Table 1. Association of indices of physical abuse with sociodemographic and psychosocial variables

Sociodemographic variable	Significantly different groups	Total with abuse No. (%)[a]	χ^2	df
Sex (ever abused)	Male > female	318 (49.8 male)	79.5***	1
Sex multiple abuses[b]	Male > female	167 (26.1 male)	96.9***	5
Age group (ever abused)	25–34 years > others	19 (65.5)	12.2**	2
Age group multiple abuses[b]	25–34 years > others	16 (55.1)	58.4***	10
Faculty (ever abused)	Allied health > others	47 (43.9)	38.4***	10
Parent's marital status (ever abused)	Divorced/separated > others	78 (53.1)	22.7***	2
Parents' marital status multiple abuses[b]	Divorced/separated > others	50 (34.0)	57.9***	10
Living with who (ever abused)	With father > others	15 (51.7)	17.5***	3
Living with who multiple abuses[b]	With father > others > both parents	11 (37.9)	50.0***	15
Father's education (ever abused)	Primary education > others	28 (45.2)	17.5**	5
Polygamy (ever abused)	Polygamous > Monogamous	74 (40.7)	14.5***	2
Polygamy multiple abuses[b]	Polygamous > Monogamous	42 (23.0)	29.0***	10
Household multiple abuses[b]	Multiple wives in same household > others	112 (32.2)	37.6***	10
Monthly income (ever abused)	Income less than US$ 1800 > others	80 (53.7)	42.8***	4
Monthly income multiple abuses[b]	Income less than US$ 1800 > others	47 (31.6)	67.9***	20
Smoking status (ever abused)	Ex-smoker > others	22 (66.7)	67.9***	3
Smoking status multiple abuses[b]	Daily smoker > Non-smoker	45 (44.2)	138.5***	15
Violent behaviour multiple abuses[b]	Physical fight last year > No physical fight	127 (50.4)	316.0***	5
Police arrest multiple abuses[b]	Arrested by police > not arrested	63 (34.5)	88.2***	5

Physical abuse justified (ever abused)	Not for discipline/not reasonable or justified > others	62 (88.6)	324.2***	3
Physical abuse justified multiple abuses[b]	Not for discipline/not reasonable or justified > others	43 (61.4)	467.2***	15
Physically hurt compared with other children (ever abused)	Much more than other children > others	40 (83.3)	283.6***	4
Physically hurt compared with other children multiple abuses[b]	Much more than other children > others	33 (68.9)	462.3***	20

[a]% of significant group. Because of missing responses, the overall total as denominator is less than the original total number.

[b]Multiple abuses: ≥ 2 forms of abuse.

**$P < 0.01$, ***$P < 0.001$.

df = degrees of freedom.

Table 2. Association of indices of emotional abuse with sociodemographic and psychosocial variables

Sociodemographic characteristic	Significantly different groups	Total with abuse No. (%)[a]	χ^2	df
Sex multiple abuses[b]	Male > female	179 (28.0 male)	15.8**	5
Faculty (ever abused)	Allied health > others	77 (70.6)	31.3***	10
Parents' marital status (ever abused)	Separated/divorced > others	106 (67.1)	13.5***	2
Parents' marital status multiple abuses[b]	Separated/divorced > others	74 (46.9)	88.5***	10
Living with (ever abused)	With mother > others	142 (68.6)	22.9***	3
Living with multiple abuses[b]	With mother > others	96 (46.4)	87.4***	15
Polygamy (ever abused)	Polygamous > monogamous	111 (59.0)	19.7***	2
Polygamy multiple abuses multiple abuses[b]	Polygamous > monogamous	60 (31.9)	58.8***	10
Household multiple abuses[b]	Multiple wives not in same household > others	78 (33.2)	33.2***	10
Monthly income (ever abused)	Income less than US$ 1800 > others	103 (66.5)	37.5***	4
Monthly income multiple abuses[b]	Income less than US$ 1800 > others	67 (43.2)	87.7***	20
Smoking status (ever abused)	Daily smoker > others	71 (67.0)	15.4***	3
Smoking status multiple abuses[b]	Daily smoker > nonsmoker	96 (39.7)	32.3**	15
Physical fights multiple abuses[b]	Physical fight last year > no physical fight	125 (49.0)	128.1***	5
Emotional abuse experience (ever abused)	Not for discipline/not reasonable or justified > others	116 (97.5)	456.1***	3
Emotional abuse justified multiple abuses[b]	Not for discipline/not reasonable or justified > others	95 (79.9)	840.1***	15
Emotionally abused compared with other children (ever abused)	Much more than other children > others	64 (97.0)	271.7***	4

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Emotionally hurt compared with other children multiple abuses[b]	Much more than other children > others	56 (84.9)	662.6***	20

[a]% of significant group. Because of missing responses, the overall total as denominator is less than the original total number.

[b]Multiple abuses (≥ 2 forms of abuse).

**$P < 0.01$, ***$P < 0.001$.

df = degrees of freedom.

Table 3. Association of indices of sexual abuse with sociodemographic and psychosocial variables

Sociodemographic variable	Significant different groups	Total with abuse No. (%)[a]	χ^2	df
Faculty[b]	Women's college > others	7 (20.5)	78.1**	50
Parents' marital status (ever abused)	Separated/divorced > others	53 (33.1)	20.9***	2
Parents' marital status[b]	Separated/divorced > others	68 (20.0)	31.7***	10
Living with who (ever abused)	Living with non-parent other > others > both parents	32 (34.8)	25.5***	3
Living with who[b]	Living with non-parent other > others > both parents	15 (16.3)	41.3***	15
Mother's education (ever abused)	Secondary education > others	77 (24.8)	17.3**	5
Polygamy (ever abused)	Polygamous > monogamous	38 (20.2)	12.6**	2
Polygamy[b]	Polygamous > monogamous	19 (10.1)	23.7**	10
Monthly income (ever abused)	Income less than US$ 1800 > others	52 (34.0)	29.5***	4
Monthly income[b]	Income less than US$ 1800 > others	27 (17.6)	49.4***	20
Smoking statusv	Daily smoker > non-smoker	11 (11.0)	59.2***	15
Physical fights[b]	Physical fight last year > no physical fight	43 (17.4)	32.6***	5
Police arrest[b]	Arrested by police > not arrested	28 (16.1)	27.1***	5

[a]% of significant group. Because of missing responses, the overall total as denominator is less than the original total number.
[b]Multiple abuses (≥ 2 forms of abuse).
**$P < 0.01$, *** $P < 0.001$.
df = degrees of freedom.

Table 4. Association between types of child abuse and association of perpetrators

Child abuse type	χ^2	df
Physical vs emotional	261.7***	15
Physical vs sexual	164.2***	14
Emotional vs sexual	632.9***	15
Association of perpetrators: mother vs father	11.2***	10

***$P < 0.001$.

df = degrees of freedom.

Table 5. Predictors of child abuse: multiple (stepwise) regression analyses: final regression models

Dependent variable predicted	Significant predictors: independent variable	Variance (%)	Total variance (%)	Standard beta	t-value
Physical abuse	Physical fight during past year	14.4	26.6	0.29***	13.8
	Depression (PHQ-9 total score)	6.0		0.26***	12.2
	Sex (male)	2.7		0.15***	7.0
	Age (25–34 years)	1.5		0.10***	5.0
	Parents' marital status (divorced/separated)	1.2		0.10***	4.9
	Household (live with other wives)	0.4		0.06**	3.03
	Smoking status (ex-smoker)	0.4		0.06**	0.0
Emotional abuse	Physical fight during past year	5.2	9.4	0.23***	10.4
	Living with mother	2.7		0.15***	6.8
	Family income < 600 KD	0.5		0.07***	3.2
	Faculty (Allied health)	0.4		0.06**	2.9
	Father's education (primary)	0.2		0.05*	2.2
	Smoking status (daily)	0.2		0.06**	2.7
	Sex (male)	0.2		-0.05*	-2.3
Sexual abuse	Depression (PHQ-9 total score)	7.1	8.4	0.26***	11.7
	Police arrest during past year	0.6		0.08***	3.7
	Living with non-parent/other	0.4		0.06**	2.8
	Parents' marital status (divorced/separated)	0.3		0.06*	2.5

*$P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.