



Physical Abuse Perpetrated by In-laws: An Analysis of Nationally Representative Survey Data from 47 Low- and Middle-income Countries

Jacinta Mukulu Waila¹ · Michael Lowery Wilson^{1,2} · Till Bärnighausen¹ · Anne Abio^{1,2}

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Abstract

Purpose Violence within extended kinship contexts remains understudied. This study sought to estimate the prevalence of physical violence perpetrated by in-laws.

Methods Demographic and Health Surveys' data collected between 2011 and 2020 were utilized. Data for females and males were derived from 47 and 10 countries respectively. We estimated the prevalence of being physically hurt by mothers-in-law, fathers-in-law and other in-laws against participating females (n=420 020) and males (n=71 629) separately.

Results The pooled prevalence for in-law perpetrated physical violence against female respondents was 0.38% (95% CI 0.34, 0.42). The prevalence of violence from mothers-in-law was 0.18% (95% CI 0.15, 0.21), fathers-in-law was 0.11% (95% CI 0.09, 0.13) and other in-laws 0.20% (95% CI 0.17, 0.23). The pooled prevalence of in-law violence against male respondents was 0.56%; (95% CI 0.45, 0.71), and from mothers-in-law was 0.08%; (95% CI 0.05, 0.13), fathers-in-law was 0.05%; (95% CI 0.03, 0.09) and other in-laws was 0.51%; (95% CI 0.39, 0.66). Among individual countries, the highest prevalence among females and males was recorded in Afghanistan at 4.07% (95% CI 3.30, 5.02) and in Mozambique at 2.24%; (95% CI 1.56, 3.20) respectively.

Conclusion Violence by in-laws affects both men and women in varying degrees across different countries. The data indicate that it is possible for one individual to experience violence perpetrated by more than one extended family member. Given the paucity of research in this area, it is hoped that the results may stimulate further inquiry into relevant contextual and social variables which influence in-law violence.

Keywords Prevalence · Demographic and health survey · Domestic violence · Kinship

✉ Jacinta Mukulu Waila
jmkibs@gmail.com

Michael Lowery Wilson
michael.l.wilson@utu.fi

Till Bärnighausen
till.baernighausen@uni-heidelberg.de

Anne Abio
anne.p.abio@utu.fi

¹ Heidelberg Institute of Global Health, Im Neuenheimer Feld 130.3, University of Heidelberg, Heidelberg, Germany

² Injury Epidemiology and Prevention (IEP) Research Group, Turku Brain Injury Center, Department of Clinical Neurosciences, Turku University Hospital and University of Turku, Turku, Finland

Introduction

Violence within domestic settings is a significant problem of public health importance worldwide. Although spouses/intimate partners have been cited as significant perpetrators of domestic violence, extant literature implicates in-laws as well (Ragavan and Iyengar, 2020; Tasnim et al., 2021; Jewkes et al., 2019). Violence by in-laws is primarily expressed through control and coercion depriving the victim of individual autonomy. Domestic violence by in-laws can be emotional, economic, sexual or physical in nature and some of the documented perpetrators include fathers-in-law, mothers-in-law, brothers-in-law and sisters-in-law among other unspecified in-laws (Jewkes et al., 2019; Turaeva and Becker, 2022).

Like research on other forms of violence, most of the available literature on domestic violence perpetrated by in-laws has focused on women with very little evidence on the experience of men. Extant literature highlights the manner in which various forms of violence by in-laws manifest. For instance, emotional violence may include movement restriction and social isolation whereby one is not allowed to interact or communicate with others including one's natal family (Bentley, 2018; Jordan and Bhandari, 2016). Control and coercion on the other hand denies the victim the freedom to make independent decisions, as is the case with reproductive coercion which is the intentional control of a person's (mostly women) reproductive choices (Grace, 2016; Silverman et al., 2019). Verbal abuse and degradation aimed at intimidating or scaring the subject with threats to harm as well as domestic servitude are other common manifestations of emotional violence by in-laws (Bentley, 2018; Jordan and Bhandari, 2016). Economic control on the other hand is embodied in a lack of the autonomy to earn a living, access finances and make decisions on spending, even for personal items such as clothes (Rew et al., 2013). In some cases, one is actually forced into gainful employment but they have no freedom to spend their earnings since they have to account for every expenditure or worse still, the money is forcefully taken away (Bentley, 2018). Some of the documented acts of physical violence by in-laws include slaps, kicks, burnt with firewood, pushed into deep wells, banged against hard surfaces like walls and having one's hair pulled to inflict pain - some of these acts of violence are directed towards pregnant women (Sabri and Young, 2022; Gurung and Archarya, 2016; Jewkes et al., 2019). Physical violence by in-laws has particularly been linked to poverty which triggers competition for limited resources (Jewkes et al., 2019). Though not commonly documented, in a study conducted in India, women reported sexual violence by male relatives of their husbands (Panchanadeswaran and Koverola, 2005).

Rew and his colleagues note that, whereas some of the in-law abuses are intentional and strategic, others are culturally and habitually embodied. In the former, violent acts are perpetrated by several in-laws in a synergistic manner to gain control over the victim and force a desired behavior. An example is when a woman is threatened that she will be sent back to her natal home or she is denied access to her children. On the other hand, culturally and habitually embodied violence involves the wider community which plays a role in controlling the victim beyond the household setting. For instance, community members may play a role in restricting and monitoring the victim's movement (Rew et al., 2013).

The patrilocal family system practiced in some of the South Asian societies is viewed as one that normalizes violence against women by the husband's family. For instance, violence by mothers-in-law is a well-documented phenomenon in India where women move to their husband's

homes after marriage, a setting which allows the man's mother to exercise control and power over her daughter-in-law (Rew et al., 2013). It is argued that the inherent desire to maintain a close relationship with the son, a bond which is threatened by the entry of a daughter-in-law who more often than not is seen as an intruder in the mother-son relationship explains why most of the in-law violence against women is perpetrated by mothers-in-law (Rew et al., 2013). Similarly, in Tajikistan where a couple co-resides with the man's parents, women in such settings are more than three times as likely to experience emotional violence compared to those in nuclear family settings, the level being higher in the presence of the mother-in-law (Turaeva and Becker, 2022). In fact, it has been argued that violence by females against fellow women within the family setting can be inter-generational where mothers-in-law mistreat their young daughters-in-law and the latter subject their son's wives to the same treatment later in life making it a cycle (Ghoshal et al., 2023). Moving into a man's home with children from previous marriages often makes the woman a target of violence by her in-laws, violence which can also be extended to the children (Sabri and Young, 2022). Despite a decline in the patrilocality norm in some regions, it has been observed that generational hierarchies persist even when living in different localities and this forms a basis for in-law abuse against women (Bentley, 2018).

Besides patrilocality, dowry payment by a girl's family to her husband's family, a cultural practice in some Asian countries such as Nepal, Pakistan and India, has also been cited as a factor that predisposes women to in-law abuse. A study conducted in Pakistan revealed that the amount of assets brought in as dowry determined a woman's status, autonomy and decision making power within the husband's family (Makino, 2019). Several studies have established that a woman is often mistreated by in-laws if it is felt that her family had not given a decent dowry. Such maltreatment could take the form of physical violence, verbal insults sometimes criticizing her birth family, her suitability as a wife or even threats of divorce since she is seen as a financial burden (Jordan and Bhandari, 2016; Bentley, 2018; Gondal, 2015; Sabri and Young, 2022).

The belief that a male child is of more value than a female child in some societies triggers in-law violence if a woman does not give birth to a male. This is because it is often through the male child that a family's lineage is continued and he is seen as a source of wealth through dowry (Rew et al., 2013; Bentley, 2018; Sabri and Young, 2022). In the African context, in some societies in the past, having many children was considered a sign of wealth and in regions where this notion is still upheld, failure to have children or giving birth to fewer than desired has also been highlighted as potential trigger of in-law abuse. A study in Côte d'Ivoire established that women were forced to get pregnant, denied the option

of using contraceptives, denied food or even denied access to the house if they did not get pregnant (Gupta et al., 2012).

Some of the documented adverse health effects of exposure to in-law violence include mental health disorders such as: depression, suicidal ideation and post-traumatic stress disorder (PTSD) (Tasnim et al., 2021; Jewkes et al., 2019). A study conducted in Bangladesh revealed that women who were subjected to domestic violence were more likely to develop post-partum depression within 6-months after delivery (Tasnim et al., 2021). In addition, physical injuries emanating from severe beatings, burns and harm from the use of weapons have also been documented, sometimes leading to disabilities or even death as is the case with dowry-related deaths (Gondal, 2015; Sabri and Young, 2022). Besides the direct negative health consequences, in-laws have been cited as instigators of intimate partner violence (IPV), a problem which has far reaching adverse health, social and economic effects for its survivors and other family members (Lagdon et al., 2014). For example, in Pakistan, 67% of the women enrolled in a study stated that in-laws played a role in aggravating disagreements between them and their husbands triggering IPV (Hussain et al., 2020). Likewise, the presence of in-laws was found to increase the likelihood of IPV against women but not men in a study in Sri Lanka (Bandara et al., 2022). Raj and her colleagues (Raj et al., 2006) in their bid to establish the association between IPV experience and in-law violence found a significant association in which women with a history of IPV were more than five times as likely to report in-law violence. A finding which was supported by a study conducted in China which identified in-law conflict as having the strongest association with IPV (Chan et al., 2009). Indeed violence by in-laws compounds the adverse health impacts of IPV and the severity of these outcomes is greater where IPV is combined with in-law abuse (Jewkes et al., 2019). Some scholars, cognizant of the consequences of in-law abuse, have recommended targeting the domestic unit in domestic violence prevention and not just intimate partners as is the norm in most interventions (Jewkes et al., 2019; Sabri and Young, 2022).

Despite the evident adverse consequences of in-law abuse, this form of domestic violence has not received a lot of scholarly attention hence literature on its magnitude remains scarce. Global estimates are elusive but a number of studies have quantified it in various countries. However, available literature seems to focus on quantifying the problem among women while remaining silent on the experiences of men. For instance, a study conducted in Côte d'Ivoire established a lifetime prevalence of physical and non-physical in-law violence of 27% among women (Gupta et al., 2012). In Afghanistan, a study focusing on two provinces had 14% of the female participants report physical violence by mothers-in-law in the 12 months prior to being surveyed (Jewkes et al., 2019). While in India, a study conducted in 49 districts

revealed that 49% of the participants who reported reproductive coercion had been subjected to it by in-laws (Silverman et al., 2019).

Although most of the previous research has been skewed towards violence against women, changes in family structure and society which in turn affect norms and values cannot be ignored with regard to domestic violence. Men are also subjected to domestic violence by their in-laws although they are less likely to report exposure to violence due to various legal and social barriers (Deshpande, 2019). Recent scholarly work underscores the need to focus on men as victims of violence by generating evidence on their experiences and quantifying the problem so as to pave way for social and legal intervention strategies (Malik, 2019). Needless to say, domestic violence against men should therefore be an active area of research to ensure a balance in strategies and interventions aimed at promoting peaceful co-existence within the family setting. Estimating in-law violence prevalent among both men and women and identifying its perpetrators has the potential to generate nuanced knowledge, revealing research gaps which could stimulate more scholarly work on the subject matter and adoption of holistic interventions. The aim of this study was to estimate the prevalence of physical violence perpetrated by in-laws against women and men in low- and middle-income countries (LMICs).

Methods

Data and Sample Population

The study used data from the Demographic Health Surveys (DHS) conducted between 2011 and 2020 in order to use the most recent datasets. The DHS surveys have been conducted in over 90 low-to-middle income countries (LMICs) (ICF, n.d). These cross-sectional surveys are nationally representative and provide population, health and nutrition related information in their respective countries to facilitate decision-making. The surveys usually use a two stage stratified sampling method, from which participants are selected. For the domestic violence module, one woman was selected from each selected household, while for the men, it varied by country, for instance, selections were made from either every household, or every second household or every third household depending on the country procedures. Standard model questionnaires, which are continuously reviewed are normally used across countries, thus the data collected are comparable. All countries with available data on the variables of interest were included in the analysis; 47 countries for females and 10 countries for males. The list of countries, the survey year and their respective sample sizes are presented in Table 1 for females, and Table 2 for males. Detailed information about the DHS, sampling strategy and

Table 1 Prevalence of females physically hurt by in-laws

Country	Year	N (all ages)	N (15–49 yrs)	N*	Prev*	95% CI*	N†	Prev†	95% CI†	N§	Prev§	95% CI§	N‡	Prev‡	95% CI‡	N#	Prev#	95% CI#	
Africa																			
Angola	2015–16	10,339	10,339	17	0.22	0.10, 0.49	1	<0.01	<0.01, 0.01	0	0	0, 0	16	0.22	0.10, 0.49	–	–	–	–
Benin	2017–18	5318	5318	23	0.45	0.27, 0.76	6	0.17	0.06, 0.49	3	0.06	0.02, 0.22	14	0.23	0.12, 0.42	–	–	–	–
Burkina Faso	2010	11,333	11,333	37	0.32	0.22, 0.47	3	0.04	0.01, 0.12	1	<0.01	<0.01, 0.03	21	0.18	0.11, 0.30	13	0.11	0.05, 0.22	0.05, 0.22
Burundi	2016–17	10,173	10,173	41	0.31	0.21, 0.44	2	0.03	0.01, 0.12	10	0.09	0.04, 0.18	29	0.19	0.12, 0.29	–	–	–	–
Cameroon	2018	6651	6651	20	0.23	0.14, 0.39	5	0.08	0.03, 0.22	2	0.01	<0.01, 0.06	14	0.14	0.08, 0.26	–	–	–	–
Chad	2014–15	4108	4108	21	0.52	0.30, 0.89	1	0.01	<0.01, 0.06	2	0.04	0.01, 0.17	18	0.47	0.26, 0.84	–	–	–	–
Comoros	2012	3319	3319	12	0.22	0.10, 0.48	4	0.06	0.01, 0.26	0	0	0, 0	8	0.17	0.07, 0.40	–	–	–	–
Congo DR	2013–14	6761	6761	27	0.35	0.20, 0.60	6	0.13	0.05, 0.38	1	<0.01	<0.01, 0.01	20	0.21	0.11, 0.40	–	–	–	–
Cote d'Ivoire	2011–12	6316	6316	120	2.26	1.74, 2.96	3	0.09	0.02, 0.35	3	0.05	0.01, 0.17	77	1.31	0.97, 1.77	48	0.95	0.63, 1.44	0.63, 1.44
Ethiopia	2016	5816	5816	7	0.11	0.05, 0.26	1	0.01	<0.01, 0.06	2	0.03	0.01, 0.17	4	0.07	0.02, 0.22	–	–	–	–
Gabon	2012	5541	5541	33	0.61	0.29, 1.29	7	0.34	0.09, 1.22	1	0.03	<0.01, 0.24	25	0.24	0.14, 0.39	–	–	–	–
Gambia	2019–20	2453	2453	6	0.33	0.13, 0.84	1	0.02	<0.01, 0.12	0	0	0, 0	5	0.32	0.12, 0.83	–	–	–	–
Kenya	2014	5641	5641	18	0.31	0.18, 0.56	4	0.08	0.03, 0.28	4	0.05	0.02, 0.13	10	0.18	0.08, 0.40	–	–	–	–
Liberia	2019–20	3090	3090	12	0.57	0.22, 1.48	1	0.01	<0.01, 0.06	2	0.05	0.01, 0.38	9	0.51	0.19, 1.34	–	–	–	–
Malawi	2015–16	6356	6356	9	0.28	0.10, 0.78	2	0.02	<0.01, 0.10	1	<0.01	<0.01, 0.03	7	0.26	0.08, 0.78	–	–	–	–
Mali	2018	3680	3680	13	0.57	0.22, 1.49	1	0.01	<0.01, 0.04	1	0.15	0.02, 1.08	12	0.56	0.21, 1.49	–	–	–	–
Mozambique	2011	6820	6820	18	0.22	0.12, 0.38	–	–	–	–	–	–	18	0.22	0.12, 0.38	–	–	–	–
Namibia	2013	2910	2910	2	0.09	0.02, 0.44	1	0.07	0.01, 0.49	1	0.02	<0.01, 0.15	0	0	0, 0	–	–	–	–
Nigeria	2018	10,584	10,584	20	0.17	0.10, 0.30	2	0.01	<0.01, 0.05	2	0.01	<0.01, 0.03	16	0.16	0.08, 0.29	–	–	–	–
Rwanda	2019–20	2785	2785	3	0.08	0.03, 0.26	0	0	0, 0	1	0.03	<0.01, 0.24	2	0.05	0.01, 0.20	–	–	–	–
Senegal	2019	1844	1844	8	0.78	0.24, 2.51	5	0.65	0.16, 2.60	0	0	0, 0	4	0.19	0.07, 0.55	–	–	–	–
Sierra Leone	2019	5217	5217	17	0.32	0.18, 0.57	5	0.14	0.05, 0.40	2	0.02	0.01, 0.10	11	0.17	0.09, 0.33	–	–	–	–
Tanzania	2015–16	9302	9302	3	0.02	0.01, 0.08	1	0.01	<0.01, 0.09	2	0.02	<0.01, 0.08	1	0.01	<0.01, 0.04	–	–	–	–
Togo	2013–14	6695	6695	17	0.24	0.14, 0.43	0	0	0, 0	2	0.02	0.01, 0.09	15	0.22	0.12, 0.40	–	–	–	–
Uganda	2016	9200	9200	45	0.46	0.30, 0.72	9	0.06	0.03, 0.12	3	0.02	0.01, 0.06	37	0.41	0.25, 0.67	–	–	–	–
Zambia	2018	9462	9462	19	0.17	0.10, 0.28	1	0.01	<0.01, 0.10	1	<0.01	<0.01, 0.03	17	0.15	0.09, 0.26	–	–	–	–
Zimbabwe	2015	7216	7216	13	0.16	0.08, 0.29	2	0.03	<0.01, 0.16	2	0.02	<0.01, 0.08	9	0.11	0.05, 0.23	–	–	–	–
Sub total		168,930	168,930	581	0.30	0.25, 0.35	74	0.05	0.03, 0.09	49	0.02	0.01, 0.04	419	0.21	0.17, 0.25	61	0.59	0.40, 0.87	0.40, 0.87

Table 1 continued

Country	Year	N (all ages)	N (15–49 yrs)	N*	Prev* 95% CI*	N†	Prev† 95% CI†	N‡	Prev‡ 95% CI‡	N#	Prev# 95% CI#	95% CI#
Americas												
Colombia	2015	38,075	35,365	154	0.33, 0.73	–	–	154	0.49	–	–	0.33, 0.73
Dominican Rep	2013	6992	6992	4	0.01, 0.06	–	–	4	0.02	–	–	0.01, 0.06
Guatemala	2014–15	8590	8590	11	0.09, 0.40	11	0.19, 0.40	–	–	–	–	–
Haiti	2016–17	6310	6310	27	0.42, 0.69	5	0.08, 0.28	18	0.26	–	–	0.16, 0.43
Honduras	2011–12	15,819	15,819	17	0.11, 0.06, 0.19	11	0.08, 0.04, 0.17	2	0.01	–	–	<0.01, 0.05
Sub total		75786	73,076	213	0.34, 0.25, 0.46	27	0.13, 0.08, 0.22	178	0.34	–	–	0.24, 0.48
East Mediterranean												
Afghanistan	2015	19,862	19,862	849	4.07, 3.30, 5.02	546	2.39, 1.91, 3.01	418	1.93	–	–	1.46, 2.53
Egypt	2014	6683	6683	14	0.25, 0.12, 0.53	10	0.19, 0.08, 0.48	2	0.02	–	–	<0.01, 0.11
Jordan	2017–18	6636	6636	5	0.07, 0.02, 0.23	5	0.07, 0.02, 0.23	–	–	–	–	–
Pakistan	2017–18	4007	4007	57	0.87, 0.55, 1.36	23	0.30, 0.15, 0.60	37	0.68	–	–	0.40, 1.14
Sub total		37,188	37,188	925	0.99, 0.78, 1.27	584	0.48, 0.36, 0.64	457	0.61	–	–	0.43, 0.86
South East Asia												
India	2015–16	79,092	79,092	231	0.29, 0.24, 0.35	150	0.20, 0.15, 0.25	72	0.09	–	–	0.06, 0.12
Maldives	2016–17	3924	3924	3	0.06, 0.02, 0.26	0	0, 0	3	0.06	–	–	0.02, 0.26
Myanmar	2015–16	4516	4516	11	0.11, 0.05, 0.26	2	0.02, <0.01, 0.07	8	0.08	–	–	0.03, 0.24
Nepal	2016	4435	4435	70	1.60, 1.21, 2.11	39	0.98, 0.68, 1.41	35	0.70	–	–	0.48, 1.02
Timor-Leste	2016	5029	5029	4	0.07, 0.02, 0.19	1	0.02, <0.01, 0.16	2	0.04	–	–	0.01, 0.15
Sub total		96,996	96,996	319	0.31, 0.27, 0.37	192	0.21, 0.17, 0.25	120	0.10	–	–	0.08, 0.13
Western Pacific												
Cambodia	2014	4301	4301	17	0.32, 0.17, 0.58	1	0.01, <0.01, 0.10	17	0.32	–	–	0.17, 0.58
Papua New Guinea	2016–18	4800	4800	32	0.94, 0.58, 1.51	10	0.39, 0.18, 0.82	17	0.35	–	–	0.17, 0.72
Philippines	2017	17,888	17,888	24	0.06, 0.04, 0.09	8	0.02, 0.01, 0.05	17	0.04	–	–	0.02, 0.07
Sub total		26,989	26,989	73	0.15, 0.11, 0.20	19	0.04, 0.03, 0.07	51	0.09	–	–	0.06, 0.13

Table 1 continued

Country	Year	N (all ages)	N (15–49 yrs)	N*	Prev*	95% CI*	N†	Prev†	95% CI†	N‡	Prev‡	95% CI‡	N#	Prev#	95% CI#
Europe															
Armenia	2015–16	4571	4571	4	0.10	0.03, 0.31	2	0.08	0.02, 0.31	1	0.01	<0.01, 0.05	1	0.02	<0.01, 0.13
Kyrgyz Rep	2012	6009	6009	7	0.11	0.05, 0.24	3	0.04	0.01, 0.17	1	0.01	<0.01, 0.05	4	0.06	0.02, 0.18
Tajikistan	2017	6261	6261	6	0.26	0.09, 0.76	0	0	0, 0	1	0.01	<0.01, 0.09	5	0.25	0.08, 0.77
Sub total		16,841	16,841	17	0.18	0.08, 0.40	5	0.03	0.01, 0.07	3	0.01	<0.01, 0.04	10	0.15	0.06, 0.39
Total	422,730	420,020	2128	0.38	0.34, 0.42	901	0.18	0.15, 0.21	739	0.11	0.09, 0.13	1235	0.20	0.17, 0.23	61

N - Unweighted Numbers

Prev is the weighted prevalence

All ages is all participants 13–64 years; 15–49 years age group was consistent across all countries and included in the analysis

† is the addition of being physically hurt by mother in-law, father in-law, other in-law and other male in-law

‡ was physically hurt by mother in-law

§ was physically hurt by father in-law

‡ was physically hurt by other in-law

was physically hurt by other male in-law

Table 2 Prevalence of males physically hurt by in-laws

Country	Year	N (all ages)	N (15–54 ys)	N*	Prev* [†]	95% CI* [†]	N [†]	Prev [†]	95% CI [§]	N [‡]	Prev [‡]	95% CI [‡]
Africa												
Burundi	2016–17	7548	7176	10	0.28	0.12, 0.65	1	0.01	<0.01, 0.06	0	0	0, 0
Cameroon	2018	2615	2400	18	0.58	0.34, 0.99	6	0.26	0.10, 0.63	3	0.08	0.02, 0.29
Kenya	2014	4981	4981	15	0.35	0.13, 0.97	0	0	0, 0	4	0.02	0.01, 0.06
Mozambique	2011	2942	2703	54	2.24	1.56, 3.20	3	0.09	0.03, 0.30	2	0.03	0.01, 0.12
Namibia	2013	3927	3927	7	0.44	0.14, 1.37	1	0.02	<0.01, 0.16	1	0.21	0.03, 1.50
Rwanda	2019–20	2156	2056	8	0.34	0.16, 0.69	0	0	0, 0	1	0.03	<0.01, 0.23
Sierra Leone	2013	4686	4501	30	1.25	0.50, 3.10	10	0.24	0.08, 0.76	6	0.20	0.07, 0.53
Uganda	2016	3997	3997	23	0.47	0.30, 0.72	4	0.08	0.03, 0.22	4	0.07	0.02, 0.21
Sub total		32,852	31,741	165	0.71	0.56, 0.92	25	0.08	0.05, 0.14	21	0.05	0.03, 0.09
Americas												
Colombia	2015	35,216	32,805	96	0.22	0.17, 0.30	–	–	–	–	–	–
Guatemala	2014–15	7463	7083	1	0.01	<0.01, 0.05	1	0.01	<0.01, 0.05	–	–	–
Sub total		42,679	39,888	97	0.17	0.13, 0.22	1	0.01	<0.01, 0.05	–	–	–
Total		75,531	71,629	262	0.56	0.45, 0.71	26	0.08	0.05, 0.13	21	0.05	0.03, 0.09

N - Unweighted Numbers

Prev is the weighted prevalence

* All ages is all participants 13–64 years; 15–54 years age group was consistent across all countries and included in the analysis

† is the addition of being physically hurt by mother in-law, father in-law, other in-law and other male in-law

‡ was physically hurt by mother in-law

§ was physically hurt by father in-law

‡ is physically hurt by other in-law

data collection are available elsewhere (Demographic and Health Survey, 2022). The countries used in this study were classified according to the World Health Organisation regions to which they belonged (World Health Organisation, 2022).

Variables of Interest

The main outcome of interest was physical violence experienced by the respondent at the hands of their in-laws (mother in-law, father in-law, other in-law and other male in-law). The outcome was derived from questions asked in the domestic module questionnaire of the respective DHS. The questions asked were: a) From the time you were 15 years old, has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically?; b) From the time you were 15 years old, has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically? Who has hurt you in this way? Various options were given to be selected for responses. For the sake of this analysis, the options selected were restricted to “mother in-law”, “father in-law”, “other in-law” and “other male in-law”. “Other male in-law” data was only available for Burkina Faso and Côte d’Ivoire. An additional breakdown of what the “other in-laws” comprised of was not provided in the questionnaires. Thus, the responses for the mother in-law, father in-law, other in-law, and other male in-law were combined to generate the collective prevalence of the in-law violence. Additionally, the prevalence rates were also estimated separately for mother-in-law, father-in-law, other-in-law and other male-in-law.

Statistical Analysis

The data were analyzed to estimate the prevalence and the survey design was taken into consideration. The data analysis was restricted to females aged 15–49 years and males aged 15–54 years as these were the ages that were consistently available in each country included in the study. The data analysis was done separately for female and male datasets. As the data were derived from the domestic violence module, the appropriate domestic violence weight was used for each respective dataset, with the population of each country taken into consideration for the pooled prevalence. Data analysis was conducted using Stata 17 (StataCorp, TX, USA).

Ethical Clearance

The questionnaires and survey procedures used were approved by the ICF Institutional Review Board (IRB). Furthermore, ethical clearance was granted by the relevant IRBs of the government authorities in each of the countries where the survey was conducted. Consent was also obtained from the respondents who participated in the survey and privacy was

ensured in the process of data collection. For this analysis, we used secondary data and permission to use these data was sought from the DHS team.

Results

A total of 422 730 female respondents responded to the survey questions of interest, out of these 420 020 were aged 15–49 years and subsequently included in the analysis since this age group was consistently available in all considered countries. On the other hand, 75 531 males responded to the survey questions, out of which 71 629 who were between 15–54 years of age were included in the analysis for consistency across all countries.

Among females, the pooled prevalence of physical violence from in-laws was 0.38% (95% CI 0.34, 0.42) (n=2 128). A graphical illustration is presented in Fig. 1. The prevalence of in-law violence perpetrated against females was 0.18% (95% CI 0.15, 0.21) (n=901) by mothers-in-law, 0.11% (95% CI 0.09, 0.13) (n=739) by the fathers-in-law and 0.20% (95% CI 0.17, 0.23) (n=1 235) by other in-laws. The region with the highest prevalence was the East Mediterranean with 0.99% (95% CI 0.78, 1.27) (n=925), while the least was the Western Pacific with 0.15% (95% CI 0.11, 0.20) (n= 73) followed by Europe at 0.18% (95% CI 0.08, 0.40) (n=17). The mothers-in-law had a higher prevalence rate reported for physically hurting the respondents compared to fathers-in-law with exceptions reported in some African countries (Burkina Faso, Chad, Ethiopia, Liberia, Tanzania and Togo) and in Afghanistan. Generally, the prevalence of violence from “other in-laws” was higher than either the mothers- or fathers-in-law except in Gabon, Senegal, Honduras, Egypt and India. However, the numbers were too few to draw meaningful conclusions in these differences. By country, Afghanistan had the highest prevalence of in-law physical violence at 4.07% (95% CI 3.30, 5.02) (n=849), followed by Côte d’Ivoire at 2.26% (95% CI 1.74, 2.96) (n=120) and Nepal at 1.60% (95% CI 1.21, 2.11) (n=70). In the Americas, Colombia had the highest prevalence rate at 0.49% (154), while Papua New Guinea had the highest prevalence in the Western Pacific at 0.94%; 95% CI 0.58, 1.51, (n=32) and Tajikistan in Europe at 0.26%; 95% CI 0.08, 0.40, (n=6). The prevalences for females are presented in Table 1.

Among the male respondents, the pooled prevalence for the combined in-law violence was 0.56%; (95% CI 0.45, 0.71), (n=262) as shown in Table 2. The pooled prevalence rate from mothers-in-law was 0.08%; (95% CI 0.05, 0.13), (n=26), fathers-in-law was 0.05%; (95% CI 0.03, 0.09), (n=21); and other in-laws was 0.51%; (95% CI 0.39, 0.66), (n=217). The African region had a higher pooled prevalence at 0.71%; (95% CI 0.56, 0.92), (n=165) versus South America at 0.17%; (95% CI 0.13, 0.22), (n=97). Mozambique had

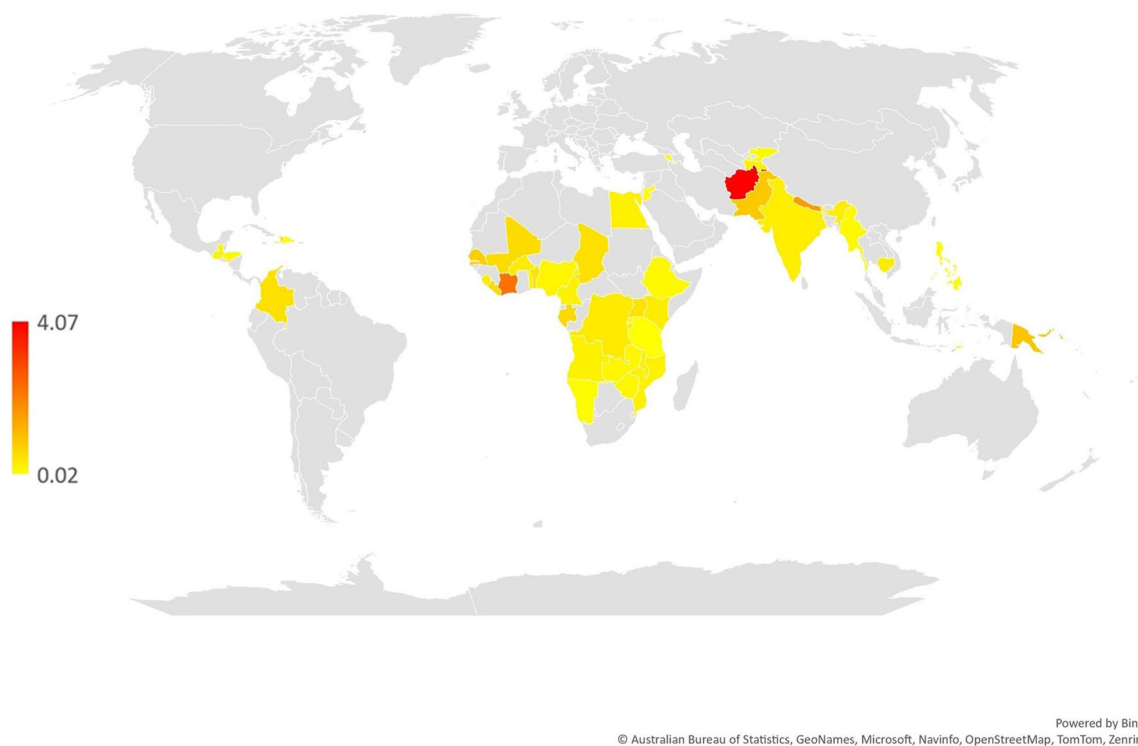


Fig. 1 Prevalence of violence perpetrated by in-laws against females

the highest prevalence rate at 2.24%; (95% CI 1.56, 3.20), (n=54) followed by Sierra Leone at 1.25%; (95% CI 0.50, 3.10), (n=30). In the Americas, Colombia had the highest prevalence at 0.22%; (95% CI 0.17, 0.30), (n=96). A higher prevalence rate was reported among the other in-laws, compared to the mothers in-law or fathers in-law except in Cameroon. However, there were equally very small numbers to be able to draw meaningful conclusions in these differences. Males who were physically hurt by more than one in-law member in a family were reported from Kenya and Uganda. The prevalence rates among males are presented in Table 2.

Regarding the prevalence of domestic violence against females vs. against males, males in Mozambique had a higher rate 2.24%; (95% CI 1.56, 3.20), (n=54) vs females 0.22%; (95% CI 0.12, 0.38), (n=18). Albeit with small numbers and overlapping confidence intervals, other countries that appeared to have a higher male prevalence included Cameroon, Namibia, Rwanda. Furthermore, there were occasions where respondents were hurt by more than one in-law family member (Table 3). For instance, the prevalence of females being hurt by both the mother and father in-law in Afghanistan was 1.64%; (95% CI 1.24, 2.17), (n=372) and by another family in-law in addition to the parents-in-law was 0.98%; (95% CI 0.63, 1.53), (n=217). Other countries where multiple in-law physical abuse was reported included Egypt,

Jordan and Pakistan from the East Mediterranean, Cameroon, Kenya, Malawi, Mali, Senegal, Sierra Leone, Tanzania and Uganda from Africa; Honduras from the Americas; India and Nepal from South East Asia, Cambodia, Papua New Guinea from the Western Pacific and the Kyrgyz Republic in the European region.

Discussion

Our study findings add valuable knowledge to existing literature on domestic violence by focusing on a group of perpetrators who though often overlooked, play a critical role in the propagation of abuse within households. Through the estimation of the magnitude of the problem and identifying the perpetrators, our findings broaden the understanding of violence within the extended kinship context.

Contrary to extant literature which cites women as the main victims of domestic violence, the pooled prevalence of physical violence by in-laws directed towards females in our study is lower (0.38%) compared with that towards men at 0.56%. Whereas this could be due to the substantial difference in the male and female sample sizes, the effect of pooling data from multiple countries with diverse social and cultural landscapes may also explain this finding. The social constructionism theory postulates that our perception and

Table 3 Prevalence of being physically hurt by multiple in-laws

Country	Year	N*	Prev**	95% CI†	N‡	Prev‡	95% CI‡	N§	Prev§	95% CI§	N‡	Prev‡	95% CI‡
Females													
Africa													
Cameroon	2018	1	0.01	<0.01, 0.04	0	0	0.0	0	0	0.0	0	0	0.0
Malawi	2015–16	1	<0.01	<0.01, 0.03	0	0	0.0	0	0	0.0	0	0	0.0
Mali	2018	0	0	0.0	0	0	0.0	0	0	0.0	1	0.15	0.02, 1.08
Senegal	2019	0	0	0.0	0	0	0.0	1	0.06	0.01, 0.42	0	0	0.0
Sierra Leone	2019	1	0.01	<0.01, 0.10	0	0	0.0	0	0	0.0	0	0	0.0
Tanzania	2015–16	1	0.01	<0.01, 0.09	0	0	0.0	0	0	0.0	0	0	0.0
Uganda	2016	1	0.01	<0.01, 0.05	1	0.01	<0.01, 0.05	2	0.01	<0.01, 0.04	2	0.01	<0.01, 0.05
Americas													
Honduras	2011–12	1	<0.01	<0.01, <0.01	0	0	0.0	0	0	0.0	0	0	0.0
East Mediterranean													
Afghanistan	2015	372	1.64	1.24, 2.17	217	0.98	0.63, 1.53	259	1.12	0.75, 1.67	249	1.12	0.73, 1.71
Egypt	2014	2	0.03	0.01, 0.14	0	0	0.0	0	0	0.0	0	0	0.0
Jordan	2017–18	1	<0.01	<0.01, 0.02	0	0	0.0	0	0	0.0	0	0	0.0
Pakistan	2017–18	5	0.07	0.02, 0.26	2	0.06	0.01, 0.26	8	0.11	0.04, 0.31	3	0.06	0.01, 0.26
South East Asia													
India	2015–16	48	0.06	0.04, 0.10	12	0.02	0.01, 0.03	20	0.03	0.02, 0.05	15	0.02	0.01, 0.04
Nepal	2016	14	0.38	0.21, 0.71	5	0.13	0.04, 0.44	11	0.23	0.10, 0.51	7	0.18	0.07, 0.47
Western Pacific													
Cambodia	2014	0	0	0.0	0	0	0.0	1	0.01	<0.01, 0.10	0	0	0.0
Papua New Guinea	2016–18	2	0.09	0.02, 0.37	0	0	0.0	0	0	0.0	0	0	0.0
Philippines	2017	0	0	0.0	0	0	0.0	1	<0.01	<0.01, 0.01	1	<0.01	<0.01, <0.01
Europe													
Kyrgyz Republic	2012	1	0.01	<0.01, 0.05	0	0	0.0	0	0	0.0	0	0	0.0
Males													
Africa													
Kenya	2014	0	0	0.0	0	0	0.0	0	0	0.0	1	<0.01	<0.01, 0.02
Uganda	2016	1	0.02	<0.01, 0.17	0	0	0.0	0	0	0.0	0	0	0.0

N - Unweighted Numbers

Prev is the weighted prevalence

* was the same respondent physically hurt by mother in-law and father in-law

† was the same respondent physically hurt by mother in-law, father in-law and other in-law

§ was the same respondent physically hurt by mother in-law and other in-law

‡ was the same respondent physically hurt by father in-law and other in-law

understanding of the world is dependent upon how the world is presented to us through language and is specific to time and culture hence there is no one universal definition of words or concepts (Burr and Dick, 2017). Based on this, we can not rule out variations in the definition of violence or the defining acts across countries since their inclusion in the study was based on their income status without consideration of social and cultural factors. Moreover, since only 10 out of the 47 included countries had data collected (during the DHS) on male exposure to in-law violence, it is possible that men in these countries shared unique characteristics which put them at high risk of violence or inspired willingness to disclose exposure to violence.

With regard to violence perpetrators, mothers-in-law physically abused the majority of female and male participants, without considering the “other in-laws” category, in the pooled analysis. This finding is in line with extant literature which cites them as the main perpetrators of most violence against daughters-in-law (Turaeva and Becker, 2022; Rew et al., 2013). This has been explained by the desire to maintain a close mother-son bond which risks being weakened by the entry of a wife. Moreover, the older women in a family setting are sometimes expected to propagate the family’s values and traditions, a factor which has the potential to bring friction between her and her daughter-in-law who is perceived as an outsider who must conform to accepted norms (Rew et al., 2013). Available evidence also suggests that domestic violence by females is an inter-generational phenomenon where young women in a household setting are abused by the older women and they in turn violate the young women who come into the family later, as daughters-in-law, once they have a senior position (Ghoshal et al., 2023). However, as for the male participants, this survey did not collect data on the context and previous scholarly work has largely been silent on male experience of in-law violence making it impossible to explain this finding authoritatively. Nonetheless, a plausible explanation is that these mothers’ actions might have been prompted by reports of maltreatment of their daughters by their husbands. Previous research on disclosure shows that a majority, over 90%, of the women who report IPV share their experience and seek help from informal sources, preferably the woman’s own family, neighbors or her in-laws (Parvin et al., 2016; Stake et al., 2020). The belief that their mothers have most probably been through similar situations, will therefore understand them and offer assistance may make mothers the preferred family members to disclose IPV to (Augusti and Myhre, 2017). We posit that the higher prevalence of violence by fathers-in-law than mothers-in-law against females in six African countries: Burkina Faso, Chad, Ethiopia, Liberia, Tanzania and Togo might have been by chance owing to the few numbers out of which the proportions were computed. However, this does not eliminate the need for further research to ascertain this finding. The

specificities of local cultures and ecosystems, could also contain explanations for why fathers-in-law are more likely to be abusers of the daughters-in-law; comparing this with IPV in these specific contexts could also provide insight.

In the pooled analysis, the proportion of both female and male participants who were abused by other in-laws is highest. This is possibly because this category lumps together all persons falling under the in-laws category other than the parents. This therefore leaves room for inclusion of a diverse range of potential violence perpetrators ranging from spouses’ siblings to cousins, uncles and aunts among other relatives. This finding points to a need to conduct further research on this group of violence perpetrators to establish who they exactly are and the context of such violence.

That the East Mediterranean region reported the highest prevalence of in-law violence against females can potentially be explained by the patriarchal nature of the societies in member countries which exposes women to violence (Jewkes et al., 2019; Alsawalqa et al., 2021). The patrilocal family system in these societies coupled with low levels of female emancipation are factors that make women easy targets of violence by their in-laws due to financial dependency on their spouses and the man’s relatives. Conversely the Western Pacific region and Europe recorded the lowest in-law violence against females probably due to changes in social norms which generally promote increased equity among males and females with the aim of encouraging the adoption of marriage practices where both are considered equal partners. This may in turn result in less external interference in the marriage from extended family members (Ali et al., 2021).

The African region had the highest prevalence of in-law violence against males, a surprise revelation given that most African societies have male-dominated power systems and structures. It is worth noting that the African region had the highest number of countries included at 27 for females compared to the other regions which had between three and five countries. That the African continent has undergone changes in the cultural norms and values which in turn affect relationships at the family level is obvious; social and economic transformations with push for women’s empowerment and more focus on violence against women might have placed men at a position where they can easily be victimized within the household setting. For instance, in Uganda, a fifth of the men reported experiencing physical IPV where controlling behavior of their spouses and being afraid of them most of the time were identified as associated factors (Waila et al., 2022). In Cameroon and Sierra Leone, nationally representative data revealed that 24.4% and 14.9% respectively of married or cohabiting men aged between 15 and 59 years had experienced physical IPV (Oyediran et al., 2023). This calls for a gender-balanced approach in tackling domestic violence through research and prevention strategies.

Our country-specific prevalence estimates are lower compared to what previous scholars have documented. For example, 49%, 27% and 14% in India, Côte d'Ivoire and Afghanistan (Gupta et al., 2012; Jewkes et al., 2019; Silverman et al., 2019) compared to 0.29%, 2.26% and 4.07% among females respectively. This marked variance could be due to differences in the forms of in-law violence investigated since both physical and non-physical violence were reported unlike the present study which examined physical violence only. In addition, we used nationally representative data, which was not the case in the previous studies. Generally, previous studies seeking to estimate the prevalence of in-law violence targeted study populations with unique characteristics which predisposed participants to violence hence recording higher rates. On the contrary, demographic health surveys whose sampling approaches may not be tailored to adequately sample participants at risk would most likely yield substantially lower rates (Zahnd et al., 2019).

The three countries, Afghanistan, Côte d'Ivoire and Nepal, which record the highest prevalence of in-law violence against females are male-dominated societies where violence against women is generally high (García-Moreno et al., 2013). Further, the three have all experienced periods of protracted armed conflicts which is closely linked to interpersonal violence (Alleyne-Green et al., 2022; Istratii, 2023). In fact, a study conducted in Afghanistan on the lived experience of conflict and domestic violence against women established that loss of father figures during the war rid them of the men who would help them make important life decisions exposing them to coercion with no one to protect them. Furthermore, the illicit drug trade which thrives in war-torn areas as an economic driver of conflict, and the poverty situation associated with and as a result of war, left women vulnerable making them easy targets of violence from multiple sources including at the household level (Mannell et al., 2021). Similarly, Colombia and Papua New Guinea had the highest prevalence in the Americas and West Pacific regions and they too have a history of armed conflict. In addition, whereas some women are subjected to violence on the basis of having not paid adequate dowry/bride price especially in South East Asian countries, in some countries like Papua New Guinea where men pay the bride price, women are violated on the basis that they were “fully paid for” (Eves, 2019).

Mozambique in Southern Africa, which had the highest prevalence of in-law violence against men at 2.24%, is a unique country which has a mixture of matrilineal and patrilineal kinship organizations (Katto and Bonate, 2021). This means that authority and control is not concentrated around men; women also have access to resources and decision making power. It is also a multilingual nation whose official language is Portuguese but most of the citizens use local Bantu languages and are not fluent in Portuguese, a factor that affects domestic violence reporting given that

the data collection tool/exercise is subject to translation or interpretation (Heydon and Mabasso, 2018). Based on the kinship organization described above, we speculate that men in Mozambique may be more free to disclose exposure to domestic violence compared to men in other countries which are highly patriarchal. Again, owing to the multilingual setting, we can not rule out divergent translation/interpretation of the violence defining acts assessed during data collection yielding the relatively high prevalence among men who are less often subjected to domestic violence questions as victims/survivors. However, we acknowledge that these explanations remain speculative and underscore the need for further research to explain this finding.

The finding that one person can be subjected to physical violence by more than one in-law is disturbing. This is especially because we focused on physical violence only and we cannot rule out the co-existence of emotional and sexual violence against the same individuals. Indeed, one can suffer immensely within the family setting. Moreover, the fact that this was reported by females in 18 of the 47 countries studied suggests that it is not an uncommon occurrence clearly depicting a worrisome state of affairs with regard to in-law violence. Additionally, that men from two male dominated African countries (Kenya and Uganda) also reported physical violence by multiple in-laws was surprising. Although the method used in this cannot explain this phenomenon in detail, it is indisputable that further research to describe this finding is warranted.

Strengths and Limitations: The present study focused on providing statistically robust estimates on the prevalence of domestic violence perpetrated by in-laws in LMICs. The data used were derived using validated survey instruments which were adapted to facilitate the capture of violence across multiple diverse settings. The data were nationally representative of the included countries. To the best of our knowledge, this is the first study to quantify in-law violence against men, a sub-population that has been left out in previous scholarly work which is often biased towards violence against women. However, the results presented here should be considered within the context of at least three important limitations. Firstly, the data are cross-sectional, which is prone to recall bias and does not allow the ascertainment of event sequence. Secondly, domestic violence (and those who experience it) are often stigmatized. This introduces bias in the form of under-reporting and potentially encourages responses which may mask the full extent of the phenomena under study.

Thirdly, although the most recent data considered for inclusion in this study were from 2020, the study remains silent on the potential effect of pandemic-related restrictions in light of COVID-19. It has now been acknowledged that the shutting down of meaningful economic activity, home-based quarantine, coupled with restrictions on movement, may

have exacerbated many forms of domestic violence (Piquero et al., 2021). Along the same lines, restrictions on movement may have also distorted otherwise viable official channels for help- and health-seeking behavior for those affected by violence in household settings. The results should also be considered in light of what currently exists in the literature on the issue of violence perpetrated by in-laws. There are few studies utilizing nationally representative data to which the present results can be compared.

Conclusions

The study reveals that physical violence perpetrated by in-laws in domestic settings affects both men and women in varying degrees in different countries. It also clarifies that it is possible for a single individual, within an extended family setting, to experience violence directed at them by more than one family member. This lays bare the complexity of the dynamics involved in relationships/interactions at the family level and the suffering that one can be subjected to in such settings. Given the paucity of research in this area, it is hoped that the results presented here are able to stimulate further scientific inquiry into the contextual and social variables which influence in-law violence. In particular, violence by in-laws directed towards men remains a relatively new area of research with serious knowledge gaps on its context.

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Availability of data and materials Available from the DHS website

Code Availability Available on request

Declarations

Conflict of interest/Conflict of interest The authors have no relevant financial or non-financial interests to disclose

Ethics approval The DHS had been approved by the relevant IRBs in each of the countries where the survey was conducted

Consent to participate During the DHS, informed consent was obtained from each respondent

Consent for secondary analysis and publication Permission for research granted by DHS team

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