Co-occurring violent discipline of children and intimate partner violence against women in Latin America and the Caribbean: a systematic search and secondary analysis of national datasets

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ABSTRACT

Introduction  Intersections between violent discipline (physical punishment and/or verbal aggression) of children and intimate partner violence (IPV) against women have received growing international attention. This study aimed to determine how many Latin American and Caribbean (LAC) countries had national data on co-occurring IPV and violent discipline in the same household, how estimates compared and whether violent discipline was significantly associated with IPV.

Methods  A systematic search (following Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines) was used to identify which LAC countries had eligible, national co-occurrence data. The most recent eligible dataset in each country was obtained and reanalysed for comparability. Standardised national estimates were produced for prevalence of violent discipline, physical and/or sexual IPV and co-occurrence among ever partnered women of reproductive age living with a child aged 1–14. Bivariate analyses and logistic regressions produced levels and odds ratios (ORs) of physical punishment and verbal aggression in households affected by IPV (past year and before past year) compared with never, adjusted for sociodemographic characteristics.

Results  Nine countries had eligible datasets. Co-occurring physical punishment with past year IPV ranged from 1.7% (Nicaragua) to 17.5% (Bolivia); and with IPV ever from 6.0% (Nicaragua) to 21.2% (Haiti). In almost all countries, children in IPV affected households experienced significantly higher levels and ORs of physical punishment and verbal aggression, whether IPV occurred during or before the past year. Significant adjusted ORs of physical punishment ranged from 1.52 (95% CI 1.11 to 2.10) in Jamaica to 3.63 (95% CI 3.26 to 4.05) in Mexico for past year IPV; and from 1.50 (95% CI 1.23 to 1.83) in Nicaragua to 2.52 (95% CI 2.30 to 2.77) in Mexico for IPV before past year.

Conclusions  IPV is a significant risk factor for violent discipline, but few national surveys in LAC measure both. Co-ocurrence merits greater attention from policymakers and researchers.

Key questions

What is already known?

► Intimate partner violence (IPV) against women and violence against children often co-occur in the same household.

► Co-occurrence estimates vary widely, are difficult to compare across sites due to methodological diversity and come primarily from high-income countries.

► Some studies suggest that IPV is associated with a higher risk of violent discipline of children (physical punishment and/or verbal aggression), with mixed findings about whether associations persist beyond the past year.

What are the new findings?

► Most national data on IPV and violent discipline in Latin America and the Caribbean come from separate streams of research; 9 of 35 countries had national surveys measuring both, providing a rare opportunity for a standardised multicountry analysis.

► IPV and violent discipline co-occurred in a substantial proportion of households, ranging from 6.0% to 21.2% for co-occurring physical punishment and IPV ever.

► In almost all countries, IPV was significantly associated with a higher risk of physical punishment and/or verbal aggression, whether IPV occurred during or before the past year, even after controlling for sociodemographic characteristics.

What do the new findings imply?

► Co-occurrence merits greater attention from policymakers and service providers, with implications for children’s and women’s health, well-being and rights.

► Until countries expand the number of high-quality, comparable surveys measuring both forms of violence, evidence needed to inform prevention strategies will remain incomplete.

INTRODUCTION

Research and programmes addressing violence against children and violence against women historically proceeded along parallel but separate pathways, leaving important
gaps. Recently however, researchers and policymakers have paid growing attention to intersections between violent discipline of children and intimate partner violence (IPV) against women—the two most common forms of violence in the household. United Nations (UN) Member States have recognised both forms of violence as global public health and human rights problems and agreed to work towards eliminating them as part of 2030 Sustainable Development Goals (SDGs). As of February 2020, at least 10 Latin American and Caribbean (LAC) countries had prohibited corporal punishment of children in all settings including the home, and six others had expressed a commitment to full prohibition.

Large proportions of children aged 1–14 in the LAC region experience violent discipline (defined by SDG indicator 16.2.1 as physical punishment and/or verbal aggression by caregivers in the past month), with estimates ranging from 45% in Panama to more than 80% in Haiti, Jamaica and Suriname. IPV against women and girls is also widespread in the region, with national estimates of physical and/or sexual IPV ever against ever partnered women and girls ranging from 7.6% in Uruguay to more than 58.5% in Bolivia.

Both violent discipline and child exposure to IPV against women have negative consequences for children. Evidence indicates that physical punishment is both ineffective and detrimental to children’s health, well-being and human rights. Verbal aggression by caregivers also has negative consequences for children’s health, well-being and development. Studies link child exposure to IPV to emotional impairment and mental health disorders, malnutrition and stunting, and aggression towards peers and siblings.

Research and programmes have paid increasing attention to co-occurrence, defined for purposes of this study as caregiver violence against children and IPV against women that has occurred in the same household (ever, not necessarily concurrently). Evidence suggests that co-occurrence may compound negative effects of direct violence against children or exposure to IPV alone. For example, research from Uganda found that children who witnessed IPV in the home and experienced violence had about two times the odds of mental health difficulties as children who experienced violence but did not witness IPV.

The international evidence on co-occurrence has limitations. A 2020 review identified 132 studies on co-occurring IPV and child maltreatment, with co-occurrence rates ranging from 1% to 89%. Studies used highly diverse research designs, operational definitions and respondent characteristics, however. Some limited the definition of co-occurrence to households affected by both forms of violence in the past year; others did not include clear temporal bounds. These differences make it difficult to compare co-occurrence estimates across sites. The vast majority of co-occurrence studies in that 2020 review came from Europe and the USA, however, some studies from LAC have explored levels and/or correlates of co-occurring IPV and violent discipline, and/or IPV as an independent risk factor for violent discipline of children.

Globally, co-occurrence research has been hampered by a lack of nationally representative surveys measuring both IPV and child discipline. UNICEF-supported Multiple Indicator Cluster Surveys (MICS) are considered the gold standard for measuring child discipline, but they do not usually measure IPV against women. Multicountry analyses of MICS data exploring correlates of violent discipline in low- and middle-income countries have found significant associations with caregiver attitudes supporting violence, younger age of children, lower caregiver education, parental depression and socioeconomic status; however, because MICS do not measure IPV, they have not been able to explore associations with IPV. Similarly, Demographic and Health Surveys (DHS) and World Health Organization (WHO) surveys, the most common sources of national IPV prevalence estimates, often ask about violent discipline in women’s childhood but not in current households, with some exceptions.

This article presents a secondary analysis of nine national datasets from LAC identified through a systematic search. The study aimed to determine which countries had national data on IPV and child discipline in the current household, how co-occurrence estimates compared across countries, and whether children in IPV-affected households had a higher risk of violent discipline than other children. Specific research questions were: (1) How many LAC countries have nationally representative, population-based surveys that gathered data on co-occurring IPV against women of reproductive age and violent discipline of children in the current household? (2) How comparable are these data in terms of sample characteristics, violence measures and risk of bias? (3) How do co-occurrence estimates vary across countries after standardising variables for comparability? (4) Are the odds of physical punishment and verbal aggression by caregivers significantly higher in households affected by IPV (past year and before past year) compared with households in which women did not report IPV, after adjusting for sociodemographic characteristics? Henceforth, this article refers to women and girls of reproductive age (15–49) as ‘women’ for simplicity, while acknowledging that the Convention on the Rights of the Child considers girls aged 15–17 to be children, not adults, regardless of marital status.

METHODS

Search strategy

A systematic search was carried out in two stages (December 2018 and December 2019) following Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (figure 1). At all stages, eligibility was assessed independently by at least
two authors (ARC, JAM, SB), with differences resolved by consensus.

In the first stage, described elsewhere, a systematic search used the following a priori inclusion criteria: (a) nationally representative, population-based survey, (b) from the Americas, (c) with a report published (at least online) between January 2000 and July 2018 in any language, (d) measured IPV against women of reproductive age, not just adolescents or young adults, (e) adequate information to clarify data quality (instruments were requested directly from research teams if unavailable from published documents), (f) using measures that met basic quality criteria, for example, no filter questions about violence ‘by anyone’ before asking about partner violence and no emotionally laden terms such as ‘violence’, ‘abuse’ or ‘assault’—known to reduce disclosure.28

The search included databases of journals (Pubmed, Lilacs, SciELO, EBSCO, Web of Science and Google Scholar), international organisations and research programmes; national institutes of statistics websites; article bibliographies; and personal contacts with researchers and government officials throughout the region. Search terms included names of each Member State of the Pan American Health Organization (PAHO) combined with terms such as: gender-based violence, intimate partner violence, domestic violence, spouse abuse, violence against women and family violence (and Spanish equivalents, online supplemental table A). After removing duplicates, 1046 records were screened. Full text records (e.g. articles, reports, manuals and survey instruments) were retrieved and reviewed for 72 surveys from 24 countries.

The second stage (December 2019) updated the search using all stage one criteria, modified as follows: (a) publication deadline was extended to December 2019, (b) surveys had to measure both IPV prevalence and child discipline in the current household, (c) from LAC, not Canada or the USA and (d) the most recent eligible...
survey in each country. Expanded search terms included: *child maltreatment, child abuse, violent discipline, child punishment and corporal punishment* (and Spanish equivalents, online supplemental table A). This stage excluded five surveys and added nine others. Full text records for 72 surveys from 26 countries were assessed for eligible co-occurrence data, along with MICS surveys from 16 LAC countries.

All nine eligible surveys were open access, allowing authors to obtain the following datasets, listed by country, data collection year(s) and type: Bolivia 2008 DHS, Colombia 2015 DHS, Guatemala 2008/2009 Reproductive and Health Survey (RHS), Haiti 2016/2017 DHS, Jamaica 2008/2009 RHS, Mexico 2016 Encuesta Nacional sobre la Dinámica de las Relaciones en los Hogares (ENDIREH), Nicaragua 2011/2012 DHS, Paraguay 2008 RHS and Peru 2018 DHS. Henceforth, each survey is referred to by country name.

### Risk of bias assessment

As noted earlier, the search limited eligible datasets to population-based surveys using violence measures that met basic international quality standards. All nine eligible surveys included in the secondary analysis were assessed in duplicate (ARC, SB) for other potential risks of bias/data quality limitations as required by PRISMA guidelines. The following risk of bias checklist was adapted from existing tools, informed by good practice guidelines, (1) measured IPV with a module, not a dedicated violence survey, (2) collected data >10 years ago, (3) used a child discipline or IPV subsample that could not be fully standardised, (4) did not use the MICS child discipline module, considered the gold standard, (5) gathered child discipline data among household questionnaire respondents who were not always the same as women’s questionnaire respondents asked about IPV, (6) measured IPV during the past year but not ever, (7) measured IPV by any partner in life but not by the current/most recent partner specifically and (8) deviated from WHO ethical and safety guidelines. Results are reported alongside prevalence estimates.

### Safety and ethical measures

All surveys used ethical and safety measures for IPV research, including informed consent, privacy, confidentiality and interviewer training on violence against women, although reports provided different levels of detail on these measures. Some surveys did not adhere to all WHO ethical and safety recommendations for researching IPV, however. For example, Bolivia strongly recommended but did not require privacy. Bolivia and Colombia asked all women in the household about IPV, not just one woman (posing a risk to confidentiality). And, informed consent instructions in Mexico did not emphasise women’s right to refuse any question. Published reports did not explain how interviewers responded to disclosures of violence against children (e.g. whether they provided referrals to local services).

### Public involvement

All surveys were developed with the participation of civil society organisations and women’s advocates working on violence against women. In most countries, all stages of design, implementation and dissemination were guided by specialised committees comprised of a wide array of government, academic, civil society and international organisations and advocates with expertise in violence research, prevention and services.

### Sample design

All surveys used multistage, probability samples. Primary sampling units (PSUs) were selected from master sampling frames, usually a census. Households were randomly selected within each PSU. All surveys except Bolivia and Colombia randomly selected one woman in the household for violence questions. Women were interviewed face to face, usually in or around the woman’s residence. All surveys had response rates >85% and used weights for producing nationally representative estimates for women, children and households.

The types of respondents eligible for child discipline questions varied by survey (online supplemental table B). In some surveys, women were asked about child discipline even if their children were infants, already adults and/or not living in the household. Jamaica and Mexico asked all women but included ‘no children’ as a response option. Haiti gathered child discipline data among male and female household questionnaire respondents, only some of whom were women asked about IPV or even a primary caregiver of the selected child. Most surveys limited female respondents to women of reproductive age, but Mexico had no upper age limit.

The secondary analysis eliminated most of these differences by restricting datasets to subsamples of ever-partnered women of reproductive age (15–49) living with a daughter or son aged 1–14 with data on both IPV against women and child discipline in the current household (online supplemental table B). Full standardisation was not always possible, however. Women in the Haiti subsample were usually but not always the same respondent who provided child discipline data. Bolivia limited IPV questions to women with a partner in the past year. Jamaica and Paraguay did not gather enough data to definitively exclude all women whose children aged 1–14 all lived elsewhere. And, Paraguay capped women’s age at 44 years.

### Child discipline measures

Surveys used diverse child discipline measures (table 1). Haiti used the MICS module, asking closed-ended questions about whether one randomly selected child in the household (specified by name) was disciplined with specific acts in the past month. Mexico asked closed-ended questions about whether she or her partner hit the children when they became ‘angry’ or ‘desperate’ (‘se enoja o desespera’). The other seven asked open-ended questions about how children were disciplined,
| Survey          | Original survey items (translated into English if needed)                                                                 | Physical (verbal) acts measured‡ |
|-----------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| Bolivia 2008    | Who punishes your sons (daughters) in the household? Anyone else?                                                        | Pull ears or slap/smack          |
|                 | FATHER; MOTHER; STEPFATHER; STEPMOTHER; GRANDFATHER; GRANDMOTHER; OLDER SISTER; HOUSEHOLD WORKER; OTHER; NO ONE (NOT PUNISHED) | Beat on the body (Verbal: Shout, insult) |
|                 | IF FATHER: How does your husband/partner punish your sons/daughters? IF MOTHER: How do you punish your sons/daughters? IF OTHER: How does that person punish your sons/daughters? |                                  |
| Colombia 2015   | Who punishes your sons (daughters) (or your step or adopted sons (daughters)) in the household? Anyone else?              | Slap/smack                       |
|                 | FATHER/STEPFATHER; MOTHER/RESPONDENT/ STEPMOTHER; OTHER; NO ONE (NOT PUNISHED)                                           | Push                             |
|                 | IF FATHER/STEPFATHER: How does your partner punish your (step, adopted) sons (daughters)? IF RESPONDENT: How do you punish your (step, adopted) sons (daughters)? IF OTHER: How does that person punish your (step, adopted) sons (daughters)? |                                  |
| Guatemala 2008/2009 | Who punishes your sons/daughters in the household? FATHER; MOTHER; OTHER; NO ONE (NOT PUNISHED)                          | Spank                            |
|                 | IF FATHER: How does the father punish your sons/daughters? IF MOTHER: How do you/the mother punish your sons/daughters? IF OTHER: How does that person punish your sons/daughters? | Burn                             |
|                 |                                                                                | Make kneel on corn or rocks       |
| Haiti 2016/2017 | In the past month, did you or anyone else in your household:                                                             | Shake                            |
|                 | …shake (NAME)? … yell or shout at (NAME)? … pull (NAME’s) ears? … make (NAME) knee? … spank or hit (NAME) on the bottom with a bare hand? | Pull ears                        |
|                 | … hit (NAME) on the bottom or elsewhere on the body with something like a belt, whip, stick or other hard object? … call (NAME) an idiot, lazy, ugly or something like that? | Make kneel                       |
|                 | … slap or punch (NAME) on the face, head or ears? … hit (NAME) on the hand, arm or leg? … beat (NAME), that is to say… hit over and over as hard as possible? | Spank/hit on bottom with bare hand |
|                 |                                                                                | Hit with belt, whip, stick, or other hard object                     |
|                 |                                                                                | Slap or punch on face, head, ears                                      |
|                 |                                                                                | Hit on hand, arm, leg                                                    |
|                 |                                                                                | Beat (hit over and over as hard as possible)                            |
|                 |                                                                                | (Verbal: Yell or shout; Call names)                                     |
| Jamaica 2008/2009 | In this household, are the children punished when they do not behave well? YES; NO; NO CHILDREN (AGE 1–15) IN THE HOUSEHOLD | Cuff or spank                   |
|                 | IF YES: How are the children punished when they don’t behave well? Another way?                                           | Hit with hand or fist          |
|                 |                                                                                | Hit with belt, stick, other object                                      |
| Mexico 2016     | When your husband or partner becomes angry or desperate with his/your daughters and sons, does he hit them…              | Smack/slap                     |
|                 | When you become angry or desperate with your daughters and sons, do you hit them…                                       | Hit with hand or fist          |
|                 | …. sometimes? frequently? does not hit them? no sons/daughters?                                                        | Beat with belt, ruler, whip/rope, stick, other object                   |
| Nicaragua 2011/2012 | In this household, how are children disciplined when they behave badly?                                                  | Same as Nicaragua              |
| Paraguay 2008   | In your household, how are children punished? Anything else?                                                            |                                  |
| Peru 2018       | Who reprimands or punishes your daughters or sons in the household? Anyone else? BIOLOGICAL FATHER; BIOLOGICAL MOTHER; OTHER; NO ONE (NOT PUNISHED) | Slap/smack                     |
|                 | IF BIOLOGICAL FATHER: How does your husband/partner punish your daughter(s) or son(s)? IF BIOLOGICAL MOTHER: How do you punish your daughter(s) or son(s)? IF OTHER: How does that person punish your daughter(s) or son(s)? | Beat or ‘physical punishment’ |

*Spanish and French survey items were translated into English by authors.
†Words in small caps font were coded but not read to respondent.
‡All surveys except Mexico also measured acts of non-violent discipline, which are not shown.
coding spontaneous answers using predetermined categories. Bolivia, Colombia, Guatemala and Peru asked who punishes ("castiga") children (e.g. mother, father/partner, anyone else) before asking how. No survey other than Haiti asked about a timeframe. Bolivia, Guatemala, Mexico and Peru asked about respondents’ own daughters and sons. Colombia asked about biological, step and adopted children. Jamaica, Nicaragua and Paraguay asked about children in the household generally. Some surveys used wording such as ‘punish’, likely to elicit disclosure of negative discipline; others used neutral language such as ‘teach’ designed to elicit disclosure of positive and negative discipline. For example, the MICS preamble used in Haiti (in English) reads: "Adults use certain ways to teach their children the right behaviour".

For the secondary analysis, standardised violent discipline variables were constructed using operational definitions that aligned with SDG indicators as much as possible within limits of available data. Although specific acts measured by each survey varied (table 1), all surveys measured physical punishment (1=1+ act; 0=none) defined as any act of physical discipline except ‘pouring/throwing water’ ("echándoles agua"), which did not clearly meet the UN definition of corporal punishment. Only Bolivia and Haiti measured verbal aggression (1=1+ act; 0=none), defined as shouting or insults, separate from more ambiguous acts such as verbal reprimands or ‘scolding’ ("reprenda verbal/regaño"). Otherwise eligible women who reported that children were ‘not punished’ were retained in denominators and coded as ‘no physical punishment’ (or ‘no verbal aggression’), in keeping with the approach used by the MICS, but in contrast to the 2018 Peru DHS report.

Measures of IPV against women

Measures of physical IPV were highly comparable across surveys. All nine surveys used a modified conflict tactics scale, asking about behaviourally specific acts (e.g. slapped, punched, etc) by an intimate partner, considered good practice for measuring IPV. Five surveys (Bolivia, Colombia, Haiti, Mexico and Peru) measured violence by the current or most recent partner. Four (Guatemala, Jamaica, Nicaragua and Paraguay) measured violence by any partner in life. Sexual IPV measures were fairly comparable, with some exceptions. All surveys asked about forced sex. In addition, some DHS surveys also asked about forced sex ‘acts’, and some RHS surveys also asked about sex that occurred due to fear of what a partner might do if she refused. Mexico measured a wider range of acts, including being forced to watch pornography and to have unprotected sex. Emotional/psychological IPV was measured in highly diverse ways across surveys, and therefore, was not included in this analysis.

For the secondary analysis, IPV was defined as any act of physical and/or sexual violence by an intimate partner. Dichotomous variables were constructed for the prevalence of IPV ever (1=ever; 0=never) and past year (1=pastyear; 0=not in the past year). In addition, a trichotomous variable for IPV by timeframe was constructed with three mutually exclusive categories: 0=never (reference category); 1=pastyear; 2=before (but not during) the past year.

Two co-occurrence variables were created: one for women who reported both physical child punishment in the current household and IPV against themselves ever (1=yes; 0=no), and one for women who reported both physical child punishment in the current household and IPV against themselves in the past year (1=yes; 0=no). Women who completed the violence module (or equivalent in Mexico) but were missing responses to select child discipline or IPV items (online supplemental table C) were retained in denominators and classified as ‘no’ for that act, in keeping with the DHS and MICS.

Sociodemographic variables

Partnership was defined as currently versus previously married or cohabited with a partner, except in Jamaica, which also included ‘visiting partners’, a common form of long-term, non-cohabiting partnership in that setting. Women’s age was grouped into 5-year categories. Residence was defined as urban or rural, except in Mexico where three original categories were collapsed into urban (≥100,000 inhabitants) and rural/semi-urban (<100,000 inhabitants). Education was defined as the highest level reached (not necessarily completed), including: lower primary (≤3 years) or less, upper primary (>3 years), lower secondary (≤5 years except in Bolivia, where it included seventh and eighth years of ‘primary school’), upper secondary and postsecondary. In Jamaica, few women reported less than upper primary, so they were combined into a category of primary and below for regression analyses.

Wealth quintiles (poorest, poorer, middle, richer, richest) were precoded by original research teams, except in Mexico and Nicaragua, which were produced by authors (ARC, JAM) using SPSS (V.26) following DHS methodology. Household assets and other characteristics were assigned weights generated through principal components analysis. Scores were standardised in relation to a normal distribution with a mean of zero and SD of one. Standardised scores were summed to create the household wealth index. Households were ranked and divided into quintiles, applying household weights, adjusted for household size.

Data analysis

Statistical analyses were done with Stata V.16 (StataCorp LP). Prevalence of each form of violence (physical punishment, verbal aggression, any violent discipline, past year IPV, IPV ever, co-occurring physical punishment and past year IPV and co-occurring physical punishment and IPV ever) was estimated with percentages and 95% confidence intervals (CIs). To explore whether children in households affected by IPV experienced higher levels of physical punishment and verbal aggression than other children, bivariate analyses were carried out by
IPV timeframe (never, past year, before past year), with significance testing using Pearson’s χ² test corrected for survey design effects and converted into an F-statistic. Logistic regression produced odds ratios (ORs) of physical punishment and verbal aggression in households affected by IPV past year and before past year compared with never, adjusted for partnership, age, residence, education and wealth. Sensitivity testing was carried out for physical versus physical and/or sexual IPV.

Survey design effects were taken into account for all CIs, regressions and significance testing, using domestic violence module weights (if available) or women’s individual weights, which were normalised to equalise weighted and unweighted numbers of women in each study subsample. Each survey was analysed separately, not pooled because: (a) the diversity of child discipline measures posed a risk of bias, (b) surveys were conducted over a 10-year period from a limited number of countries, so the reference population would have been unclear and (c) violence was not rare, so pooling could not be justified by a need to increase statistical power.

RESULTS
Systematic search results
As of December 2019, 25 LAC countries had nationally representative data on the prevalence of IPV against women that met basic quality and reporting criteria, but only nine (Bolivia, Colombia, Guatemala, Haiti, Jamaica, Mexico Nicaragua, Paraguay and Peru) had a survey that met those criteria and measured both IPV and child discipline in the current household. National data on co-occurring IPV and verbal aggression against children were even more limited, measured by only two of nine eligible surveys. All MICS surveys in the region measured child discipline, but none measured IPV against women. Among eligible surveys, Mexico was dedicated specifically to violence against women; all others were DHS or RHS surveys using violence modules within larger health surveys. Eligible surveys were carried out between 2008 and 2018. Four (Bolivia, Guatemala, Jamaica and Paraguay) were >10 years old.

Characteristics of secondary analysis subsamples
Reanalysed subsample sizes ranged from 3291 women in Haiti to 43095 in Mexico. Women’s sociodemographic characteristics varied by country (table 2). In all countries, most women were currently partnered. Relatively few (1%–5%) were adolescent girls aged 15–19. Education levels varied widely; more than half of women in the Guatemalan subsample had less than 4 years of primary education, but only nine women in Jamaica fell into that category.

Prevalence of violence
In all countries, except Nicaragua, levels of violent discipline were higher than levels of IPV (table 3). Reports of physical child punishment ranged from 22.1% (95% CI 20.7 to 23.4) in Nicaragua to 82.0% (95% CI 80.1 to 84.0) in Haiti. Past year IPV ranged from 7.2% (95% CI 6.4 to 8.1) in Nicaragua to 26.8% (95% CI 25.5 to 28.1) in Bolivia. IPV ever ranged from 21.3% (95% CI 20.7 to 21.9) in Mexico to 33.7% (95% CI 32.5 to 34.9) in Colombia (not measured in Bolivia). Co-occurring physical punishment and past year IPV ranged from 1.7% (95% CI 1.3 to 2.1) in Nicaragua to 17.5% (95% CI 16.3 to 18.6) in Bolivia. Co-occurring physical punishment and IPV ever ranged from 6.0% (95% CI 5.3 to 6.7) in Nicaragua to 21.2% (95% CI 19.3 to 23.2) in Haiti. In Bolivia and Haiti, levels of verbal aggression were 40.6% (95% CI 38.8 to 42.3) and 64.2% (95% CI 61.7 to 66.7) respectively, and levels of any violent discipline (physical and/or verbal) were 69.9% (95% CI 68.5 to 71.2) and 87.1% (95% CI 85.6 to 88.7).

Associations between IPV and violent discipline
Bivariate analyses found significant associations between IPV and physical punishment in all nine countries and between IPV and verbal aggression in Bolivia and Haiti, the only two countries that measured this indicator (table 4). In all countries, ORs of physical punishment were higher in households affected by IPV (past year and before past year) than in households where women reported no IPV, before and after adjusting for partnership, age, residence, education and household wealth. All elevated ORs were statistically significant, except in Haiti, where only the unadjusted OR for past year IPV was significant, and in Nicaragua, where ORs (adjusted and unadjusted) were significantly elevated for children in households affected by IPV before past year but not by IPV in the past year. Significant adjusted ORs of physical child punishment ranged from 1.52 (95% CI 1.11 to 2.10, p<0.010) in Jamaica to 3.63 (95% CI 3.26 to 4.05, p<0.001) in Mexico for past year IPV, and from 1.50 (95% CI 1.23 to 1.83, p<0.001) in Nicaragua to 2.52 (95% CI 2.30 to 2.77, p<0.001) in Mexico for IPV before past year.

In Bolivia and Haiti, ORs of verbal aggression were significantly elevated for both past year IPV and IPV before past year, before and after adjusting for sociodemographic characteristics (p<0.001 for both surveys and timeframes, except IPV before past year in Haiti, which was p=0.001). Sensitivity testing did not find notable statistical differences between physical versus physical and/or sexual IPV for any survey or type of discipline.

DISCUSSION
This is the first study from LAC to present a systematic search and secondary analysis of national data on co-occurring IPV against women and violent discipline of children in the current household. The search confirmed that nationally representative, population-based data on co-occurring IPV and violent discipline remain limited in the region. National prevalence data on these forms of violence are often generated by separate research streams. Only nine LAC countries had eligible datasets, and only five had data gathered in the past decade. Published
analyses of national co-occurrence data from LAC were even more limited. Most co-occurrence data gathered by surveys in this study had not been previously analysed, although secondary analyses of co-occurrence have been published using data from Bolivia (2008) and previous rounds of DHS and RHS surveys from Colombia (2010), Nicaragua (2006–2007) and Peru (2000 & 2012).19 20 44 45

As a result, this secondary analysis provided a rare opportunity to explore standardised national estimates of co-occurring IPV and violent discipline across different countries. High levels of violent child discipline (physical and/or verbal), physical and/or sexual IPV against women, and co-occurrence were found in all nine LAC countries. The range of co-occurrence estimates (1.7% to 17.5% for physical punishment and past year IPV and 6.0% to 21.2% for physical punishment and IPV ever) was narrower than the 1%–89% range found by Sijtsema and colleagues,15 but wider than 5%–10% reported by reviews of community-based surveys with representative samples.46 47

In almost all countries with data, IPV against women was significantly associated with a higher risk of physical punishment and verbal aggression against children, even after controlling for sociodemographic characteristics, compared with households in which women reported no IPV. This finding echoes many studies from the USA48 and a more limited number from LAC countries,15 including Nicaragua19 and Peru.17 20 Notably, most ORs of physical punishment and verbal aggression were significantly elevated whether IPV occurred during or before the past year, which

| Table 2 Sociodemographic characteristics of women in secondary analysis subsamples* |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Women's characteristics | Bolivia 2008 DHS | Colombia 2015 DHS | Guatemala 2008/2009 RHS | Haiti 2016/2017 DHS | Jamaica 2008/2009 RHS | Mexico 2016 ENDIREH | Nicaragua 2011/2012 DHS | Paraguay 2008 RHS | Peru 2018 DHS |
| Number of women N | 8735 | 17097 | 10664 | 3291 | 4585 | 43095 | 9045 | 3459 | 19680 |
| Partnered | | | | | | | | | |
| Currently | % | 95.9 | 79.4 | 89.1 | 88.1 | 84.2 | 85.4 | 77.2 | 88.4 | 84.0 |
| Previoulsy | % | 4.1 | 20.6 | 10.9 | 11.9 | 15.8 | 14.6 | 22.8 | 11.6 | 16.0 |
| Age | | | | | | | | | |
| 15–19 | % | 2.3 | 2.4 | 3.7 | 1.2 | 1.9 | 2.2 | 4.5 | 2.0 | 1.0 |
| 20–24 | % | 11.8 | 12.9 | 15.1 | 11.3 | 12.7 | 12.2 | 15.3 | 13.3 | 8.6 |
| 25–29 | % | 21.1 | 20.7 | 21.3 | 18.4 | 20.4 | 17.8 | 22.5 | 22.1 | 18.4 |
| 30–34 | % | 21.3 | 22.3 | 20.9 | 23.9 | 22.5 | 21.3 | 22.3 | 24.4 | 22.7 |
| 35–39 | % | 19.7 | 19.2 | 17.8 | 20.7 | 21.1 | 21.5 | 18.3 | 20.5 | 21.3 |
| 40–44 | % | 14.1 | 13.8 | 12.3 | 13.4 | 13.9 | 16.7 | 10.9 | 17.8 | 18.3 |
| 45–49† | % | 9.7 | 8.7 | 8.8 | 11.1 | 7.5 | 8.3 | 6.2 | NA | 9.8 |
| Residence | | | | | | | | | |
| Rural‡ | % | 38.9 | 24.4 | 57.5 | 61.0 | 45.2 | 49.9 | 44.0 | 39.0 | 22.8 |
| Urban | % | 61.1 | 75.6 | 42.5 | 39.0 | 54.8 | 50.1 | 56.0 | 61.0 | 77.2 |
| Education§ | | | | | | | | | |
| ≤Lower primary | % | 26.6 | 8.5 | 54.7 | 34.9 | 0.3 | 6.0 | 25.4 | 8.5 | 8.3 |
| Upper primary | % | 23.6 | 13.6 | 22.4 | 25.1 | 3.5 | 16.8 | 25.6 | 35.4 | 15.7 |
| Lower secondary¶ | % | 9.2 | 11.7 | 8.7 | 18.4 | 22.4 | 38.5 | 19.2 | 15.7 | 12.0 |
| Upper secondary | % | 27.6 | 35.3 | 10.1 | 17.6 | 64.0 | 22.4 | 17.4 | 21.1 | 30.1 |
| Postsecondary | % | 13.0 | 30.9 | 4.0 | 4.0 | 9.7 | 16.3 | 12.3 | 19.2 | 34.0 |
| Wealth quintile | | | | | | | | | |
| Poorest | % | 19.0 | 21.4 | 22.2 | 20.2 | 26.5 | 23.2 | 20.1 | 23.4 | 21.8 |
| Poorer | % | 19.2 | 21.6 | 21.6 | 19.3 | 21.1 | 22.3 | 20.8 | 21.0 | 23.4 |
| Middle | % | 21.7 | 21.0 | 20.6 | 19.7 | 20.4 | 20.4 | 21.0 | 19.7 | 20.5 |
| Richer | % | 21.7 | 18.8 | 20.3 | 23.7 | 17.1 | 18.7 | 20.4 | 18.8 | 18.9 |
| Richest | % | 18.4 | 17.3 | 15.3 | 17.1 | 14.9 | 15.4 | 17.6 | 17.1 | 15.5 |

NA, not available because not measured. All numbers are unweighted.
*Secondary analysis subsamples were limited to ever-partnered women of reproductive age, living with a daughter or son aged 1–14.
†Paraguay capped women’s age at 44.
‡In Mexico, residence was urban (≥100000 inhabitants) and rural/semi-urban (<100000 inhabitants).
§One woman in Mexico was missing education level; no other sociodemographic data were missing from any survey.
¶In Bolivia, lower secondary included seventh and eighth years of what they consider ‘primary’ school.
| Survey country and year | Physical punishment Past year | Verbal aggression Past year | Physical and/or verbal Past year | Physical and/or sexual IPV† Past year | Co-occurrence (Physical punishment and IPV) With IPV past year | With IPV ever | Risk of bias‡ |
|-------------------------|-----------------------------|-----------------------------|---------------------------------|--------------------------------------|-----------------------------|----------------|---------------|
| Bolivia 2008            | 56.5                        | 69.9                        | 26.8                            | 17.5                                 | 17.5                        | 17.5          | 1, 2, 3a, 4, 6, 8 |
| Colombia 2015          | 47.0                        | 19.1                        | 10.6                            | 3.0                                  | 3.0                         | 3.0           | 1, 4, 8       |
| Guatemala 2008/2009    | 47.0                        | 10.3                        | 5.9                             | 16.5                                 | 16.5                        | 16.5          | 1, 2, 4, 7    |
| Haiti 2016/2017        | 82.0                        | 14.7                        | 12.6                            | 21.2                                 | 21.2                        | 21.2          | 1, 5          |
| Jamaica 2008/2009      | 58.7                        | 8.3                         | 5.6                             | 15.2                                 | 15.2                        | 15.2          | 1, 2, 3b, 4, 7 |
| Mexico 2016            | 40.0                        | 9.9                         | 6.4                             | 12.9                                 | 12.9                        | 12.9          | 4, 8          |
| Nicaragua 2011/2012    | 22.1                        | 7.2                         | 1.7                             | 6.0                                  | 6.0                         | 6.0           | 1, 4, 7       |
| Paraguay 2008          | 27.3                        | 7.9                         | 3.1                             | 7.9                                  | 7.9                         | 7.9           | 1, 2, 3b, 4, 7 |
| Peru 2018              | 39.0                        | 11.8                        | 6.3                             | 15.7                                 | 15.7                        | 15.7          | 1, 4          |

*In Haiti, some child discipline data were reported by another member of the woman’s household.
†Bolivia, Colombia, Haiti, Mexico and Peru measured IPV by the current/most recent partner; Guatemala, Jamaica, Nicaragua and Paraguay measured IPV by any partner in life.
‡Risk of bias items: (1) Measured IPV with a module, not a dedicated violence survey. (2) Collected data >10 years ago. (3a) Limited IPV questions to women with a partner in the past year. (3b) Did not gather enough data to exclude all women without children age 1-14 in the household. (4) Did not use MICS questions to measure child discipline. (5) Gathered child discipline data from household questionnaire respondents. (6) Measured IPV during the past year but not ever. (7) Measured IPV by any partner in life not the current/most recent partner specifically. (8) Deviated from WHO ethical and safety guidelines.
; MICS, Multiple Indicator Cluster Survey; NA, not available, because not measured.
## Table 4  Odds ratios that children were disciplined with physical punishment or verbal aggression, by timeframe of IPV

| Survey          | IPV timeframe         | Total n | No % | Yes % | Unadjusted odds ratio (OR) | Adjusted odds ratio (aOR)† | Unadjusted CI | Adjusted CI | p value | Adjusted CI | p value |
|-----------------|-----------------------|---------|------|-------|-----------------------------|-----------------------------|----------------|-------------|---------|-------------|---------|
| **Bolivia 2008** |                       |         |      |       |                             |                             |                |             |         |             |         |
| No past year IPV‡ | 6396                  | 46.7    | 53.3 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| IPV past year   | 2339                  | 34.8    | 65.2 |       | 1.64                        | 1.45 to 1.86                | <0.001***       | 1.69        | 1.48 to 1.92 | <0.001*** |
| **Colombia 2015** |                       |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 11339                 | 56.9    | 43.1 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 3260                  | 44.6    | 55.4 |       | 1.64                        | 1.46 to 1.85                | <0.001***       | 1.77        | 1.57 to 1.99 | <0.001*** |
| IPV before past year | 2498                  | 46.2    | 53.8 |       | 1.54                        | 1.31 to 1.81                | <0.001***       | 1.59        | 1.35 to 1.87 | <0.001*** |
| **Guatemala 2008/2009** |               |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 7675                  | 57.7    | 42.3 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 1096                  | 42.1    | 57.9 |       | 1.87                        | 1.61 to 2.18                | <0.001***       | 1.96        | 1.68 to 2.28 | <0.001*** |
| IPV before past year | 1893                  | 40.4    | 59.6 |       | 2.01                        | 1.75 to 2.31                | <0.001***       | 2.01        | 1.75 to 2.32 | <0.001*** |
| **Haiti 2016/2017** |                       |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 2483                  | 19.3    | 80.7 | *     | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 478                   | 14.1    | 85.9 |       | 1.46                        | 1.00 to 2.13                | 0.047*          | 1.33        | 0.92 to 1.93 | 0.126     |
| IPV before past year | 330                   | 13.8    | 86.2 |       | 1.49                        | 0.93 to 2.39                | 0.099           | 1.46        | 0.89 to 2.38 | 0.132     |
| **Jamaica 2008/2009** |               |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 3571                  | 44.2    | 55.8 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 383                   | 33.4    | 66.6 |       | 1.58                        | 1.16 to 2.14                | 0.004**         | 1.52        | 1.11 to 2.10 | 0.010     |
| IPV before past year | 631                   | 30.3    | 69.7 |       | 1.82                        | 1.43 to 2.32                | <0.001***       | 1.67        | 1.31 to 2.14 | <0.001*** |
| **Mexico 2016** |                       |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 33296                 | 65.6    | 34.4 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 4264                  | 35.0    | 65.0 |       | 3.55                        | 3.20 to 3.94                | <0.001***       | 3.63        | 3.26 to 4.05 | <0.001*** |
| IPV before past year | 4906                  | 42.8    | 57.2 |       | 2.54                        | 2.32 to 2.78                | <0.001***       | 2.52        | 2.30 to 2.7 | <0.001*** |
| **Nicaragua 2011/2012** |                   |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 6982                  | 79.2    | 20.8 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 653                   | 76.7    | 23.3 |       | 1.15                        | 0.89 to 1.50                | 0.279           | 1.13        | 0.87 to 1.48 | 0.359     |
| IPV before past year | 1409                  | 72.4    | 27.6 |       | 1.45                        | 1.20 to 1.75                | <0.001***       | 1.50        | 1.23 to 1.83 | <0.001*** |
| **Paraguay 2008** |                       |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 2718                  | 75.3    | 24.7 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 274                   | 61.0    | 39.0 |       | 1.95                        | 1.46 to 2.59                | <0.001***       | 1.92        | 1.44 to 2.57 | <0.001*** |
| IPV before past year | 467                   | 64.2    | 35.8 |       | 1.70                        | 1.33 to 2.17                | <0.001***       | 1.82        | 1.42 to 2.35 | <0.001*** |
| **Peru 2018**   |                       |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 13278                 | 65.5    | 34.5 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 2330                  | 46.9    | 53.1 |       | 2.15                        | 1.82 to 2.53                | <0.001***       | 2.23        | 1.89 to 2.64 | <0.001*** |
| IPV before past year | 4072                  | 54.5    | 45.5 |       | 1.59                        | 1.37 to 1.83                | <0.001***       | 1.83        | 1.58 to 2.13 | <0.001*** |
| **Bolivia 2008** |                       |         |      |       |                             |                             |                |             |         |             |         |
| No past year IPV‡ | 6396                  | 61.9    | 38.1 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| IPV past year   | 2339                  | 52.7    | 47.3 |       | 1.46                        | 1.29 to 1.64                | <0.001***       | 1.49        | 1.33 to 1.68 | <0.001*** |
| **Haiti 2016/2017** |                       |         |      |       |                             |                             |                |             |         |             |         |
| Never IPV       | 2483                  | 38.8    | 61.2 | ***   | Ref                         | Ref                         |                 |             |         |             |         |
| Past year IPV   | 478                   | 26.7    | 73.3 |       | 1.74                        | 1.29 to 2.35                | <0.001***       | 1.77        | 1.31 to 2.39 | <0.001*** |
| IPV before past year | 330                   | 26.6    | 73.4 |       | 1.75                        | 1.29 to 2.37                | <0.001***       | 1.69        | 1.24 to 2.31 | 0.001**  |

Children in the household were physically punished:

- All numbers, percentages and ORs are weighted. *p<0.05; **p<0.01; ***p<0.001.
- †Adjusted for women's partnership status, age, urban/rural residence, education level and household wealth.
- ‡Bolivia did not measure IPV before past year, therefore the reference category was no IPV in the past year.
- aOR, adjusted OR; CI, confidence interval; IPV, intimate partner violence; Ref, reference category.
suggests it may be a mistake to limit attention to recent IPV when studying intersections between violent discipline and IPV. Previous research produced mixed findings about whether associations between IPV and violence against children in the household persist beyond 1 year, but most research has come from high-income countries.48

The question of why children in IPV-affected households face a higher risk of violent discipline than other children is beyond the scope of this study. It is possible that IPV and violent discipline share risk factors that independently affect the likelihood of each form of violence.49 Some researchers theorise that women living with partner abuse are more likely to discipline their children harshly due to stress or anxiety.48 It is also possible that men who abuse partners are more likely to abuse children. Research indicates that children may experience violent discipline by fathers/partners and other household members, not just mothers/stepmothers.42,50 Five surveys eligible for this study examined who disciplined children and how, providing a future opportunity for research into how pathways linking IPV to violent discipline vary by caregiver.

Limitations

This study had many limitations. Surveys used diverse measures of violent discipline. Most lacked a preamble introducing the idea of positive and negative discipline, used open-ended questions, coded a small number of acts and did not ask about a specific child or timeframe. Therefore, co-occurrence estimates in this analysis included some households in which physical punishment occurred only in the past year but IPV occurred before past year or vice versa. MICS estimates of physical child punishment in the past month were available from three countries in this analysis, including 68.4% for Jamaica 2011, 43.7% for Mexico 2015 and 39.7% for Paraguay 2016.51 All three MICS estimates were higher than estimates from this analysis, even though MICS estimates were limited to only one child in the household in the past month. MICS reports do not include CIs however, so additional analyses would be required to confirm that differences were significant.

Haiti used the MICS module, but had other risks of bias. Consistent with MICS series 4 and 5, Haiti gathered child discipline data from household questionnaire respondents who were not always the women asked about IPV or even a primary caregiver of selected children.6 Moreover, Haiti limited child discipline and domestic violence modules to a subset (about two-thirds) of households, many of which did not have both an eligible child and an eligible woman. As a result, the final subsample from Haiti included only 3291 of 14371 women who participated in the full survey, the smallest subsample size of all nine surveys. These limitations made it hard to draw conclusions about why associations between physical punishment and IPV were not significant in that country after controlling for sociodemographic factors. Were levels of physical punishment so high (>80%) that IPV did not make a difference? Was the subsample size too small to detect significance differences? Or, was this an artefact of gathering some child discipline and IPV data from different respondents in the household? Future surveys that include both the MICS child discipline module and the DHS domestic violence module could avoid these limitations by including both modules in the women’s individual questionnaire.

Another limitation was that study subsamples did not include all households with children aged 15–17. Caregiver violence against older adolescents remains a research gap that merits attention. Nor did study subsamples include households in which no child lived with an ever-partnered mother of reproductive age, and violence patterns may be different in those households. However, household data from all six surveys that measured family structure (not shown) suggest that the vast majority of children lived with mothers, and generally, researchers have not found a universal relationship between family structure and violent discipline across low- and middle-income countries.25

Another limitation was that the nine surveys were carried out over a 10-year period, and some are more than 10 years old. A 2019 analysis found preliminary evidence that IPV against women may have declined in some LAC countries.7 Meanwhile, other research suggests that the COVID-19 pandemic may have increased levels of violence in the household,52 although that evidence is still preliminary. Levels of physical child punishment may be changing as well, and co-occurrence estimates based on older datasets may be out of date.

Finally, any survey on violence may underestimate true prevalence due to barriers to disclosure such as respondents’ fear of reprisal or social stigma. This study relied on survivor reports of IPV and caregiver reports of child discipline. In contrast, Violent against Children Surveys in Colombia, El Salvador, Haiti and Honduras have asked children aged 13–17 about violence they experienced by caregivers and IPV against parents they witnessed.53 Surveys have also gathered retrospective data from women54 and men55 about childhood experiences of violent discipline and exposure to IPV. Retrospective data do not shed light on violence in current households, and children of IPV survivors may underreport levels of IPV even more than survivors. Nonetheless, these are important data sources that complement this study.

CONCLUSION

This study suggests that policymakers and professionals working on children’s health and well-being should be aware that IPV in the household is often associated with an increased risk of violent discipline of children, with implications for children’s rights, health, well-being and development. This study also suggests that research on correlates and consequences of violent discipline may be incomplete if researchers do not include exposure to IPV (ever and past year) as a possible risk factor. This study supports growing evidence from the programme literature suggesting that long-term efforts to prevent violence against children may be ineffective without greater attention to violence against women—and vice versa.5
The finding that national data on violence against children and violence against women continue to come from parallel but segregated data collection efforts suggests a need to expand the number, quality and comparability of national surveys that measure both forms of violence. Until researchers bridge these gaps, our understanding of how to prevent and respond to violence against children will remain fragmented. Ideally, more national surveys would include the MICS child discipline module within women’s questionnaires that ask about IPV. Intersections between violence against children and violence against women deserve greater attention, both for advancing public health and protecting human rights.

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REFERENCES
1 Fry DA, Elliott SP. Understanding the linkages between violence against women and violence against children. Lancet Glob Health 2017;5:e472–3.
2 Guedes A, Bott S, Garcia-Moreno C, et al. Bridging the gaps: a global review of intersections of violence against women and violence against children. Glob Health Action 2016;9:31516.
3 UNICEF. Gender dimensions of violence against children and adolescents: a discussion paper. New York: UNICEF, Programme Division and Office of Research-Innocenti, 2020. https://www.unicef.org/documents/gender-dimensions-violence-against-children-and-adolescents
4 UN General Assembly. Transforming our world: the 2030 agenda for sustainable development. New York: United Nations, 2015. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
5 Global Initiative to End All Corporal Punishment of Children. Progress towards prohibiting all corporal punishment in Latin America and the Caribbean. London: Global Initiative to End All Corporal Punishment of Children, 2020. http://endcorporalpunishment.org/wp-content/uploads/legal-terms/Latin-America-and-Caribbean-progress-table-commitment.pdf
6 UNICEF. Violent discipline: data and methodology. New York: UNICEF, 2020. https://data.unicef.org/topic/child-protection/violence-violent-discipline/
7 Bott S, Guedes A, Ruiz-Celis AP, et al. Intimate partner violence in the Americas: a systematic review and reanalysis of national prevalence estimates. Rev Panam Salud Publica 2019;43:1.
8 Sege RD, Siegel BS, et al, COUNCIL ON CHILD ABUSE AND NEGLECT. Effective discipline to raise healthy children. Pediatrics 2018;142:e20183112.
9 Brassard MR, Hart SN, Glaser D. Psychological maltreatment: an international challenge to children’s safety and well being. Child Abuse Negl 2020;110:104611.
10 McTavish JR, MacGregor JCD, Wathen CN, et al. Children’s exposure to intimate partner violence: an overview. Int Rev Psychiatry 2016;28:504–18.
11 Chai J, Fink G, Kaaya S, et al. Association between intimate partner violence and poor child growth: results from 42 demographic and health surveys. Bull World Health Organ 2016;94:331–9.
12 UNICEF. A familiar face: violence in the lives of children and adolescents. New York: UNICEF, 2017. https://data.unicef.org/resources/a-familiar-face/
13 Herrenkohl TT, Sousa C, Tajima EA, et al. Intersection of child abuse and children’s exposure to domestic violence. Trauma Violence Abuse 2008;9:84–99.
14 Devries KM, Knight L, Child JC, et al. Witnessing intimate partner violence and child maltreatment in Ugandan children: a cross-sectional survey. BMJ Open 2017;7:e013583.
15 Sijtsma JJ, Stolz EA, Bogaerts S. Unique risk factors of the co-occurrence between child maltreatment and intimate partner violence perpetration. Eur Psychol 2020;25:122–33.
16 Buffarini R, Coll CVN, Moffitt T, et al. Intimate partner violence against women and child maltreatment in a Brazilian birth cohort study: co-occurrence and shared risk factors. BMJ Glob Health 2021;6:e004306.
17 Benavides M, Leon Jara Almonte J, Ponce de Leon Marquina M. The co-occurrence of domestic and child violence in urban Peru: evidence from three regions. J Fam Violence 2015;30:1045–53.
18 Nazar A, Salvaterra B, Salazar S. [Violencia física contra adolescentes y estructura familiar: magnitudes, expresiones y desigualdades]. Physical violence against adolescents and family structure: Scope, expressions and inequalities. Estudios Demográficos y Urbanos 2018;33:365–400.
19 Salazar M, Dahlbom K, Solórzano L, et al. Exposure to intimate partner violence estimates. Rev Panam Salud Publica 2018;50:53–33.
20 Lansford JE, Deater-Deckard K. Childrearing discipline and violence in developing countries. Child Dev 2012;83:62–75.
21 Beatriz E, Salhi C. Child discipline in low- and middle-income countries: socioeconomic disparities at the household- and country-level. Child Abuse Negl 2019;94:104023.
22 United Nations. Sustainable Development Goal indicator 16.2.1 metadata. New York: United Nations, 2021. https://unstats.un.org/unsd/mdg/metadata/files/Metadata-16-02-01.pdf
23 UNICEF. Child disciplinary practices at home: evidence from a range of low- and middle income countries. New York: UNICEF, 2010. https://www.unicef.org/media/files/Child_Disciplinary_Practices_at_Home.pdf
24 Lonsford JE, Deater-Deckard K. Childrearing discipline and violence in developing countries. Child Dev 2012;83:62–75.
25 Beatriz E, Salhi C. Child discipline in low- and middle-income countries: socioeconomic disparities at the household- and country-level. Child Abuse Negl 2019;94:104023.
26 United Nations. Sustainable Development Goal indicator 5.2.1 metadata. New York: United Nations, 2020. https://unstats.un.org/sdgs/metadata/files/Metadata-05-02-01.pdf
UN General Assembly. *Convention on the Rights of the Child (Article 19)*. Geneva: United Nations, Office of the High Commissioner for Human Rights, 1990. https://www.ohchr.org/en/professionalinterest/pages/crc.aspx

28 United Nations. *Guidelines for producing statistics on violence against women*. New York: United Nations, Department of Economic and Social Affairs Statistics Division, 2014. https://unstats.un.org/unsd/gender/docs/guidelines_statistics_vaw.pdf

29 Ministerio de Salud y Deportes, Bolivia. [DATASET] Encuesta Nacional de Demografía y Salud (ENDSA) Bolivia, 2008. Available: https://dhsprogram.com/data/

30 Profamilia, Ministro de Salud y Protección Social. [DATASET] Encuesta Nacional de Demografía y Salud (ENDS), Colombia, 2015. Available: https://dhsprogram.com/data/

31 Ministerio de Salud Pública y Asistencia Social, Instituto Nacional de Estadística, US Centers for Disease Control and Prevention. [DATASET] Encuesta Nacional de Salud Materno Infantil (ENSMI), Guatemala, 2008-2009. Available: http://ghdx.healthdata.org/record/guatemala-reproductive-health-survey-2008-2009

32 Institut Haïtien de l’Enfance, DHS Program, ICF. [DATASET] Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS-VII), Haïti, 2016-2017. Available: https://dhsprogram.com/data/

33 Statistical Institute of Jamaica, US Centers for Disease Control and Prevention. [DATASET] Reproductive Health Survey, Jamaica, 2008-2009. Available: http://ghdx.healthdata.org/

34 Instituto Nacional de Estadística y Geografía (INEGI), Mexico. [DATASET] Encuesta Nacional sobre la Dinámica de las Relaciones en los Hogares (ENDIHERE) 2016, Mexico, 2016. Available: https://www.inegi.org.mx/programas/endihere/2016/

35 Instituto Nacional de Información de Desarrollo (INIDE), Nicaragua. [DATASET] Encuesta Nicaragüense de Demografía y Salud (ENDES), Nicaragua, 2011-2012. Available: https://www.inide.gob.ni/Home/dataBasesENDESA/?Length=4

36 Centro Paraguayo de Estudios de Población (CEPEP), USAID. [DATASET] Encuesta Nacional de Demografía y Salud Sexual y Reproductiva (ENDSSR) Paraguay, 2008. Available: http://ghdx.healthdata.org/record/paraguay-reproductive-health-survey-2008

37 Instituto Nacional de Estadística e Informatica, Peru. [DATASET] Encuesta Demográfica y de Salud Familiar (ENDES) Peru, 2018. Available: http://inei.inei.gob.pe/microdatos/Consulta_por_Encuesta.asp

38 Munn Z, Moela S, Riitano D, et al. The development of a critical appraisal tool for use in systematic reviews addressing questions of prevalence. *Int J Health Policy Manag* 2014;3:123-8.

39 World Health Organization. *Putting women first: ethical and safety recommendations for research on domestic violence against women*. Geneva: World Health Organization, 2001. https://www.who.int/gender/violence/womenfirsteng.pdf

40 World Health Organization. *Preventing violence: evaluating outcomes of parenting programmes*. Geneva: World Health Organization, 2013. https://www.who.int/publications/i/item/preventing-violence-evaluating-outcomes-of-parenting-programmes

41 UN Committee on the Rights of the Child. *General Comment No. 8 (2006): the right of the child to protection from corporal punishment and other cruel or degrading forms of punishment*. Geneva: UN Committee on the Rights of the Child (CRC), 2007. https://www.un.org/...