

Vulnerability to domestic physical violence among married women in Indonesia

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Abstract

Purpose – Due to the gender norms in Indonesia, married women are vulnerable to domestic violence perpetrated by their husband. With a paucity of studies on this issue, the purpose of this paper is to explore the vulnerability to domestic physical violence among married women in Indonesia by measuring the acceptance of being beaten by their husband and factors associated with married women's approvals were also identified.

Design/methodology/approach – Secondary data analysis of three rounds of Indonesia Demographic and Health Survey in 2002/2003, 2007 and 2012 was performed. Data were analyzed descriptively to reveal the trend of women's acceptance and binary logistic regression was applied to identify determinants.

Findings – Women's acceptance of wife beating in some circumstances experienced an increase during 2002–2012. Determinants varied by type of beating justification. Overall, determinants fell into three groups of women's, husband's and household's characteristics.

Originality/value – This study helps to identify determinants of women's vulnerability to domestic physical violence and suggests some substantial approaches to address this pressing issue.

Keywords Domestic violence, Physical violence, Wife beating, Married women, Indonesia

Paper type Research paper

Introduction

Violence against a woman perpetrated by her spouse is known as intimate partner violence (IPV) and occurs in several ways, such as physical assaults, threats and intimidation, sexual abuse, and economic deprivation[1]. WHO estimated that the global prevalence of physical and/or sexual IPV among women was almost one-third (30 percent) and the highest prevalence occurred in Eastern Mediterranean and South-East Asian regions, accounting for 37 and 37.7 percent, respectively[2]. In some particular societies, gender norms and cultural practices are at the root of gender-based violence which allows men to use force against women[3]. One of the reasons related to the acceptance of violence

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against women, particularly in Sub-Saharan African and South-East Asian societies is associated with patriarchy[4].

Due to Indonesia's remarkable ethnic diversity and cultural system, the presence of patriarchal norms vary within this country where it can be strongly maintained in some areas whilst it is less possible in other areas. With their influence on family formation, including the preference of a son, patriarchal norms in particular societies can be identified with a tendency toward patrilocal residence and son preference[5, 6]. Patrilocal residence (married couple's living arrangement in the residence of the husband's family) predominates in some areas in Indonesia, such as Lampung, the Nias archipelago, Bali, West and East Nusa Tenggara, and eastern parts of Indonesia (Maluku, Papua) where the preference for a son is highly prevalent amongst the ethnicities settled in those areas[6]. The existing and well-maintained patriarchal system impacts on role differentiation and unequal position between men and women in the society and household, leading to discrimination against women[7, 8]. Even if all areas in Indonesia are not patriarchal, the gender inequality in this country is also related to the religious construction of Indonesia as a majority Muslim nation[9, 10].

Even though gender perceptions in Indonesia have started changing, the conservative view is that a woman's duty is to perform household duties and focus on childbearing responsibilities[11]. As a consequence, a woman is expected to obey her husband in the household, resulting in the increased likelihood that she would be a survivor of domestic violence[12]. In addition, patriarchal norms allow the authoritarian behavior of the husband as acceptable by family members, even if it involves physical violence[13].

A national survey conducted by the Central Bureau of Statistics and Ministry of Woman Empowerment and Child Protection, Indonesia in 2016 found that the prevalence of married women aged 15–64 years old experiencing physical and sexual IPV during their lifetime was 12.3 and 10.6 percent, respectively[14]. However, violence taking place in the family is more likely under-reported in Indonesia since it is viewed as private and not for the public sphere[15]. In addition, other studies conducted in some districts in Indonesia found that both couples' characteristics were determinants of domestic violence exposure among married women[16, 17].

Physical violence as one of the domestic violence types among married women can contribute to dangerous outcomes in women's health[18, 19]. A study conducted in a neighboring country, Timor-Leste found that women experiencing physical violence were more likely to report sexually transmitted infections, pregnancy terminations, low birth weight infants and higher rates of child mortality[20]. Therefore, examining the vulnerability to domestic physical violence among married women in Indonesia remains an important issue which can be measured by their acceptance of domestic violence justification perpetrated by the husband. To our knowledge, while some published literature identified determinants of physical violence among women in Indonesia, there is a paucity of scholarly research that attempts to assess women's approval of being beaten by husbands in Indonesia. This study aimed to describe the trend of women's acceptance of domestic physical violence and examine the determinants.

Materials and methods

Data

This study was a quantitative study with a cross-sectional approach using secondary data from the standard Indonesia Demographic and Health Survey (IDHS), conducted by Statistics Indonesia, the National Family Planning Board, the Ministry of Health and MEASURE DHS ICF International, Calverton, Maryland USA. The records of individual married women of reproductive age (15–49 years old) were employed from three survey rounds in 2002/2003, 2007 and 2012. Those are current published large data sets of national representations of population-based surveys that help describe the current situation of domestic physical violence among married women in Indonesia. The sampling technique

employed for the IDHS was a multi-stage random sampling, stratified by province, district and village as classified into urban-rural areas[21]. About 91,041 records of individual married women from three rounds of DHS were obtained, of which 902 data sets or almost 1 percent of the total were omitted due to missing values. As a result, only the remaining 90,139 were employed in this study, consisting of 27,544; 30,457; and 32,138 married women were selected from standard IDHS in 2002/2003, 2007 and 2012, respectively.

Variables

The dependent variable was women's vulnerability to domestic physical violence, measured by their acceptance of domestic violence perpetrated by the husband in five particular circumstances: wife goes out without telling husband; wife neglects the children; wife argues with husband; wife refuses to have sex with husband; and wife burns the food. These five domestic violence justifications are validated measurements that are used globally in standard DHS to measure women's attitudes toward domestic violence. Five dependent variables were developed from those justifications and a new one was constructed by the acceptance of at least one specified reason. Therefore, a total of six dependent variables were employed in this study. Meanwhile, independent variables for this study fell into three main groups: women's characteristics: age, educational level, child marriage status; occupational status; husband's characteristics: age, educational level, occupational status; and household characteristics: number of living children, wealth index, residential type, region. Regarding the wealth index, calculations were made based on household ownership of some selected assets where the data set of the standard DHS classified it into five categories (poorest, poorer, middle, richer and richest).

Statistical analysis

A χ^2 test was used for bivariate analysis to find out the difference in percentage (prevalence) by independent variables. In addition, binary logistic regression was applied to multivariate analysis to determine the association between independent variables and women's acceptance with the significant level (α) at 0.05. The results were presented by odds ratio (OR), 95% confidence interval (CI) OR and *p*-value. Since this study employed national survey data with a complex sampling design, sampling weights and clustering effects were taken into account in order to make sample data representative to the whole population. The DHS data set already provided the weight value, and details of how it works are clearly presented in the DHS guidelines[22].

Results

Table I shows a trend of socio-demographic characteristics of married women, husband and household over a 10-year period. It also reflects the shift in age structure of the actual population due to fertility decline which affects the change in education, and other socio-demographic characteristics. For every 5-year period of the survey, there was a decrease in percentage of young married women (15–24 years old), but the proportion of those aged 30–49 years old experienced an increase, indicating women tend to delay age of marriage, supported by the proportional decline of child marriage prevalence during the course of the decade. In addition, the proportion of women who attended secondary and higher education also increased together with their participation in the labor force.

In a comparison of the couples' age ranges, the proportion of husbands who were younger or the same age as their wife has been increasing gradually. Similar to the wife's educational attainment trend, a noticeable increase also occurred among husbands who completed their secondary and post-secondary education. The unemployment status among husbands also decreased gradually.

Variables	IDHS 2002/2003 <i>n</i> = 27,544	IDHS 2007 <i>n</i> = 30,457	IDHS 2012 <i>n</i> = 32,138	Physical violence among married women
<i>Women</i>				
Age (years)				
15–19	3.29	2.64	2.62	
20–24	13.54	12.79	11.14	
25–29	18.69	18.09	17.89	
30–34	18.47	18.62	18.85	
35–39	17.81	18.41	18.97	
40–44	15.37	15.85	16.71	
45–49	12.83	13.60	13.83	
Educational attainment				
No education	7.46	6.43	3.52	
Incompleted primary	19.46	16.47	12.49	
Completed primary	34.17	30.76	27.08	
Incompleted secondary	17.60	21.04	23.64	
Completed secondary	16.21	18.38	23.21	
Higher	5.09	6.93	10.05	
Child marriage status				
No (\geq 18 years old)	57.80	63.19	68.66	
Yes (< 18 years old)	42.20	36.81	31.34	
Occupational status				
Unemployed	48.72	40.50	36.69	
Employed	51.28	59.50	63.31	
<i>Husband</i>				
Age				
\leq Wife's age	12.37	13.36	14.91	
1–5 years older	50.64	49.00	48.69	
6–10 years older	26.70	27.61	26.58	
> 10 years older	10.29	10.03	9.83	
Educational attainment				
No education	4.69	3.94	2.46	
Incompleted primary	17.79	16.29	12.38	
Completed primary	32.53	29.30	26.16	
Incompleted secondary	17.39	18.96	21.39	
Completed secondary	20.66	23.28	27.41	
Higher	6.94	8.23	10.20	
Occupational status				
Unemployed	3.06	2.47	1.95	
Employed	96.94	97.53	98.05	
<i>Household</i>				
Number of living children				
No children	7.96	8.05	8.09	
1–2 children	52.40	56.46	60.56	
3–5 children	34.15	31.25	28.63	
> 5 children	5.50	4.24	2.73	
Wealth index				
Poorest	20.56	18.58	17.56	
Poorer	19.57	20.09	19.75	
Middle	19.74	20.51	20.58	
Richer	19.93	20.63	21.70	
Richest	20.20	20.19	20.42	

(continued)

Table I.
Trends of
socio-demographic
characteristics of
married women,
husbands
and households

Table I.

Variables	IDHS 2002/2003 <i>n</i> = 27,544	IDHS 2007 <i>n</i> = 30,457	IDHS 2012 <i>n</i> = 32,138
Residential type			
Urban	45.71	41.60	49.30
Rural	54.29	58.40	50.70
Region			
Java	61.79	61.72	59.69
Bali and Nusa Tenggara	5.02	5.68	5.40
Sumatera	20.39	17.82	20.26
Borneo (Kalimantan)	5.76	5.91	5.82
Sulawesi	7.05	6.98	6.65
Maluku and Papua	–	1.90	2.18

During this 10-year period, married couples preferred to have 1–2 children in the household. The socio-economic status within the household improved continuously by a declining proportion of poor households. In addition, an almost similar proportion of those who lived in urban and rural areas were documented. Survey coverage also varied by region where in IDHS 2002/2003, some provinces such as Nanggroe Aceh Darussalam, Maluku, North Maluku and Papua were not included due to conflict and political instability. These four provinces represent 4 percent of the total population[23].

Figure 1 shows married women’s acceptance of domestic violence justification in five different circumstances across surveys. Some examples of justified acceptances of beating experienced an increase whereas the others fluctuated during the course of the decade. The highest acceptance was attributable to “wife neglects the children,” followed by “wife goes out without telling husband” while less than 5 percent of them accepted a beating if they burnt the food. Interestingly, women’s acceptance of at least one specified reason increased sharply by 6.25 percent during the first 5-year period and increased by 2.25 percent for the next period. Overall, one-third (30.14 percent) of women accepted justification for any specified beating during a 10-year period.

Table II presents bivariate analysis of independent variables with each acceptance of domestic violence justification. It also informs proportion (prevalence) differences of all women’s approvals by characteristics of women, husband and household. Based on bivariate

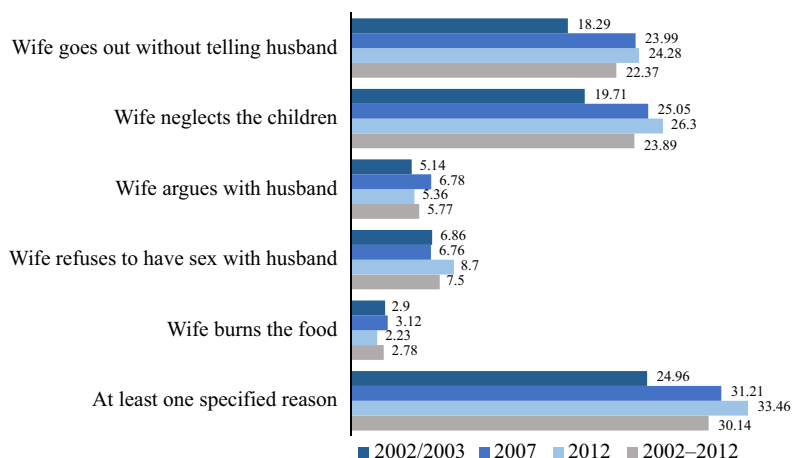


Figure 1.
Women’s acceptance of domestic physical violence justifications perpetrated by husband in Indonesia

(continued)

Variables	Acceptance 1		Acceptance 2		Acceptance 3		Acceptance 4		Acceptance 5		Acceptance 6	
	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)
<i>Women</i>												
Age (years)												
15-19	68.72	31.28	67.61	32.39	90.88	9.12	89.27	10.73	95.87	4.13	60.13	39.87
20-24	72.84	27.16	70.00	30.00	93.25	6.75	91.42	8.58	96.88	3.12	63.02	36.98
25-29	75.50	24.50	72.52	27.48	94.19	5.81	92.23	7.77	97.20	2.80	66.49	33.51
30-34	77.72	22.28	76.45	23.55	94.74	5.26	92.61	7.39	97.49	2.51	70.21	29.79
35-39	79.08	20.92	77.70	22.30	94.45	5.55	92.53	7.47	97.28	2.72	71.46	28.54
40-44	80.46	19.54	79.76	20.24	94.78	5.22	93.02	6.98	97.30	2.70	73.78	26.22
45-49	81.30	18.70	81.39	18.61	94.24	5.76	93.75	6.25	97.29	2.71	75.45	24.55
Educational attainment												
No education	79.41	20.59	80.54	19.46	90.45	9.55	91.86	8.14	96.11	3.89	74.11	25.89
Incomplete primary	77.02	22.98	76.26	23.74	92.82	7.18	91.39	8.61	95.96	4.04	69.88	30.12
Completed primary	76.44	23.56	75.29	24.71	93.79	6.21	91.67	8.33	96.76	3.24	68.66	31.34
Incomplete secondary	74.25	25.75	72.51	27.49	94.28	5.72	92.25	7.75	97.68	2.32	65.55	34.45
Completed secondary	79.81	20.19	77.09	22.91	96.02	3.98	94.08	5.92	98.15	1.85	71.50	28.50
Higher	86.14	13.86	83.26	16.74	97.08	2.92	95.34	4.66	98.89	1.11	79.23	20.77
Child marriage status												
No (≥ 18 years old)	78.79	21.21	76.59	23.41	94.80	5.20	93.22	6.78	97.52	2.48	70.67	29.33
Yes (< 18 years old)	75.60	24.40	75.28	24.72	93.23	6.77	91.26	8.74	96.69	3.31	68.44	31.56
Occupational status												
Unemployed	78.04	21.96	76.68	23.32	94.81	5.19	93.05	6.95	97.61	2.39	70.78	29.22
Employed	77.34	22.66	75.70	24.30	93.82	6.18	92.12	7.88	96.94	3.06	69.21	30.79
<i>Husband</i>												
Age												
\leq Wife's age	79.47	20.53	77.48	22.52	94.47	5.53	93.45	6.55	97.44	2.56	71.60	28.40
1-5 years older	77.59	22.41	75.92	24.08	94.15	5.85	92.40	7.60	97.26	2.74	69.68	30.32
6-10 years older	76.57	23.43	75.39	24.61	94.30	5.70	92.36	7.64	97.18	2.82	68.83	31.17
> 10 years older	78.16	21.84	77.12	22.88	94.12	5.88	92.14	7.86	96.83	3.17	71.14	28.86
Educational attainment												
No education	77.19	22.81	77.11	22.89	89.99	10.01	91.86	8.14	96.20	3.80	71.13	28.87
Incomplete primary	76.77	23.23	76.03	23.97	93.11	6.89	91.34	8.66	96.24	3.76	69.28	30.25

Table II. Bivariate analysis of factors associated with married women's acceptance of domestic physical violence justifications perpetrated by the husband in Indonesia

Table II.

Variables	Acceptance 1		Acceptance 2		Acceptance 3		Acceptance 4		Acceptance 5		Acceptance 6	
	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)
Completed primary	76.80	23.30	75.96	24.04	93.85	6.15	91.66	8.34	96.85	3.15	69.28	30.72
Incomplete secondary	75.30	24.70	72.94	27.06	94.07	5.93	92.00	8.00	97.14	2.86	66.35	33.65
Completed secondary	78.48	21.52	76.39	23.61	95.35	4.65	93.64	6.36	97.94	2.06	70.23	29.77
Higher	85.04	14.96	82.71	17.29	96.55	3.45	95.68	4.32	98.82	1.18	78.39	21.61
Occupational status	$\chi^2 = 8.56$		$\chi^2 = 11.82^*$		$\chi^2 = 6.24$		$\chi^2 = 0.003$		$\chi^2 = 15.87^*$		$\chi^2 = 6.42$	
Unemployed	80.18	19.82	79.19	20.81	93.01	6.99	92.53	7.47	95.85	4.15	72.30	27.70
Employed	77.56	22.44	76.03	23.97	94.26	5.74	92.50	7.50	97.25	2.75	69.80	30.20
<i>Household</i>												
Number of living children	$\chi^2 = 5.63$		$\chi^2 = 31.42^{**}$		$\chi^2 = 95.12^{***}$		$\chi^2 = 43.27^{***}$		$\chi^2 = 61.38^{***}$		$\chi^2 = 20.07^*$	
No children	76.62	23.38	75.02	24.98	93.85	6.15	92.43	7.57	97.06	2.94	68.61	31.39
1-2 children	77.69	22.31	75.65	24.35	94.73	5.27	92.87	7.13	97.51	2.49	69.58	30.42
3-5 children	77.84	22.16	77.26	22.74	93.80	6.20	92.15	7.85	96.94	3.06	70.80	29.20
> 5 children	77.10	22.90	75.85	24.15	91.25	8.75	90.19	9.81	95.59	4.41	69.07	30.93
Wealth index	$\chi^2 = 991.33^{***}$		$\chi^2 = 948.48^{***}$		$\chi^2 = 1,152.67^{***}$		$\chi^2 = 584.31^{***}$		$\chi^2 = 810.05^{***}$		$\chi^2 = 1,106.15^{***}$	
Poorest	71.81	28.19	69.83	30.17	89.56	10.44	89.43	10.57	94.39	5.61	62.92	37.08
Poorer	74.06	25.94	73.32	26.68	93.25	6.75	91.03	8.97	96.83	3.17	66.25	33.75
Middle	77.20	22.80	75.74	24.26	94.44	5.56	92.26	7.74	97.31	2.69	69.24	30.76
Richer	80.34	19.66	78.24	21.76	96.31	3.69	94.02	5.98	98.39	1.61	72.47	27.53
Richest	84.16	15.84	82.84	17.16	97.18	2.82	95.48	4.52	98.94	1.06	77.78	22.22
Residential type	$\chi^2 = 710.11^{***}$		$\chi^2 = 559.37^{***}$		$\chi^2 = 471.75^{***}$		$\chi^2 = 383.40^{***}$		$\chi^2 = 343.20^{***}$		$\chi^2 = 697.79^{***}$	
Urban	81.66	18.34	79.78	20.22	96.07	3.93	94.38	5.62	98.33	1.67	74.27	25.73
Rural	74.24	25.76	73.03	26.97	92.68	7.32	90.93	9.07	96.29	3.71	66.16	33.84
Region	$\chi^2 = 1,321^{***}$		$\chi^2 = 1,546.35^{***}$		$\chi^2 = 2,596.51^{***}$		$\chi^2 = 944.68^{***}$		$\chi^2 = 1,045.32^{***}$		$\chi^2 = 1,570.30^{***}$	
Java	81.24	18.76	80.29	19.71	96.41	3.59	94.20	5.80	98.44	1.56	74.45	25.55
Bali, Nusa Tenggara	63.88	36.12	62.30	37.70	80.37	19.63	83.67	16.33	92.43	7.57	56.33	43.67
Sumatera	72.81	27.19	69.68	30.32	93.08	6.92	90.13	9.87	96.13	3.87	62.63	37.37
Borneo (Kalimantan)	76.62	23.38	72.54	27.46	93.94	6.06	92.91	7.09	96.82	3.18	66.83	33.17
Sulawesi	72.38	27.62	72.37	27.63	91.45	8.55	91.20	8.80	94.22	5.78	64.93	35.07
Maluku, Papua	69.94	30.06	69.97	30.03	83.54	16.46	90.22	9.78	94.11	5.89	59.30	40.70

Notes: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

analysis using a χ^2 test, almost all women's characteristics (age, educational level, child marriage status and occupational level) were associated with all acceptances of domestic violence justification. Regarding the husband's characteristics, while their age and educational level were associated with some women's approvals, only their educational level was associated significantly with all acceptances. Meanwhile, all variables under household's characteristics (number of living children, wealth index, residential type and region) were associated with the acceptance of being beaten by their husband in almost all circumstances.

Table III presents six multivariate models of women's acceptance of each beating justification: model 1 (wife goes out without telling husband); model 2 (wife neglects the children); model 3 (wife argues with husband); model 4 (wife refuses to have sex with husband); model 5 (wife burns the food); and model 6 (at least one specified reason). Based on women's age, the likelihood of women's acceptance declined gradually by an increase in the age group, found in all models. A higher educational level affected the more acceptable of physical violence justification in models 1, 2 and 6 whereas an opposite effect was presented in models 3 and 5. Interestingly, almost all models showed that less acceptance was found among higher educated women. Moreover, those experiencing child marriage were more likely to accept several justifications and employed women were more likely to accept almost all beating justifications. Regarding husband's characteristics, only model 5 showed that women with working husbands were less likely to accept beating justification because of burning the food.

For household factors, having more children increased the likelihood of women's acceptance. In addition, the better the household economic status (wealth index), the less likely they accepted beating justification. Meanwhile, living in rural areas contributed to increase the likelihood, found in all models. Similarly, those settled outside Java were more likely to accept any justification of domestic physical violence.

Based on model 6, the margin probability of women's acceptance was calculated by comparing some characteristics of a couple as presented in Figures 2 and 3. According to Figure 2, the highest probability of women's acceptance was among a couple of a woman aged 15–19 years old while her husband was 6–10 years older; whereas the lowest probability occurred among a combination of a 45–49 year-old woman and a husband who was 10–years older. Regarding educational attainment presented in Figure 3, the probability of acceptance reached a peak among both, the woman and her husband who did not complete secondary education. Interestingly, having a husband who had completed his higher education contributed to lower probability across all educational attainments of a woman. While having a higher educated husband, an uneducated woman, as well as a higher educated one, experienced the lowest probability.

Discussion

This study employed five circumstances of justification for wife beating to measure women's vulnerability to domestic physical violence. The recorded justifications provide comprehensive and validated measurement and are widely applied for assessing women's attitudes toward domestic violence. During a 10-year period (2002–2012), several women's acceptances increased such as "wife goes out without telling husband," "wife neglects the children," and "wife refuses to have sex with husband," resulting in a gradual increase in women's acceptance of at least one specified reason. A sharp increase by 6.25 percent of at least one reason accepted during the first 5-year period might be due to the survey coverage in 2002/2003 where provinces with political instability were excluded, contributing to fewer women's opinion regarding this issue being documented. Obviously, conflict and political instability leads to women's vulnerability to experience domestic or gender-based violence[24, 25].

The patriachal system and gender norms remain strongly maintained by conservative people in Indonesian society. Not surprisingly, they are internalized since childhood

Table III.
Multivariate analysis of factors associated with married women's acceptance of domestic physical violence justifications perpetrated by their husbands in Indonesia

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	aOR	95%CI	aOR	95%CI	aOR	95%CI	aOR	95%CI	aOR	95%CI	aOR	95%CI
<i>Women</i>												
Age (years)												
15-19	ref		ref		ref		ref		ref		ref	
20-24	0.91	0.78-1.05	0.94	0.81-1.08	0.83	0.66-1.05	0.87	0.68-1.11	0.86	0.64-1.18	0.94	0.81-1.08
25-29	0.82**	0.71-0.94	0.84*	0.73-0.97	0.72**	0.57-0.92	0.80	0.63-1.01	0.80	0.57-1.11	0.82**	0.71-0.95
30-34	0.73***	0.62-0.85	0.69***	0.59-0.81	0.65**	0.51-0.84	0.75*	0.58-0.96	0.72*	0.51-0.99	0.70***	0.60-0.82
35-39	0.67***	0.57-0.78	0.65***	0.55-0.75	0.67**	0.52-0.86	0.73*	0.57-0.94	0.75	0.53-1.06	0.66***	0.56-0.77
40-44	0.61***	0.52-0.72	0.58***	0.49-0.68	0.59***	0.45-0.77	0.65**	0.52-0.84	0.71	0.50-1.01	0.59***	0.50-0.69
45-49	0.57***	0.47-0.67	0.52***	0.44-0.61	0.61***	0.46-0.80	0.55***	0.42-0.72	0.65***	0.46-0.94	0.53***	0.45-0.62
<i>Educational attainment</i>												
No education	ref		ref		ref		ref		ref		ref	
Incomplete primary	1.17*	1.02-1.33	1.30**	1.14-1.48	0.89	0.74-1.06	1.08	0.91-1.27	1.11	0.90-1.38	1.24***	1.09-1.39
Completed primary	1.23**	1.07-1.41	1.38**	1.20-1.57	0.83*	0.69-0.99	1.09	0.91-1.30	1.00	0.80-1.27	1.31***	1.16-1.49
Incomplete secondary	1.36***	1.18-1.57	1.52**	1.32-1.74	0.77**	0.63-0.94	1.05	0.87-1.27	0.73*	0.57-0.93	1.45***	1.27-1.66
Completed secondary	1.15	0.99-1.34	1.36**	1.18-1.58	0.62***	0.50-0.79	0.98	0.79-1.22	0.74	0.54-1.01	1.26**	1.09-1.45
Higher	0.88	0.73-1.06	1.10	0.92-1.33	0.53***	0.39-0.72	0.98	0.75-1.27	0.58*	0.39-0.88	0.99	0.83-1.17
<i>Child marriage status</i>												
No (≥ 18 years old)	ref		ref		ref		ref		ref		ref	
Yes (< 18 years old)	1.11***	1.05-1.18	1.04	0.99-1.11	1.15**	1.04-1.27	1.16***	1.07-1.27	1.08	0.96-1.22	1.06*	1.01-1.12
<i>Occupational status</i>												
Unemployed	ref		ref		ref		ref		ref		ref	
Employed	1.07*	1.01-1.13	1.10**	1.04-1.16	1.07	0.98-1.17	1.09*	1.01-1.20	1.16*	1.02-1.32	1.13***	1.07-1.19
<i>Husband</i>												
Age												
≤ Wife's age	ref		ref		ref		ref		ref		ref	
1-5 years older	1.03	0.96-1.11	1.03	0.96-1.10	0.99	0.88-1.11	1.09	0.97-1.22	1.03	0.87-1.21	1.03	0.96-1.10
6-10 years older	1.08	0.99-1.17	1.06	0.98-1.14	0.99	0.86-1.13	1.09	0.95-1.25	1.10	0.91-1.33	1.06	0.98-1.14
> 10 years older	0.97	0.87-1.06	0.95	0.86-1.05	0.90	0.77-1.05	1.07	0.92-1.25	1.08	0.87-1.33	0.94	0.85-1.03
<i>Educational attainment</i>												
No education	ref		ref		ref		ref		ref		ref	
Incomplete primary	0.99	0.85-1.15	0.97	0.84-1.12	0.87	0.72-1.05	1.11	0.92-1.35	1.18	0.89-1.54	1.00	0.87-1.15

(continued)

Variables	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	aOR	95%CI	aOR	95%CI	aOR	95%CI	aOR	95%CI	aOR	95%CI	aOR	95%CI
Completed primary	0.98	0.84-1.14	0.93	0.80-1.09	0.92	0.76-1.12	1.13	0.92-1.38	1.21	0.91-1.62	0.99	0.86-1.15
Incomplete secondary	1.04	0.88-1.22	1.03	0.88-1.22	0.93	0.76-1.13	1.11	0.91-1.35	1.20	0.89-1.61	1.08	0.93-1.26
Completed secondary	1.04	0.88-1.23	1.00	0.85-1.17	0.96	0.77-1.18	1.04	0.83-1.28	1.18	0.87-1.60	1.06	0.92-1.24
Higher	0.87	0.71-1.07	0.86	0.71-1.04	0.96	0.72-1.30	0.82	0.63-1.06	0.94	0.63-1.42	0.90	0.75-1.07
Occupational status												
Unemployed	ref		ref		ref		ref		ref		ref	
Employed	1.07	0.89-1.28	1.06	0.89-1.24	0.79	0.60-1.03	0.92	0.71-1.17	0.58**	0.39-0.86	1.00	0.85-1.18
<i>Household</i>												
Number of living children												
No children	ref		ref		ref		ref		ref		ref	
1-2 children	1.03	0.94-1.13	1.09	0.99-1.19	0.96	0.82-1.11	1.00	0.87-1.15	0.92	0.75-1.14	1.07	0.98-1.17
3-5 children	1.10	0.99-1.23	1.13*	1.02-1.26	1.05	0.88-1.24	1.11	0.94-1.31	0.98	0.78-1.24	1.13*	1.02-1.25
> 5 children	1.13	0.97-1.32	1.26**	1.09-1.47	1.26	0.99-1.59	1.35**	1.08-1.69	1.14	0.86-1.52	1.25**	1.08-1.44
Wealth index												
Poorest	ref		ref		ref		ref		ref		ref	
Poorer	1.02	0.94-1.11	0.96	0.88-1.04	0.83**	0.74-0.93	0.99	0.88-1.11	0.74***	0.64-0.86	0.98	0.91-1.07
Middle	0.94	0.85-1.03	0.90*	0.82-0.99	0.79**	0.69-0.91	0.95	0.84-1.08	0.76**	0.64-0.90	0.91	0.84-1.01
Richer	0.85**	0.76-0.94	0.84**	0.75-0.93	0.59***	0.50-0.69	0.81*	0.67-0.96	0.54***	0.42-0.67	0.85**	0.76-0.94
Richest	0.77***	0.68-0.88	0.71***	0.63-0.81	0.52***	0.43-0.63	0.72***	0.59-0.86	0.44***	0.35-0.56	0.74***	0.65-0.83
Residential type												
Urban	ref		ref		ref		ref		ref		ref	
Rural	1.23***	1.12-1.35	1.17**	1.07-1.28	1.17**	1.03-1.33	1.23**	1.07-1.40	1.26**	1.06-1.49	1.18**	1.08-1.30
Region												
Java	ref		ref		ref		ref		ref		ref	
Bali, Nusa Tenggara	2.32***	2.06-2.63	2.30***	2.04-2.60	5.64***	4.83-6.58	2.96**	2.53-3.46	4.29***	3.47-5.29	2.12***	1.88-2.39
Sumatera	1.49***	1.36-1.63	1.61***	1.47-1.75	1.79***	1.55-2.07	1.64**	1.44-1.86	2.22***	1.83-2.70	1.58***	1.45-1.73
Borneo (Kalimantan)	1.17**	1.05-1.31	1.36***	1.21-1.51	1.41***	1.18-1.69	1.09	0.93-1.28	1.65***	1.29-2.12	1.28***	1.15-1.43
Sulawesi	1.49***	1.32-1.69	1.39***	1.24-1.56	2.12***	1.80-2.48	1.41***	1.20-1.65	3.24***	2.61-4.01	1.42***	1.28-1.58
Maluku, Papua	1.66***	1.39-1.97	1.54***	1.31-1.81	3.86***	3.16-4.72	1.53***	1.26-1.85	2.88***	2.21-3.76	1.77***	1.50-2.08
F-statistics (df)	21.73 (35; 4812)***		24.04 (35; 4812)***		30.87 (35; 4812)***		14.54 (35; 4812)***		17.14 (35; 4812)***		24.75 (35; 4812)***	

Notes: aOR= adjusted odds ratio; CI= confidence interval; df=degree of freedom. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table III.

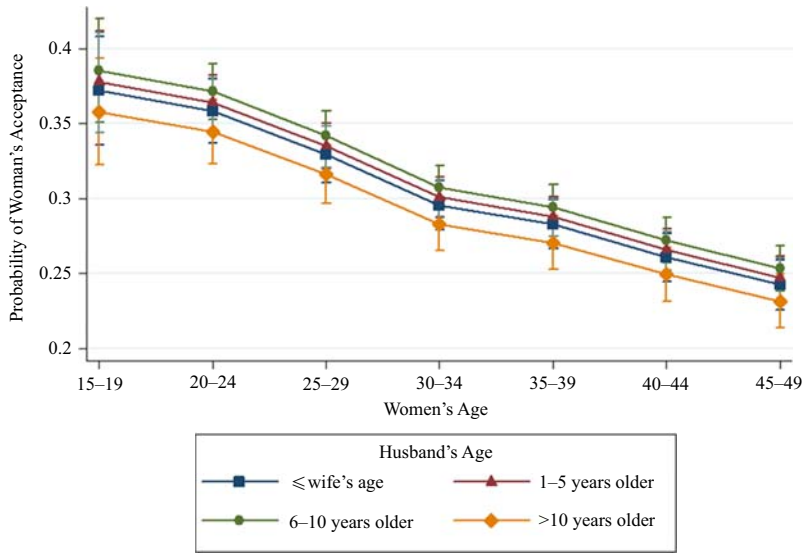


Figure 2. Probability of women's acceptance based on age of couples

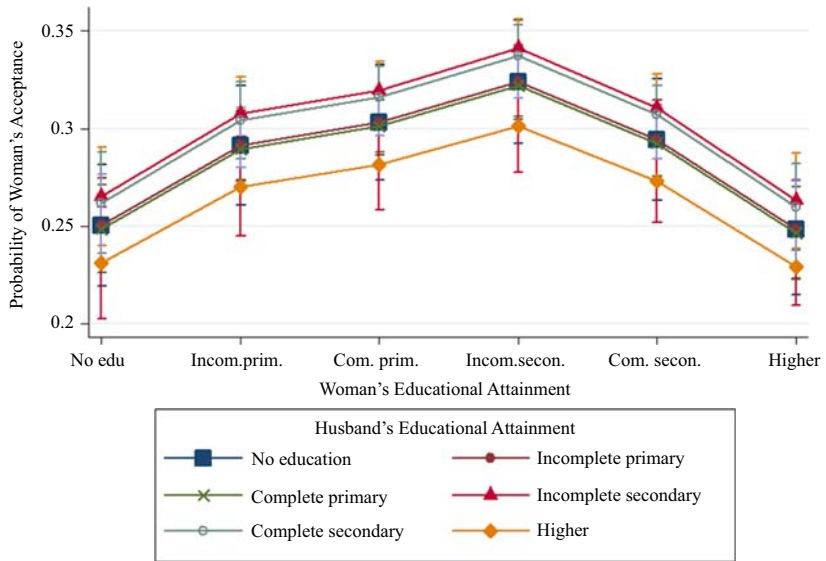


Figure 3. Probability of women's acceptance based on the educational attainment of couples

within the family and this practice continues amongst adolescent females during their schooling. As part of the learning process in the school, adolescent females might be exposed to discourse related to gender norms which are integrated into some subjects such as religion, social science and culture. Due to the strong exposure to socially-constructed roles in primary and secondary school, females are more inclined to accept their role as ideal housewife and mother to their children and allow their husband to determine their social life. This might be a reason underlying an increase by

2.25 percent during 2007–2012 as women’s attendance in secondary school also went up in that period. It aligns with a finding from multivariate analysis showing that those who attended primary and secondary education were more likely to accept some beating justifications for leaving home without informing their partner, neglecting the children, and at least one specified reason. However, no significant difference was found between higher educated women and uneducated women. This indicates that enrollment in primary and secondary education might affect a woman’s attitude and acceptance of her defined role expectations as house worker or mother due to these defined gender roles in school; hence, their acceptance of being beaten for not fulfilling what society expects of them. Nevertheless, women’s acceptance of beating justification is predicted to fall during the following years in line with the increase by 6.65 percent for the first 5-year period that declined to 2.25 percent for the second 5-year period.

Moreover, those who have the opportunity to continue their studies into post-secondary education enrollment might change their attitudes and disapprove of any justification for domestic physical violence. Similarly, a finding from another study showed that education was negatively associated with violence for women who completed secondary school or higher education only[26]. In addition, Coles and Kotsadam found that the relationship of education and domestic violence is hump-shaped (inverted U) where women who completed their elementary and secondary schooling were more likely to be abused compared to those without education and with post-secondary education[27]. In different circumstances, an increase in educational levels lowers the likelihood of beating justification approval because of arguing with husband and burning the foods. This is consistent with previous studies where those who completed their higher education were more likely to reject domestic violence[28, 29].

In addition to women’s educational attainment, the age of women was identified as a strong determinant of their acceptance. Both of these women’s characteristics remained to show significant effects from the bivariate to the multivariate model which have been controlled for their husband’s and household’s characteristics. This study found that older married women were less likely to accept beating justifications compared to adolescent mothers. In addition, experiencing child marriage contributes to higher levels of acceptance of domestic violence because it leads to economic dependence among married women in the household, driving to low autonomy in decision-making and obedience to their husband[30].

Interestingly, this study found that employed married women were more likely to accept domestic violence. Other studies also showed the same finding where women with income were more likely to be abused more frequently or have relatively higher acceptances of wife beating[1, 27]. This relationship should be interpreted with the caution that the working status among married women cannot represent the various levels of income and whether they earned higher than their spouse. In some cases in Indonesia, even though women are allowed to work by their husbands, their duty as a mother and other domestic workloads were still firmly attached under their sphere of responsibility. In addition, the gender wage gap continues to remain in Indonesia due to gender discrimination resulting in a lower salary earned by females[31]. Due to the double burdens faced by married working women compounded by their lower wage, they are more vulnerable to being domestic physical violence survivors.

The husband’s characteristics turned to be insignificant in multivariate models even if they were significantly associated in the bivariate analysis. Those might not be strong determinants of their partner’s acceptance. Occupational status was the only significant determinant of the husband’s characteristics where employed husbands decreased the women’s acceptance of beating because of burning the foods (model 5). According to margin probability, having a 10-year difference in age or a husband who completed his post-secondary education resulted in the lowest probability of the acceptance of wife beating among married women. Higher educational levels, as well as an increase in age,

may impact on and increase our insight into and increase exposure to the global notion of rejecting partner violence among husbands[32]. Similar to several previous finding, higher education attainment is negatively correlated with being a perpetrator, affecting less acceptance of wife beating[27, 33].

Focusing on household factors, having more children resulted in an increased acceptance of some beating justifications. It may be because having more children increased financial needs[1]. Furthermore, it also impacted on the mother's opportunity to earn an income by working outside since they she needed to take care of her children and perform other unpaid household chores resulting in dependency on the husband and a higher vulnerability to domestic physical violence. In addition, a better socio-economic status of married couples declined the attitude of wives to accept beating justification, found in all models. With the same explanation as resource theory, women in the poorest and poorer household tend to be dependent on their husband, affecting their acceptance of domestic physical violence[28].

Based on the geographical areas, living in a rural area increased women's acceptance of domestic violence. Living in a rural area is not only related to low socio-economic society, but also because, in rural areas, traditional society has an increased importance in maintaining gender roles, patriarchal norms and cultural values. When patriarchal norms are strongly maintained in a community, the authoritarian behavior of the husband is increasingly accepted[13]. In addition, Benson *et al.* also argued that more violence in poor communities is related to cultural and institutional reasons[34]. This finding is similar to a previous study in African countries which revealed that living in poorer areas leads to acceptance of wife beating[35]. Based on region, the finding clearly showed that those settled in non-Java regions increased the approval of beating justification. It may be related to socio-economic status at macro level where Java is a more developed region than others. Prevalence of child marriage practice as one of the predictors of women's acceptance was also found higher in some provinces outside the Java regions[36]. In addition, it might be related to the prevalence that patrilocal residence is predominated in the non-Java regions[6], supported by Rohamman and Johar's study that married women living in patrilocal communities reduced their physical autonomy[37].

The findings of this study suggest that increasing the opportunity of school enrollment until post-secondary education for girls before getting married is worth considering at community level. It must be followed by developing facilities of accessible and affordable school for secondary and higher education, particularly in rural or less developed areas as well as promoting education as a basic right for females in family. Regarding higher educational levels, it leads women to have more control in decision-making related to themselves and more opportunity to participate in a better paid labor market[37]. In the union, educated women will have more capability to negotiate with their husband in making an informed decision with less dependency on their husband[38]. Furthermore, spending more time in education has the positive result of delaying child marriage as a predictor in this study. In addition, promoting higher education among men is also essential. When both couples complete higher levels of education, it positively impacts on the household economic status, and reduces the likelihood of domestic violence. At the policy level, in an effort to avert child marriage practice, Indonesian Marriage Law No. 1/1974, article 7 paragraph (1) states that the 16 years minimum age of marriage for woman should be revised to be at least 18 years old, following Indonesian Child Protection Law No. 35/2014 and must be enacted equally for both sexes. Revising this law by enactment of the same minimum age of marriage between male and female can also stimulate a positive atmosphere of gender equality in the society.

This study has a number of limitations including the design of the cross-sectional study excluding temporal relationship that could not be examined. Since this study employed

secondary data, it impacts on the restriction of the independent variables such as income level among couples and other social and cultural factors that were not measured. In addition, women's acceptance of wife beating in this study was only measured by close-ended questions so that the responses were restricted, and also, attitudes toward these accepted practices could not be probed deeply. Therefore, future studies using a qualitative approach are needed to explain this issue.

Conclusion

Women's acceptance of wife beating perpetrated by their husbands experienced an increase during 2002–2012. Several characteristics relating to the married woman, husband, and the household arrangement were significant determinants, and reflecting those factors contribute to women's vulnerability of being domestic physical violence survivors. Therefore, it is worth considering the option of increasing women's access to and enrollment on to higher education as a means of empowerment whilst also preventing child marriage practices.

References

1. Awang H, Hariharan S. Determinants of domestic violence: evidence from Malaysia. *J Fam Violence*. 2011; 26(6): 459-64.
2. World Health Organization [WHO]. Violence against women; 2017 [cited 2018 Apr 6]. Available from: www.who.int/news-room/fact-sheets/detail/violence-against-women
3. Abramsky T, Watts CH, Garcia-Moreno C, Devries K, Kiss L, Ellsberg M, *et al*. What factors are associated with recent intimate partner violence? Findings from the WHO multi-country study on women's health and domestic violence. *BMC Public Health*. 2011 Feb 16; 11: 109. doi: 10.1186/1471-2458-11-109
4. Haj-Yahia MM. Can people's patriarchal ideology predict their beliefs about wife abuse? The case of Jordanian men. *J Community Psychol*. 2005; 33(5): 545-67.
5. Croll E. *Endangered daughters: discrimination and development in Asia*. New York, NY: Routledge; 2000.
6. Guilhoto CZ. Mapping the diversity of gender preferences and sex imbalances in Indonesia in 2010. *Popul Stud (Camb)*. 2015; 69(3): 299-315. doi: 10.1080/00324728.2015.1091603. Epub 2015 Oct 15.
7. Ida R. The construction of gender identity in Indonesia: between cultural norms, economic implications, and state formation. *Masyarakat, Kebudayaan dan Politik*. 2001; 14(1): 21-34.
8. Munir LZ. Domestic violence in Indonesia. *Muslim World Journal of Human Rights*. 2005; 2(1). Available from: <https://doi.org/10.2202/1554-4419.1031>.
9. Blackburn S. *Women and the state in modern Indonesia*. Cambridge: Cambridge University Press; 2004.
10. Robinson K. *Gender, Islam and democracy in Indonesia*. London: Routledge; 2008.
11. Ford M, Parker L. *Women and work in Indonesia*. London: Routledge; 2008.
12. Obie M. Violence against women in Muna, Southeast Sulawesi, Indonesia (A perspective of gender sociology). *The Social Science*. 2018; 13(1): 154-9. doi: 10.3923/sscience.2018.154.159
13. Nilan P, Demartoto A, Broom A, Germov J. Indonesian men's perceptions of violence against women. *Violence Against Women* 2014 Jul; 20(7): 869-88. doi: 10.1177/1077801214543383. Epub 2014 Jul 18.
14. Statistics Indonesia. Ministry of woman empowerment and child protection. *Eliminating violence against women and child in Indonesia*. Jakarta: BPS, Ministry of Woman Empowerment and Child Protection; 2017. (In Indonesian).

15. Bennett LR, Andajani-Sutjahjo S, Idrus NI. Domestic violence in Nusa Tenggara Barat, Indonesia: married women's definitions and experiences of violence in the home. *The Asia Pacific Journal of Anthropology*. 2011; 12(2): 146-63.
16. Hayati EN, Högberg U, Hakimi M, Ellsberg MC, Emmelin M. Behind the silence of harmony: risk factors for physical and sexual violence among women in rural Indonesia. *BMC Womens Health*. 2011 Nov 23; 11: 52. doi: 10.1186/1472-6874-11-52
17. Shiyun SC, Hazizan A, Meng LX, Wee LY, Hung ST, Winarto H, *et al*. Age, low education and unemployment are associated with intimate partner violence among women. *Indones J Obstet Gynecol*. 2013; 37(2): 63-70.
18. Dutton MA, Green BL, Kaltman SI, Roesch DM, Zeffiro TA, Krause ED. Intimate partner violence, PTSD, and adverse health outcomes. *J Interpers Violence*. 2006 Jul; 21(7): 955-68.
19. Heaman MI. Relationships between physical abuse during pregnancy and risk factors for preterm birth among women in Manitoba. *J Obstet Gynecol Neonatal Nurs*. 2005 Nov-Dec; 34(6): 721-31.
20. Taft Angela J, Powell Rhonda L, Watson Lyndsey F. The impact of violence against women on reproductive health and child mortality in Timor-Leste. *Aust N Z J Public Health*. 2015 Apr; 39(2): 177-81. doi: 10.1111/1753-6405.12339. Epub 2015 Feb 25.
21. Statistics Indonesia. National Population and Family Planning Board (BKKBN), ICF international. Indonesia demographic and health survey 2012. Jakarta: BPS, BKKBN, Kemenkes, ICF International; 2013.
22. Rutstein SO, Rojas G. Guide to DHS statistics. Calverton, MD: Measure DHS ICF International; 2006.
23. Statistics Indonesia, ORC Macro. Indonesia demographic and health survey 2002-2003. Calverton, MD: BPS, ORC Macro; 2003.
24. Ukrainian Centre for Social Reforms. Gender-based violence in the conflict-affected regions of Ukraine: analytical report. Kyiv: Ukrainian Centre for Social Reforms; 2015.
25. Gutierrez IA, Gallegos JV. The effect of civil conflict on domestic violence: the case of Peru. Santa Monica, CA: RAND Corporation; 2016.
26. Seema V, Charlotte W. How does economic empowerment affect women's risk of intimate partner violence in low and middle income countries? A systematic review of published evidence. *J Inter Develop*. 2009; 21(5): 577-602.
27. Cools S, Kotsadam A. Resources and intimate partner violence in Sub-Saharan Africa. *World Dev* 2017; 95: 211-30.
28. Doku DT, Asante KO. Women's approval of domestic physical violence against wives: analysis of the Ghana demographic and health survey. *BMC Womens Health*. 2015 Dec 21; 15: 120. doi: 10.1186/s12905-015-0276-0
29. Trinh OTH, Oh J, Choi S, To KG, Van Do D. Changes and socioeconomic factors associated with attitudes towards domestic violence among Vietnamese women aged 15–49: findings from the multiple indicator cluster surveys, 2006–2011. *Glob Health Action*. 2016 Feb 29; 9: 29577. doi: 10.3402/gha.v9.29577
30. Sah R, Gaurav K, Baral D, Subedi L, Jha N, Pokharel P. Factors affecting early age marriage in Dhankuta municipality, Nepal. *Nepal Journal of Medical Sciences*. 2014; 3(1): 26-30.
31. Taniguchi K, Tuwo A. New evidence on the gender wage gap in Indonesia. Manila: Asian Development Bank; 2014.
32. Pierotti RS. Increasing rejection of intimate partner violence: evidence of global cultural diffusion. *Am Sociol Rev*. 2013; 78(2): 240-65. Available from: doi.org/10.1177/0003122413480363
33. Jewkes R. Intimate partner violence: causes and prevention. *Lancet*. 2002 Apr 20; 359(9315): 1423-9.
34. Benson ML, Fox GL, DeMaris A, Van Wyk J. Neighborhood disadvantage, individual economic distress and violence against women in intimate relationships. *Journal of Quantitative Criminology*. 2003; 19(3): 207-35.

35. Uthman OA, Moradi T, Lawoko S. Are individual and community acceptance and witnessing of intimate partner violence related to its occurrence? Multilevel structural equation model. PLoS One. 2011; 6(12): e27738. doi: 10.1371/journal.pone.0027738
36. The United Nations Children's Fund [UNICEF]. Policy brief child marriage in Indonesia: past progress at a standstill. Jakarta: UNICEF; 2014.
37. Rammohan A, Johar M. The determinants of married women's autonomy in Indonesia. Fem Econ 2009; 15(4): 31-55.
38. Ooman N, Lule E, Vazirani D, Chhbra R. Indonesia: inequalities in health and population. Washington, DC: The World Bank; 2003.

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