more, shameful for boys,²⁸ and that boys are less likely than girls to report their experiences of sexual abuse.²⁴ Some studies also indicate that the types and patterns of abuse for boys and girls are different.²² In other studies, boys reported higher rates of forced exposure to pornography and forced witnessing of sexual activity than girls, which could reflect different social norms

around male and female sexual socialisation.²⁹ On the basis of the Asia-Pacific cultural context, it is also possible that girls are more strictly supervised and protected from sexual abuse than boys, which allows boys more freedom and movement.²² Further research, particularly qualitative research, is needed to explore girls' and boys' experiences of childhood sexual abuse across the region.

This study shows that childhood trauma and violence against women intersect in a number of important ways. Men's experiences of childhood trauma were associated with their perpetration of all measured forms of intimate partner violence. Women who have experienced any type of childhood trauma are at increased risk of experiencing violence by men in adulthood. Experiences of emotional abuse and neglect in childhood are important risk factors, independent of sexual or physical abuse, for men's perpetration of sexual and physical intimate partner violence, as well as women's victimisation. Further, emotional child abuse on its own was found to be associated with both perpetration and experiences of violence later in life.

This is consistent with other studies on childhood exposure to neglect and negative developmental environments,³⁰ and suggests that the environment in which a child grows up is very important for prevention of violence. However, although emotional abuse is important, the study also showed that men who faced physical or sexual violence as children, and men who faced multiple types of child maltreatment, were even more likely to perpetrate violence later in life than men who experienced only emotional abuse or neglect. The study further showed that men's witnessing abuse of their mother was both directly and indirectly associated with physical intimate partner violence, and verified the existing consensus on the mediating effect of alcohol abuse. Previous studies have shown that men who have been exposed to violence in childhood are more likely to abuse alcohol than those unexposed to violence, and that alcohol misuse is an individual risk factor for violence perpetration.³¹

Harsh parenting is common in the Asia-Pacific region, but a high proportion of parents also claim to raise their children without use of physical punishment.⁶ The line between punishment and child maltreatment has long been contested, and many argue that smacking a child as a form of discipline does not constitute physical child abuse or harsh parenting. The Parenting Across Cultures (PAC) study explored the variance of normativeness and likelihood of using corporal punishment (which included spanking, slapping, grabbing, shaking, and beating up) at the intercultural and intracultural levels.³² The PAC study found that corporal punishment is independently associated with increased outcomes of children's aggression and anxiety symptoms, and also presents as a risk factor for more severe corporal punishment and for physical child abuse.^{32,33} Other longitudinal studies have

shown that parents with inconsistent and harsh parenting styles are at increased risk of abusing their children, and that their children are at increased risk of behavioural and cognitive developmental problems.^{30,34} Harsh physical punishment, independent of child maltreatment, has also been associated with several adult physical health conditions including cardiovascular disease, arthritis, and obesity.³⁵ The results from the PAC study support these findings. Thus, harsh parenting practices, not just severe forms of child maltreatment, need to be addressed as a strategy for preventing violence against children.

In all sites (except men's reports in Indonesian urban sites), respondents more commonly reported that mothers smacked their children as a form of discipline, compared with just fathers smacking their children. This finding might reflect that mothers take primary responsibility for child rearing, and that discipline is considered to be a part of that. However, the structural equation models further show that harsh parenting practices reflect a culture in the home that normalises physical discipline of both children and women. That is, harsh parenting practices for both men and women are most strongly associated with whether the male partner uses physical discipline against the children, which is in turn directly related to male intimate partner violence against women in the home, which can also be seen as disciplining women.

The structural equation models also show that societal acceptance and normalisation of the use of violence against children is initially established within the family. Men's and women's own use of physical discipline with their children is partly driven by their own experiences of child maltreatment and witnessing their mother being abused, which suggests an element of social learning from childhood. However, social learning is compounded by other factors, such as experiences of physical intimate partner violence. The model also shows that women's use of harsh discipline against their children is not as much of a product of her psychological reaction to trauma exposure as previously thought (depression was not found to be a significant variable in the model), since it is a form of normative behaviour established within the family, which encompasses violence between parents and acceptance of the use of violence in child rearing. Additionally, the range of childhood trauma prevalence across the sites suggests that other social factors—such as culturally variant perceptions about child discipline, and norms of parental responsibility and wife abuse—also determine the outcomes of intimate partner violence. In the case of post-conflict Sri Lanka, with relatively low prevalence of child maltreatment, it becomes apparent that these other social factors are influential in affecting rates of intimate partner violence prevalence and experience.³⁶

We found that the role of gender inequality is important in understanding the interconnections and pathways between these different forms of violence in the home.

The association between a man's experiences of child maltreatment and perpetrating physical intimate partner violence is mediated by his number of sexual partners, which suggests that one effect of child maltreatment on men might be to contribute to more sexually risky behaviour and models of masculinity that emphasise heterosexual dominance. This theory is consistent with other studies that found an association between gender norms and male sexuality in Latin America.³⁷ For women, inequitable gender attitudes mediate a pathway between low socioeconomic status and harsh parenting, as well as between experience of child maltreatment, witnessing mother abuse, and harsh parenting practices. This finding suggests that there are parallels in the existence of power inequalities between men and women, and parents and children, and violence is used as a means of asserting dominance in both cases.

The study has some limitations. Most samples were not nationally representative and so the findings only reflect the sampled sites. Only some countries, and a few sites within most of these countries, were included—therefore the analysis of the combined sample does not represent the whole Asia-Pacific region. Although all countries met the minimum sample requirements, sample design and household selection varied across sites. However, these differences are unlikely to affect the findings because all methods resulted in representative samples with no particular biases related to outcomes. There might have been non-response bias, but response rates were high. Violence perpetration, particularly sexual violence, might have been under-reported because it is perceived as a private, antisocial behaviour, although most women's reports appear to validate the findings from men. Bangladesh was the first country in which the study was implemented, after which the questions on sexual intimate partner violence were expanded to include coerced sex. As a result, there is some disparity between the sexual violence questions in Bangladesh and the other sites, which could affect reported prevalence in that site. The cross-sectional nature of the survey means that causation of violence perpetration cannot be determined; however, the analysis of associated factors still provides a strong evidence base to inform prevention interventions. Additionally, although the advantages from the mutually exclusive categories of child maltreatment outweigh the disadvantages, as discussed in the Methods, we acknowledge that in reality these types of abuse are not experienced in a mutually exclusive way for many children. There is always unmeasured confounding that could affect the models; however, we measured all of the key candidates for confounding (ie, age, marital status, education level, and socioeconomic status) and therefore expect this to be minimal. Finally, we recognise that the measure of harsh parenting practices is limited because it only includes smacking or beating when other forms of emotional abuse could constitute harsh parenting. However, because the

original survey was focused on intimate partner violence, the number of questions on perpetration of child maltreatment were limited. Nevertheless, the data show that harsh parenting is a relatively common pattern of behaviour in the region and is associated with other outcomes of interest.

Overall, violence against women and violence against children intersect in a number of important ways, and can no longer be understood as totally separate issues. These survey data have implications for prevention practice to end both forms of violence, which would benefit from a meaningful integrated approach. In particular, the data point to both a co-occurrence and a cycle of abuse, with violence during childhood leading to both experiences and perpetration of violence against women and further child maltreatment during adulthood. A comprehensive approach to address the home environment and violence-supportive culture as a whole, and to work with families to promote positive parenting practices, is needed. Particularly, there is a need for interventions that focus on addressing gender inequality, the normalisation of violence across the life course, and transforming men's power over women and children.

Further research is needed to expand how violence against women and violence against children intersect in adolescence. Further, we need to expand our understanding of patterns of susceptibility. For example, what promotes resilience among children who have experienced abuse, but do not go on to perpetrate or experience violence during adulthood? Regarding child sexual abuse, more information is needed about risk factors and their variance by age group and by gender. Although there is a substantial database on risk factors for violence against women, the understanding of causality, pathways, and interplay between risk factors needs to be improved, especially since they relate to mediating pathways between child maltreatment and violence against women. There is a further need for more coordination between researchers working on violence against women and violence against children, and for longitudinal research to understand the timing of all risk factors and to establish causality.

Contributors

EF was the lead author and the research coordinator of the study. She contributed to the study design and data collection, and led the data analysis, interpretation, and writing of the paper. SMi contributed to the data analysis and writing of the paper. RJ also contributed to the study design and data collection in some sites, and contributed to the data analysis. She also contributed to data interpretation and writing of the article. TR was responsible for data collation and cleaning, statistical analysis, and the development of the majority of tables and figures. SMC contributed to literature searches, data analysis, and developed and populated some of the tables, and contributed to writing of the paper. RH was responsible for the structural equation modelling and contributed to the interpretation of the models. KLC contributed to data interpretation and reviewed the paper. The listed authors wrote on behalf of the UN Multi-country Study team, which included the principal investigators and country study teams who contributed to the study

implementation and data collection at each site. We also wrote on behalf of the steering committee and technical advisory group, who guided the overall study design and implementation.

UN Multi-country Study on Men and Violence study team

Core research team: Emma Fulu (Study coordinator; Partners for Prevention) (Study Coordinator), Rachel Jewkes (Medical Research Council, South Africa), Xian Warner (Partners for Prevention), Stephanie Miedema (Partners for Prevention), Tim Roselli (Partners for Prevention), and James Lang (Partners for Prevention)
Country study teams: *Bangladesh:* Ruchira Tabassum Naved (Principal Investigator), Hamidul Huque, Subrina Farah, and Muhammad Mizanur Rashid Shuvra (International Centre for Diarrhoeal Disease Research, Bangladesh); and Arthur Erken (UN Population Fund, Bangladesh); *China:* Wang Xiangxian (PI) (Tianjin University, China); Fang Gang (Beijing Forestry University, China); Li Hongtao (Chinese Women's College and Anti-Domestic Violence Network, China); Zeljka Mudrovic, Wen Hua, Arie Hoekman, Elina Nikulainen, Bernard Coquelin, and Mariam Khan (UNFPA China); *Cambodia:* Wenny Kusuma, Clara Magariño Manero, and Freya Larsen (UN Women Cambodia); Emma Fulu (PI) and Xian Warner (Partners for Prevention); and Saba Moussavi (independent consultant); *Sri Lanka:* Neloufer de Mel (PI) (University of Colombo); Pradeep Peiris (Social Scientists' Association, Sri Lanka); Shyamala Gomez (independent consultant); Social Indicator Team; and Kamani Jinadasa (CARE Sri Lanka); *Papua New Guinea (Bougainville):* Rachel Jewkes (PI), Yandisa Sikweyiya, and Nwabisa Shai (Medical Research Council, South Africa); Francesca Drapuluvik-Tinabar (National Statistics Office, Papua New Guinea); Peterson Magoola and Anthony Agenta (UNDP Papua New Guinea); Thomas Shanahan and Tracy Vienings (UNDP Regional Pacific Centre)
Steering committee: Rachel Jewkes (Medical Research Council, South Africa), Claudia Garcia-Moreno (WHO), Ruchira Tabassum Naved (ICDDR,B), Kamani Jinadasa (CARE Sri Lanka), Tracy Vienings (UNDP Regional Pacific Centre), and Wenny Kusuma (UN Women Cambodia).
Technical advisory group: Rachel Jewkes (Medical Research Council, South Africa), Raewyn Connell (University of Sydney, Australia), Gary Barker (Instituto Promundo, USA and Brazil), Alan Greig (independent consultant, USA), Rahul Roy (Aakar, India), Ravi Verma (International Center for Research on Women), and Kalyani Menon Sen (independent consultant).
Personal digital assistant programmer: Scott Johnson (University of Kentucky, USA)

Declaration of interests

We declare no competing interests.

Acknowledgments

The authors used raw data collected by the UN Multi-country Cross-sectional Study on Men and Violence in Asia and the Pacific, coordinated and funded by Partners for Prevention, a UN Development Programme, UN Population Fund, UN Women, and UN Volunteers regional joint programme for prevention of gender-based violence in Asia and the Pacific. The views expressed in this publication are those of the authors and do not necessarily represent those of the United Nations, including UN Development Program, UN Population Fund, UN Women, UN Volunteers, or UN Member States. Funding for the national studies was provided by the UN Population Fund in Bangladesh and China, UN Women in Cambodia and Indonesia, and the UN Development Programme in Papua New Guinea. The study in Sri Lanka was funded by CARE. EF and RJ were supported by funding from UK aid from the UK Government, and this is an output of the What Works to Prevent Violence Global Programme. However, the views expressed do not necessarily reflect the UK Government's official policies. The authors gratefully acknowledge Partners for Prevention for use of the UN Multi-country Study on Men and Violence quantitative dataset. We acknowledge all members of the UN Multi-country Study on Men and Violence study team who conducted the original research. The authors would also like to acknowledge the owners of the national data: UN Population Fund and International Centre for Diarrhoeal Disease Research, Bangladesh; UN Women in Cambodia; UN Population Fund in China; UN Women in Indonesia; UN Development Programme in Bougainville, Papua New Guinea; and Care International in Sri Lanka.

References

- 1 Devries K, Mak J, Garcia-Moreno C, et al. The global prevalence of intimate partner violence against women. *Science* 2013; **340**: 1527–28.
- 2 Abrahams N, Devries K, Watts C, et al. Worldwide prevalence of non-partner sexual violence: a systematic review. *Lancet* 2014; **383**: 1648–54.
- 3 Garcia-Moreno C, Jansen H, Ellsberg M, Heise L, Watts C. WHO Multi-country study on women's health and domestic violence against women: initial results on prevalence, health outcomes and women's responses. Geneva: World Health Organization, 2005.
- 4 Fulu E, Jewkes R, Roselli T, Garcia-Moreno C. Prevalence of and factors associated with intimate partner violence perpetration: findings from the UN Multi-country Cross-Sectional Study on men and violence in Asia and the Pacific. *Lancet Glob Health* 2013; **1**: e187–207.
- 5 Runyan D, Shankar V, Hassan F, et al. International variations in harsh child discipline. *Paediatrics* 2010; **126**: 701–11.
- 6 UNICEF. Child disciplinary practices at home: evidence from a range of low- and middle-income countries. United Nations Children's Fund: New York, 2010.
- 7 Fry D, McCoy A, Swales D. The consequences of maltreatment on children's lives: a systematic review of data from the East Asia and Pacific region. *Trauma Violence Abuse* 2012; **13**: 209–33.
- 8 Guedes A, Bott S, Garcia-Moreno C, Colombini M. Bridging the gaps: a global review of intersections of violence against women and violence against children. *Glob Health Action* 2016; **9**: 313516.
- 9 Heise L. What works to prevent intimate partner violence? An evidence overview. Department for International Development: London, 2011.
- 10 Classen CC, Palesh OG, Aggarwal R. Sexual revictimization: a review of the empirical literature. *Trauma Violence Abuse* 2005; **6**: 102–29.
- 11 Gilbert R, Widom C, Browne K, Fergusson D, Webb E, Janson S. Burden and consequences of child maltreatment in high-income countries. *Lancet* 2009; **373**: 68–81.
- 12 Abramsky T, Watts C, Garcia-Moreno C, et al. What factors are associated with recent intimate partner violence? Findings from the WHO multi-country study on women's health and domestic violence. *BMC Public Health* 2011; **11**: 109.
- 13 Bott S, Guedes A, Goodwin M, Mendoza JA. Violence against women in Latin America and the Caribbean: a comparative analysis of population-based data from 12 countries. Washington, DC: PAHO, 2012.
- 14 Abrahams N, Jewkes R. African men's having witnessed abuse of their mothers during childhood on their levels of violence in adulthood. *Am J Public Health* 2005; **95**: 1–6.
- 15 Jewkes R, Fulu E, Roselli T, Garcia-Moreno C. Prevalence of and factors associated with non-partner rape perpetration: findings from the UN Multi-country Cross-sectional Study on Men and Violence in Asia and the Pacific. *Lancet Glob Health* 2013; **1**: e208–18.
- 16 Jewkes R, Dunkle K, Koss MP, et al. Rape perpetration by young, rural South African men: prevalence, patterns and risk factors. *Soc Sci Med* 2006; **63**: 2949–61.
- 17 Burton D, Duty K, Leibowitz G. Differences between sexually victimized and nonsexually victimized male adolescent sexual abusers: developmental antecedents and behavioral comparisons. *J Child Sex Abuse* 2011; **20**: 77–93.
- 18 Renner L, Slack K. Intimate partner violence and child maltreatment: understanding intra- and inter-generational connections. *Child Abuse Negl* 2006; **30**: 599–617.
- 19 Holt S, Buckley H, Whelan S. The impact of exposure to domestic violence on children and young people: a review of the literature. *Child Abuse Negl* 2008; **32**: 797–810.
- 20 Bernstein D, Stein J, Newcomb M, et al. Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse Negl* 2003; **27**: 169–90.
- 21 Yen C, Yang MS, Yang MJ, Su Y, Wang M, Lan C. Childhood physical and sexual abuse: Prevalence and correlates among adolescents living in rural Taiwan. *Child Abuse Negl* 2008; **32**: 429–38.
- 22 Chan KL, Yan E, Brownridge DA, Ip P. Associating child sexual abuse with child victimization in China. *J Paediatr* 2013; **162**: 1028–34.
- 23 Finkelhor D, Lannen P, Quayle E, et al. Optimus Study: a cross-national research initiative on protecting children and youth: first results 2011. Zurich: UBS Optimus Foundation, 2011.
- 24 Luo Y, Parish W, Laumann E. A population-based study of childhood sexual contact in China: prevalence and long-term consequences. *Child Abuse Negl* 2008; **32**: 721–31.
- 25 United Republic of Tanzania. Violence against children in Tanzania: findings from a national survey 2009. Dar es Salaam: United Republic of Tanzania, 2011.
- 26 Nguyen H, Dunne M, Le A. Multiple types of child maltreatment and adolescent mental health in Vietnam. *Bull World Health Organ* 2010; **88**: 22–30.
- 27 Jirapramkpitak T, Prince M, Harpham T. The experience of abuse and mental health in the young Thai population. *Soc Psychiatry Psychiatr Epidemiol* 2005; **40**: 955–63.
- 28 Hilton A. "I thought it could never happen to boys": sexual abuse and exploitation of boys in Cambodia. Phnom Penh: HAGAR, 2008.
- 29 Windham A, Rosenberg L, Fuddy L, McFarlane E, Sia C, Duggan A. Risk of mother-reported child abuse in the first 3 years of life. *Child Abuse Negl* 2004; **28**: 645–67.
- 30 Finkelhor D, Ormrod R, Turner H. Poly-victimization: a neglected component in child victimization. *Child Abuse Negl* 2007; **31**: 7–26.
- 31 Garcia-Moreno C, Zimmerman C, Morris-Gehring A, et al. Addressing violence against women: a call to action. *Lancet* 2015; **385**: 1685–95.
- 32 Lansford JE, Godwin JG, Uribe Tirado LM, et al. Individual, family, and culture level contributions to child physical abuse and neglect: a longitudinal study in nine countries. *Dev Psychopathol* 2014; **26**: 561–73.
- 33 Gershoff ET, Grogan-Kaylor A, Lansford JE, et al. Parent discipline practices in an international sample: Associations with child behaviors and moderation by perceived normativeness. *Child Dev* 2010; **81**: 487–502.
- 34 MacKenzie MJ, Nicklas E, Waldfogel J, Brooks-Gunn J. Spanking and child development across the first decade of life. *Pediatrics* 2013; **132**: e1118–25.
- 35 Afifi T, Mota N, MacMillan H, Sareen J. Harsh physical punishment in childhood and physical health. *Pediatrics* 2013; **132**: e333–40.
- 36 Margolin G, Gordis E. The effects of family and community violence on children. *Annu Rev Psychol* 2000; **51**: 445–79.
- 37 Boyce S, Zeledon P, Tellez E, Barrington C. Gender-specific jealousy and infidelity norms as sources of sexual health risk and violence among young coupled Nicaraguans. *Am J Public Health* 2016; **106**: 625–32.