

Association Among Father Involvement, Partner Violence, and Paternal Health: UN Multi-Country Cross-Sectional Study on Men and Violence

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Introduction: The influence of father involvement on intimate partner violence (IPV) and men's health is poorly understood. This study aimed to investigate the prevalence of six aspects of father involvement in delivery and child care, and to explore their individual associations with IPV against women and paternal health in an Asia-Pacific context.

Methods: This study analyzed data from the 2011–2012 UN Multi-Country Cross-Sectional Study on Men and Violence, which surveyed >10,000 men from Bangladesh, Cambodia, China, Indonesia, Papua New Guinea, and Sri Lanka. Multivariate regression analyses were conducted in 2016 to examine the associations among father involvement, IPV, and paternal health.

Results: The sample comprised 6,184 men (aged 18–49 years) who had at least one child. The prevalence ranged from 40.0% to 62.9% across different aspects of father involvement. Presence at prenatal visits, taking paternity leave, and helping children with homework were associated with a reduced likelihood of IPV against women (all $p < 0.05$). When possible confounding factors were adjusted for, father involvement accounted for 2% of the variance of men's perceived health, 4% of depression, and 2% of life satisfaction (all $p < 0.05$).

Conclusions: Father involvement may be beneficial in reducing IPV and improving paternal health. More family-friendly policies should be adopted by policymakers to promote father involvement throughout pregnancy to improve family well-being and child development.

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INTRODUCTION

The idea of engaging fathers at different stages of pregnancy and during childbirth has attracted increased attention and research interest globally. This is reflected, in part, by MenCare,¹ a global fatherhood campaign that promotes father involvement, as well as the recent release of the world's first report to provide a global view of men's contributions to parenting and caregiving.² Changes in the workplace and households are bringing global changes to men's participation as caregivers and involvement in children's lives, which could have profound effects on the whole family. By sharing the caregiving and domestic work, men support women's participation in the workforce and women's equality overall. The interest in engaging men as fathers is therefore important from a health perspective and a

child development perspective, as well as a women's empowerment perspective.

Milestones of father involvement include men's participation in prenatal visits and parenting classes, accompanying the mother during labor, and assisting in the care of the newborn baby.³ Most existing findings have

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supported father involvement's positive role in promoting better health for both the mother and newborn, for example, lower maternal and neonatal mortality rate,⁴ reduced likelihood of prematurity⁵ and low birth weight,⁶ shorter labor period,⁷ and lower level of maternal pain, anxiety, and fatigue during labour.⁸

On the other hand, research on the benefits of father involvement on paternal health is still in a preliminary stage and has yielded mixed findings.³ Past findings shed light on some possible mechanisms for its beneficial effects on paternal health, which include an increased likelihood of positive changes that promote health and well-being to fathers' lifestyles, such as smoking cessation or reduction,⁹ and an increased sense of maturity and responsibility during their partners' pregnancies.¹⁰ These positive health behaviors among fathers not only promote the health and personal growth of the fathers, they also facilitate both maternal and child health, possibly serving as a protective factor against poor pregnancy and obstetric outcomes, such as preterm birth and low birth weight.¹¹ Yet some studies have demonstrated the negative effects of father involvement on health and development of parents and children. For example, father involvement in child care may induce stress and marital conflicts due to different parenting styles, and such tension and conflicts might spill over to worsen the parent-child relationship that affects child development.^{12,13} The mixed findings of the associations between father involvement and health as well as the scarcity of existing research on the concept warrant studies to reveal evidence on the link between the two.

It is not surprising that intimate partner violence (IPV), closely associated with maternal and child health, may share some common demographic background with father involvement in affecting health. For example, high stress levels,¹⁴ poor health behaviors (such as the use of alcohol or illicit drugs),¹⁵ low marital satisfaction,¹⁶ gender inequality and rigid gender role stereotypes,^{17,18} which are often found to be factors associated with IPV, may also play important roles in the link between father involvement and health. The literature has also supported that unequal intimate relationships or dominance by one partner (regardless of which partner is the dominant one) may be associated with IPV at a moderate effect size.¹⁶ If father involvement is associated with reduced levels of these risk factors, it may also be related to a reduction of IPV.

Although existing evidence seems to suggest that father involvement promotes good outcomes among family members, there are still inconsistent findings and quite a number of limitations in the previous studies. For example, most previous studies had relatively small samples.^{7,19} The mainstream research in this field has

been conducted in Western countries and relevant studies in an Asia-Pacific context are scarce. There has also been little differentiation between kinds and degrees of father involvement in terms of effectiveness; most previous studies investigated only one kind of father involvement. Differing concepts of father involvement have possibly led to mixed findings in some previous studies, which found no significant effects on health from father involvement.^{20,21}

The shortcomings of the existing literature warrant a comprehensive study on father involvement that carefully conceptualizes and operationalizes different aspects of involvement and examines their associations with IPV and health. The present study aims to fill this research gap by exploring the prevalence of six aspects of father involvement that were derived from various previous studies.²²⁻²⁴ The six aspects included presence at prenatal visits, presence at the labor ward during childbirth, paternity leave taken, playing with children, discussing personal matters with children, and helping children with homework. This study is the first to investigate how these six aspects of father involvement are associated with paternal health, indicated by general health, depression, life satisfaction, and suicidal ideation, and their relationships with men's use of physical, psychological, economic, and sexual IPV against women. Based on the previous findings in the literature, it was hypothesized that father involvement would be positively associated with paternal health and negatively associated with IPV against women.

METHODS

Study Sample

This study, conducted in 2016, analyzed data from the UN Multi-Country Cross-Sectional Study on Men and Violence conducted by Partners for Prevention, UN Development Programme, UN Population Fund, UN Women, and UN Volunteers regional joint programme for the prevention of gender-based violence in Asia and the Pacific from January 2011 to December 2012. The original study was a standardized population-based household survey study conducted in nine research sites located in six developing countries in the Asia-Pacific region (i.e., Bangladesh, Cambodia, China, Indonesia, Papua New Guinea, and Sri Lanka), assessing the perpetration and experiences of IPV against women as well as other types of violence from a sample of 10,178 men and 3,106 women (aged 18-49 years) who had had an opposite-sex partner. Specifically, men's use of IPV against women was assessed through the use of behavior-specific questions related to a current or former partner in face-to-face interviews. All procedures strictly followed the standards developed based on existing guidelines for violence research,^{25,26} and were approved by the Medical Research Council of South Africa Ethics Committee, and the institutional or national ethics boards in each country.

Details of the study design, setting, and ethical considerations of the original study have been published elsewhere.^{27,28}

This study employed only the reports of men having at least one child from the UN Multi-Country Study. Thus, the present sample comprised 6,184 fathers from the six Asia-Pacific countries ($n=503$ – $1,586$ per country; response rate, 59%–95%).

Measures

Antenatal and perinatal father involvement was measured with three items: (1) whether the participant had accompanied the mother of his last child to any prenatal visit (“presence at prenatal visits”); (2) whether he had been present at the labor ward at the birth of his last child (“presence at the labor ward”); and (3) whether he had taken leave or time off, of any duration, the last time he had a child (“paternity leave”). Dichotomous responses were captured. Father involvement in child care was assessed by three items: (1) the time that the participant had spent playing with or participating in activities with his children; (2) the time spent discussing personal matters with his children; and (3) the time spent helping children with their homework. These three items were rated on a 4-point Likert scale (*never, sometimes, often, and very often*).

The main dependent variable, men’s use of IPV against women, was measured with 18 behavior-specific items categorized into four aspects: physical violence, psychological maltreatment, economic abuse, and sexual violence. The original items were rated on a 4-point Likert scale; however, the present study categorized the responses into dichotomous ones (*yes/no*) to fit the analysis.

Depression, life satisfaction, and suicidal ideation were the main health factors used to assess paternal health in this study. Depression was measured with the 20-item Center for Epidemiologic Studies Depression Scale,²⁹ a widely used self-report scale assessing depression in the general population. Items were rated on a 4-point scale; a higher total score indicated a more severe level of depression. Life satisfaction was measured with four items rated on a 4-point scale, with a higher total score reflecting a lower level of life satisfaction. Suicidal ideation was assessed through three dichotomous items: “ever thought about committing suicide”, “tried committing suicide”, and “thought about committing suicide in the past 4 weeks.” Also measured was the perceived level of general health, which was responded to in a single item, rated on a 5-point scale. In this study, a higher score indicated poorer general health perceived by the participant.

Statistical Analysis

The prevalence of father involvement and men’s use of IPV against women (both lifetime and past year), and the mean scores and SD of the health factors were computed and presented by country. The associations between father involvement and IPV against women, as well as between father involvement and health outcomes, were explored with the use of multivariate or logistic regression models. To reduce any possible confounding effects, participants’ ages, education levels, countries of origin, unemployment, and number of biological children were adjusted for in the regression models. The model statistics are reported for multivariate regression analyses, and the AORs and 95% CIs are reported for logistic regression models.

RESULTS

The mean age of the sample ($N=6,184$) was 34.03 ($SD=8.71$) years and almost all of the fathers were married, cohabiting, or had a partner at the time of the survey. About 6.4% had been unemployed during the past year and more than half (52.2%) were earning <US \$100 a month. Other details of the sample’s demographic background are shown, by country, in [Appendix Table 1](#) (available online).

[Table 1](#) presents the prevalence of father involvement by country. About 58.9% of fathers attended prenatal visits, which was the most frequently reported perinatal father involvement. It was followed by men’s presence at the labor ward during the birth of their last child (58.3%). The least common practice was taking paternity leave (40.0%). Concerning fathers’ involvement in child care, 62.9% of the fathers reported that they had played with or performed activities with their children. About 44.3% had discussed personal matters with their children and 50.5% had helped their children with their homework.

[Table 2](#) shows the lifetime and past-year prevalence of the four types of IPV against women. On average, psychological maltreatment was the most prevalent type of IPV (lifetime, 55.4%; past year, 19.8%), followed by economic abuse (lifetime, 35.1%; past year, 15.4%) and physical violence (lifetime, 36.0%; past year, 6.2%). The least reported was sexual violence (lifetime, 24.0%; past year, 6.5%).

After the adjustment of fathers’ age, education level, country of origin, unemployment status, and number of children ([Table 3](#)), fathers’ presence at prenatal visits was associated with lower likelihoods of physical IPV (lifetime, $AOR=0.79$, 95% $CI=0.66, 0.93$, $p<0.01$; past year, $AOR=0.68$, 95% $CI=0.53, 0.86$, $p<0.001$) and economic IPV (lifetime, $AOR=0.81$, 95% $CI=0.68, 0.97$, $p<0.05$; past year, $AOR=0.74$, 95% $CI=0.62, 0.90$, $p<0.001$), as well as past-year psychological IPV against women ($AOR=0.74$, 95% $CI=0.62, 0.90$, $p<0.001$). Taking paternity leave was associated with a lower likelihood of perpetration of psychological IPV ($AOR=0.80$, 95% $CI=0.67, 0.94$, $p<0.01$).

Father involvement in child care yielded mixed findings in this study. As hypothesized, fathers’ help with children’s homework was linked to lower likelihood of psychological IPV against women (lifetime, $AOR=0.91$, 95% $CI=0.84, 0.98$, $p<0.05$; past year, $AOR=0.79$, 95% $CI=0.72, 0.88$, $p<0.001$) and past-year physical IPV ($AOR=0.83$, 95% $CI=0.73, 0.98$, $p<0.05$). However, it is surprising that playing with children was associated with a higher likelihood of past-year psychological IPV ($AOR=1.12$, 95% $CI=1.00, 1.26$, $p<0.05$), and discussing personal matters with children was linked to higher

Table 1. Prevalence of Father Involvement During Childbirth and in Child Care, Six Countries, 2011–2012

Variable ^a	Total (N=6,184)	Bangladesh (n=1,301)	Cambodia (n=1,183)	China (n=728)	Indonesia (n=1,586)	Papua New Guinea (n=530)	Sri Lanka (n=856)
Presence at prenatal visits							
Yes	72.7 ^b	54.5	N/A ^c	87.2	88.7	76.8	56.1
Missing or refused to answer	4.4 ^b	0.2	N/A	1.1	0.1	0	24.4
Presence at the labor ward							
Yes	72.1 ^b	76.3	N/A	86.7	81.4	67.9	38.4
Missing or refused to answer	4.5 ^b	0.2	N/A	1.6	0.1	0.2	24.3
Paternity leave							
Yes	49.5 ^b	34.1	N/A	37.6	67.5	62.8	40.8
N/A (self-employed or unemployed)	18.7 ^b	26.3	N/A	39.8	8.9	0	18.8
Missing or refused to answer	4.7 ^b	0.3	N/A	2.1	0.1	0.4	24.5
Plays with or performs activities with children							
Never	4.7	4.5	11.2	3.8	1.4	2.6	4.1
Sometimes	29.4	62.3	24.1	32.8	13.6	23.4	16.6
Often	26.6	20.4	47.4	23.4	34.2	8.9	6.8
Very often	6.9	3.8	13.2	1.6	9.8	7.0	1.8
Missing or refused to answer	32.5	9.0	4.1	38.3	41.0	58.1	70.8
Discusses personal matters with children							
Never	23.1	21.0	49.0	14.6	21.9	7.4	9.8
Sometimes	28.5	53.9	24.3	35.2	16.2	24.2	15.2
Often	13.7	13.8	20.0	10.2	8.8	5.7	3.5
Very often	2.1	2.2	2.5	1.0	2.1	4.9	0.7
Missing or refused to answer	32.6	9.1	4.1	39.1	41.0	57.9	70.8
Helps with children's homework							
Never	16.7	15.7	33.3	5.1	20.0	3.6	7.5
Sometimes	27.7	44.5	35.6	28.6	16.8	22.1	14.5
Often	18.7	24.1	24.0	24.6	18.6	9.4	4.2
Very often	4.1	6.5	3.0	3.4	3.2	7.0	2.5
Missing or refused to answer	32.7	9.3	4.1	38.3	41.4	57.9	71.4

^aAll data are shown as percentages.^bThese percentages excluded the data from Cambodia, resulting in N=5,001.^cThe survey conducted in Cambodia did not include items about presence at childbirth, paternity leave, and presence at prenatal clinics.

likelihood of both lifetime and past-year psychological IPV (lifetime, AOR=1.15, 95% CI=1.06, 1.25, $p<0.001$; past year, AOR=1.15, 95% CI=1.04, 1.26, $p<0.05$).

The mean scores and SDs of general health, depression, and life satisfaction, as well as the prevalence of suicidal ideation of fathers are listed in the lower part of Table 2. Table 4 shows the findings from multivariate regression models. Presence at prenatal visits was significant in predicting better perceived general health ($\beta = -0.26$, $p<0.001$), a lower level of depression ($\beta = -2.16$, $p<0.001$) and a higher level of life satisfaction ($\beta = -0.41$, $p<0.001$) in fathers; playing with children was associated with a lower level of depression ($\beta = -1.56$, $p<0.001$), a higher level of life satisfaction ($\beta = -0.14$, $p<0.05$), and a lower likelihood of suicidal ideation (AOR=0.28–0.44, all $p<0.001$). On the other hand,

there were mixed findings for the association between helping with children's homework and paternal health: It was predictive of higher levels of both life satisfaction ($\beta = -0.23$, $p<0.001$) and depression ($\beta = 0.47$, $p<0.05$).

DISCUSSION

This is one of the first studies examining the relationship among different dimensions of father involvement and IPV risk as well as paternal health. The present findings show that approximately 40%–63% of the fathers in the Asia-Pacific region were involved at the perinatal stage and in child care. Despite some mixed findings on some aspects of father involvement, these findings provide preliminary evidence that father involvement, including being present at prenatal visits and taking paternity leave,

Table 2. Prevalence of Intimate Partner Violence (IPV), Six Countries, 2011–2012

Variable ^a	Total (N=6,184)	Bangladesh (n=1,301)	Cambodia (n=1,183)	China (n=728)	Indonesia (n=1,586)	Papua New Guinea (n=530)	Sri Lanka (n=856)
IPV lifetime							
Physical	36.0	56.3	18.1	50.8	20.3	69.2	25.6
Psychological	55.4	47.8	58.2	46.2	55.4	89.1	43.2
Economic	35.1	17.5	55.8	22.4	39.4	61.3	19.6
Sexual	27.3	13.0	23.9	22.1	33.8	65.5	22.3
IPV past-year							
Physical	6.2	13.1	2.8	15.9	5.3	21.1	6.1
Psychological	19.8	19.8	16.1	21.2	19.0	34.5	15.9
Economic	15.4	4.9	26.7	10.6	16.8	31.7	7.4
Sexual	7.2	1.8	4.1	6.5	10.5	18.9	7.0
General health, M (SD)	2.38 (0.85)	2.55 (0.72)	2.96 (0.69)	2.10 (0.98)	2.26 (0.68)	2.25 (0.99%)	1.88 (0.78)
Depression, M (SD)	29.99 (10.14)	34.22 (8.76)	35.87 (8.63)	32.56 (7.28)	30.45 (6.35)	27.83 (5.54)	12.85 (4.5)
Life satisfaction, M (SD)	8.74 (2.31)	9.63 (1.84)	8.13 (2.35)	8.83 (2.28)	8.87 (1.68)	7.03 (2.32)	8.98 (3.09)
Suicidal ideation	8.4	9.7	5.8	17.9	3.0	17.0	7.2

^aData are shown as percentages, unless otherwise noted.
IPV, intimate partner violence.

is predictive both of lower likelihood of IPV against women and better paternal health.

Findings demonstrated that the presence at prenatal visits, taking paternity leave, and helping children with their homework were associated with lower likelihoods of men's use of IPV against women. Although the associations may not be direct, these findings nevertheless suggest a possibility that father involvement may in part reflect greater gender equality and more protective factors in the family; and families with more gender-equitable relationships and more protective factors may have less IPV. For example, father involvement has been found to reduce parenting stress³⁰ and promote gender equality and division of household labor,³¹ which may in turn increase marital satisfaction and stability.³² It is also likely that this relationship is driven by the fact that involved fathers are less likely to perpetrate partner violence because of more gender-equitable practices and less rigid gender roles in the family.³³ Research has shown that father involvement also carries forward across generations by contributing to boys' acceptance of gender equality and to girls' sense of autonomy and empowerment.² It was found that men who have seen their own fathers engage in domestic work are more likely to be involved in household work and caregiving as adults, and women with involved fathers who share domestic responsibilities equally are more likely to obtain less traditional and potentially higher-paying jobs.²

It is also noteworthy that some aspects of father involvement were associated with increased IPV, reflecting that there might be complicated mechanisms underlying the associations between the two. The positive relationship between father involvement and IPV was especially obvious when comparing the more-physical, instrumental forms of involvement (e.g., presence at prenatal visits) to emotional engagement (e.g., discussing personal matters with children). If men are more confident and willing to take part in active and physical types of child care,^{32,33} it could be expected that the former aspects would be more effective in improving a sense of fatherhood. On the other hand, some aspects of child care might possibly induce conflicts between mothers and fathers, which would then increase the risk of IPV. Research shows that conflict may arise over each parent's different parenting style. In this case, fathers and mothers might have different approaches to discussing personal matters with children, and such differences might induce tension, which spills over to the marital relationship and increases the risk of IPV.^{12,13} The present findings are preliminary in revealing the true relationship between father involvement and IPV, and involving fathers who have been abusive may not guarantee the reduction of IPV against mothers. Clearly, future research (e.g., some carefully performed longitudinal research) is needed before a conclusion can be made.

Table 3. Associations Between Lifetime Father Involvement and IPV, Six Countries,^a 2011–2012

Variable ^b	Lifetime IPV				Past-year IPV			
	Physical	Psychological	Economic	Sexual	Physical	Psychological	Economic	Sexual
Father involvement during childbirth								
Presence at prenatal visits	0.79** (0.66–0.93)	0.86 (0.73–1.01)	0.81* (0.68–0.97)	0.93 (0.77–1.12)	0.69*** (0.54–0.87)	0.74*** (0.62–0.90)	0.68*** (0.53–0.86)	0.79 (0.58–1.06)
Presence at the labor ward	0.91 (0.79–1.06)	0.94 (0.81–1.09)	1.14 (0.97–1.33)	0.87 (0.74–1.02)	0.95 (0.76–1.18)	1.05 (0.89–1.25)	0.91 (0.74–1.12)	0.82 (0.64–1.05)
Paternity leave	0.96 (0.82–1.11)	0.88 (0.76–1.01)	1.05 (0.89–1.22)	1.02 (0.86–1.20)	0.80 (0.64–1.01)	0.80** (0.67–0.94)	0.91 (0.74–1.12)	0.98 (0.76–1.27)
Father involvement in childcare								
Plays with and performs activities with children	0.97 (0.87–1.07)	1.08 (0.98–1.18)	1.00 (0.80–1.38)	1.01 (0.91–1.12)	0.98 (0.82–1.16)	1.12* (1.00–1.26)	1.01 (0.90–1.13)	1.06 (0.88–1.27)
Discusses personal matters with children	1.09 (0.99–1.19)	1.15*** (1.06–1.25)	1.06 (0.97–1.15)	1.06 (0.97–1.16)	0.98 (0.84–1.14)	1.15* (1.04–1.26)	1.04 (0.94–1.15)	1.14 (0.98–1.33)
Helps with children's homework	1.02 (0.94–1.11)	0.91* (0.84–0.98)	0.98 (0.91–1.07)	0.97 (0.89–1.06)	0.83* (0.73–0.98)	0.79*** (0.72–0.88)	0.91 (0.82–1.01)	0.90 (0.77–1.05)

Note: Boldface indicates statistical significance (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$).

^aBangladesh, Cambodia, China, Indonesia, Papua New Guinea, Sri Lanka.

^bData are shown as AOR (95% CI). Each adjusted for age, education level, country of origin, unemployment, and number of biological children. IPV, intimate partner violence.

Table 4. Model Summary of Associations Between Father Involvement and Health Outcomes, Six Countries,^a 2011–2012

Variable	General health	Depression	Life satisfaction	Suicidal ideation ^b
Presence at prenatal visits	-0.26***	-2.16***	-0.41***	1.01
Presence at the labor ward	0.06	-0.42	-0.00	1.03
Paternity leave	0.02	0.25	0.04	0.97
Plays with and performs activities with children	-0.01	-1.56***	-0.14*	
Sometimes ^c				0.44***
Often ^c				0.28***
Very often ^c				0.32***
Discusses personal matters with children	0.03	-0.23	0.06	
Sometimes ^c				0.86
Often ^c				0.91
Very often ^c				1.95
Helps with children's homework	0.02	0.47*	-0.23***	
Sometimes ^c				1.35
Often ^c				1.18
Very often ^c				1.25
Model statistics				
N	2,116	1,768	2,109	2,120
R-square	0.02	0.04	0.02	0.02
F(6)	6.60***	13.48***	7.46***	$\chi^2=23.63^*$

Note: Boldface indicates statistical significance (* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$). Data are presented as beta values in the General health, Depression, and Life satisfaction columns, and ORs in the Suicidal ideation column, unless otherwise indicated. Higher beta values = poorer general health, more severe depression, and lower level of life satisfaction. Each model was adjusted for age, education level, country of origin, unemployment, and number of biological children.

^aBangladesh, Cambodia, China, Indonesia, Papua New Guinea, Sri Lanka.

^bLogistic regression was conducted and ORs are presented because the dependent variable, suicide ideation, was dichotomous.

^cReferent group = Never.

As previous research has suggested,^{3,34,35} father involvement in general accounted for a significant variance in paternal health. More-involved fathers were found to have better health, lower levels of depression, and higher levels of life satisfaction. These findings provide some evidence of the positive effects of father involvement on paternal health. However, similar to the associations between father involvement and IPV, the underlying mechanisms and directions of the positive effects of father involvement on paternal health are still unknown owing to the limitations of these cross-sectional data. Future longitudinal studies would generate data that could deepen understanding of the issue including directionality and causality.

Limitations

Findings of this study should be interpreted with the following caveats. First, the cross-sectional design did not allow the authors to conclude on any definite causal relationships. Whether a more involved father had better health or a healthier father played a greater role in childrearing is unknown. Second, the investigation of the full model with detailed underlying mechanisms is not possible without longitudinal prospective research. Third, the generalizability of this study can be challenged

because of the limitations of the data set used. Some variables were assessed by single items or scales that had not been validated, and their reliability could not be guaranteed. Finally, the reliance on men's reports may confound the results and there may be reporting bias with under-reporting of IPV against women in this study.

CONCLUSIONS

With the use of a sample from six developing countries in the Asia-Pacific region, this study has extended current knowledge of the positive associations among father involvement and reduced IPV against women and better paternal health. The present findings suggest that promoting higher father involvement may be an important component of effective health promotion work. For this to occur, relevant institutions need to make a concerted effort to enable fathers to be more involved in pregnancy, birth, baby care and, more importantly, to neither accept nor inadvertently create barriers to that involvement. Similarly, governments should institute and implement equal, paid, and non-transferrable parental leave policies in both public and private sectors, as well as other father-friendly policies that allow men's equal participation in

unpaid maternal and child care work, if they wish to promote gender equality and greater father involvement in childrearing.

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SUPPLEMENTAL MATERIAL

Supplemental materials associated with this article can be found in the online version at <http://dx.doi.org/10.1016/j.amepre.2016.12.017>.

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