ORIGINAL ARTICLE

Gender-based Violence and Its Correlation With Children's Health - A Mixed Method Study

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ABSTRACT

Introduction: The number of women who experience gender-based violence (GBV) is higher among women living in rural areas and low-income countries. GBV not only causes problems for women but also affects the health of their children. This study aimed to describe the incident of GBV and its correlation with children's health. **Materials and methods:** A mixed-method design was used in this study. The research subjects were 120 mothers with children under five years old in Eastern Indonesia. The instrument used in this research was adapted from the Domestic Violence Module – Demographic and Health Surveys Methodology from USAID. **Results:** 50% of the respondents experienced GBV. There was no significant correlation between GBV in general and the history of having a baby with low birth weight (LBW) (p=0.239). However, one type of GBV, namely violence during pregnancy, was associated with the history of having a baby with LBW (p=0.035; OR=2.308 CI: 1.022-5.212). No relationship was found between GBV and the incidence of stunting (p=0.369). There was no correlation either between GBV and under-five mortality (p=0.619). However, the under-five mortality rate was higher among mothers who experienced violence (5%) compared to those who did not experience violence (1.7%). **Conclusion:** Half of the women in the research area have experienced GBV. There was no significant correlation between GBV and children's health, but mothers who experienced violence during pregnancy were at more risk of giving birth to babies with LBW. Furthermore, the history of under-five mortality rate was higher in mothers who experienced GBV.
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Keywords: Birth weight, Children's health, Gender-based violence, Under-five mortality, Violence during pregnancy

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INTRODUCTION

Gender-based violence (GBV) is any harmful act of sexual, physical, psychological, mental, and emotional harassment that is carried out against a person's will and that is based on differences that are ascribed to society (i.e., gender) between men and women (1). Women experience it more often than men, and there are significant differences in violence experienced by women in rural and urban areas, where in villages, the average incidence is higher (2). The subordinate and dependent position of women both economically and socially places women in a condition that is vulnerable to violence, including repeated abuse by their partners. At least one in 5 women has experienced physical or sexual violence in their lives perpetrated by men (3). Violence against women occurs throughout a woman's life cycle (4). The violence begins even before birth, in the womb, with the abortion of the female child and beatings by partners during pregnancy. This violence continues throughout infancy and childhood with malnutrition, lack of medical care, and sexual abuse of female children. This trend can then continue into adulthood, where women experience various forms of domestic violence.

Gender-based violence not only causes problems for women but can also affect the health of their children, both directly and indirectly (5). Women who experience five times or more violence by a partner are more likely to experience placental abruption, which results in intrauterine growth retardation and premature birth. This stunted growth has an impact on low birth weight (LBW). The greatest risk is fetal, infant, and maternal death (6). Similar research results also show that birth outcomes for women who experience partner violence are also worse than those who do not experience violence (5). Women

who experience violence are more likely to give birth to premature and LBW babies and require care in the Neonatal Intensive Unit. Another research conducted in Indonesia, in Ogan Komering Ulu Regency, Palembang, showed that mothers who experienced violence during pregnancy were 2.5 times more likely to have LBW babies (3). Based on data from the East Nusa Tenggara Province Women's Empowerment and Child Protection Service, it was found that many cases of violence were not reported. Therefore, there is a need for cooperation to prevent gender-based violence (7).

Domestic violence against women is a crucial social and health problem globally (8). Violence perpetrated by partners occurs in all countries, cultural groups, beliefs, and socio-economic groups in the world. In general, much of the violence perpetrated by these couples goes unreported. Throughout the world, 1 in 3 women experience violence in their lives, and most of it is perpetrated by their intimate partners (1,9). The two highest areas where women experience the most violence by intimate partners (intimate partner violence/ IPV) are Sub-Saharan Africa (the highest is in the Republic of Congo), where 33-47% of women aged 15-49 years have experienced IPV, and the Southeast Asia region (the highest is in Afghanistan and Bangladesh), where 35-50% of women of the same age have experienced IPV (10). Pregnant women have a prevalence of 6-7% experiencing violence during their pregnancy. When an unwanted pregnancy occurs, women will suffer four times more seriously. For pregnant and postnatal women, gender-based violence experienced will increase symptoms of depression and postpartum depression by 9-28%.

In Indonesia, data on violence against women was recorded at 11.3%, which was physical and/or sexual violence by partners, and 15.4% was violence by non-sexual partners (11). Data held by the Central Statistics Agency of Indonesia in 2016 shows that 1 in 3 women experience violence. Research in Makasar found that cases of gender-based violence include all types of violence regulated in the Gender-Based Violence Law, including GBV, violence against women, child obscenity, sexual intercourse with children, rape, abuse of women, and carrying away children (12). Data from the Religious Justice Agency of Indonesia shows a sharp spike in cases of gender-based violence, wherein in 2021, there were 3,838 cases of GBV, an increase of 80% compared to 2020 of 2,134 cases (13). In 2022, there is another increase of 50% compared to 2021. Data in Indonesia shows that cases of gender-based violence are high in Eastern Indonesia, especially in the East Nusa Tenggara. In January-August 2020, there were 31 cases reported where the perpetrator of the violence was someone close to them (14). In 2021, there were 399 cases of GBV, according to data from the Ministry of Women and Children Protection (15). The data shows that the problem of gender-based violence is becoming an increasingly serious issue that needs to be followed up.

GBV brings big impacts. Women who are victims of violence are at higher risk of experiencing physical and mental health problems, including injury, chronic pain, gynecological problems, gastrointestinal problems, substance abuse, depression, anxiety, and post-traumatic stress disorder (PTSD). Review research about intimate partner violence stated that violence correlates to various pregnancy complications, which have an impact on the physical health of women (mothers), resulting in injury to the mother or the uterus and placenta, and also other mechanisms for acute and chronic stress (6). In addition, physical and sexual violence experienced by women has a significant relationship with unwanted pregnancy, abortion, miscarriage, and having experienced termination of pregnancy (16).

Women are more likely to have stunted children if they have lifetime experiences with physical violence from their partners (17). Another research in Burkina Faso, children born to women who report experiencing emotional violence have a higher chance of experiencing stunting (18). In Cameroon, maternal exposure to physical and sexual violence is associated with a high risk of under-five mortality, and exposure to sexual violence alone is negatively associated with under-five mortality. In Zimbabwe, maternal exposure to physical violence is associated with a higher likelihood of stunting (18). In line with the results of the research, another study also shows that violence perpetrated by partners plays an important role in endangering children's health, which can cause nutritional disorders in children (19).

Previous research about the relationship between violence and birth outcomes was mostly conducted abroad. There is one research study in Palembang, Indonesia that studies the topic, and it used a quantitative research design. Research conducted in Eastern Indonesia using quantitative and qualitative methods has not been found. Therefore, this research aims to determine the relationship between gender-based violence and children's health, particularly regarding stunting, LBW, and infant mortality in the Eastern Indonesia region, using a mixed-method research design.

MATERIALS AND METHODS

This research used a mixed-method design with a concurrent approach, which is a research procedure where researchers combine quantitative and qualitative data to obtain a comprehensive analysis to answer research problems. Phase one of the research was carried out using a quantitative method. The method was used to determine the number of incidents of gender-based violence experienced by women and the forms of violence experienced, as well as to determine the relationship between gender-based

violence and children's health (stunting, LBW, and under-five mortality). The instrument used in this phase is a questionnaire adapted from the Domestic Violence Module – Demographic and Health Surveys Methodology prepared by USAID. Data regarding the number and types of gender-based violence were analyzed using univariate analysis. Data regarding the relationship between violence and children's health (stunting, LBW, and under-five mortality) were analyzed using bivariate analysis (Chi-square test). The bivariate analysis was carried out to test the hypothesis that there is a correlation between GBV and children's health (stunting, LBW, and under-five mortality).
After phase 1 was conducted, then phase 2 (qualitative method) was carried out. The qualitative method was applied to explore in more depth gender-based violence and the efforts made to prevent and overcome it. Qualitative research was carried out through focus group discussions (FGD) with community leaders and community health center officers. A question guide was used to carry out the FGD. Triangulation was carried out with other community leaders (health cadres).

The study is part of the PELKESI (Fellowship of Christian Services for Health in Indonesia) research project, which aims to describe the impact of PELKESI services on accelerating the reduction of stunting, maternal, and child mortality rates in Eastern Indonesia. Therefore, the subjects of this research are women with five-year-old children living in the working area of the PELKESI Hospital in Eastern Indonesia. The hospitals are located in East Sumba (one hospital) and West Sumba (one hospital); both hospitals are in East Nusa Tenggara, and one hospital is in Ambon, Maluku. The respondents of the study were 120 mothers of children under five years old living in those regions. The subjects for the FGD were community leaders and community health center officers, who were taken using purposive sampling techniques.

Ethical Clearance

This study was approved by the Research Ethics Committee, STIKES Bethesda YAKKUM, No. 156/KEPK.02.01/XI/2023.

RESULTS

Results from Quantitative Data Analysis on GBV

This research was conducted in East Nusa Tenggara (West Sumba and East Sumba Districts) and Ambon, Maluku. The number of respondents was 120 mothers with children under five years old. Respondents' characteristics are summarized in Table I.

Table I: Demographic Data of Respondents

NO	CHARACTERISTICS	TOTAL NUMBER (N=120)	
		Mean (Min-Max)	Frequency (%)
1	Current age (year)	31.17 (20-45)	
2	Age at first pregnancy (year)	24.11 (15-38)	
3	Education		
	a. Never went to School/ never graduated from school		3 (2.50%)
	b. Elementary School		13 (10.83%)
	c. Junior High School		18 (15%)
	d. Senior High School		68 (56.67%)
	e. Diploma or Bachelor		16 (13.33%)
	f. Master		2 (1.67%)
4	Residential area		
	a. Rural		64 (53.33%)
	b. Urban		56 (46.67%)
5	Monthly income (Rupiah)		
	a. <1.000.0000		45 (37.5%)
	b. 1.000.000 - 1.900.000		38 (31.67%)
	c. 2.000.000 - 3.000.000		24 (20%)
	d. >3.000.000		13 (10.83%)
6	Marriage status		
	a. Married, living with husband		110 (91.67%)
	b. Married, living separated from husband		3 (2.5%)
	c. Divorced		0 (0%)
	d. In a relationship		7 (5.83%)
	TOTAL		**120 (100%)**

In this study, the average age of respondents at the time of their first pregnancy was 24.11 years, with the youngest age being 15 years and the oldest age being 38 years. As many as 53.33% of respondents live in rural areas, and the majority of respondents (37.5%) have low income (less than IDR 1,000,000 per month).

Gender-based violence that occurs against women in the East Nusa Tenggara and Maluku regions is still common, as depicted in Table II. It can be seen from Table II that as many as 50% of respondents (60 women) have experienced gender-based violence. In this research, the violence experienced was categorized into four (4) types, namely physical violence, emotional violence, sexual violence, and violence during pregnancy. The number of respondents who experienced these types of violence is written in Table II.

Of the 60 respondents who experienced violence, 70% of them (42 women) experienced more than one type of violence (whether it is a combination of physical violence, emotional violence, sexual violence, or violence during pregnancy). The largest number (11 women or 18.33%) experienced all of the four types of violence, as described in Table II.

Table II: Numbers of respondents who experienced violence based on GBV's category.

NO	CHARACTERISTICS	NUMBER AND PERCENTAGE (n=120)
1	Do not experience violence	60 (50%)
2	Experience violence	60 (50%)
	a. Experience 1 type of violence	18 (15%)
	b. Experience 2 types of violence	19 (15.83%)
	c. Experience 3 types of violence	12 (10%)
	d. Experience 4 types of violence	11 (9.17%)
	TOTAL	**120 (100%)**

Results from Qualitative Data Analysis on GBV

Based on data from FGD results with health workers from community health centers, local governments, hospitals, village heads, NGOs, and women with children under five years old, data was found that cases of gender-based violence occur approximately 3 to 4 cases per month. The victims of this violence are mothers or children. So far, the community health center only provides physical care because patient privacy must be maintained. Moreover, the perpetrators of GBV are close people or their own family. Respondents conveyed the statement:

"Regarding gender-based violence, there is much violence that we help with at the community health center. In 1 month, there can be 3 to 4 cases; it was just yesterday there were cases of violence against mothers, and it must also be against their children, but we were at the community health center when the person concerned came; they usually do not come straight at the health center, so when the mother was abused, or beaten and she was injured, they immediately ran to the police. Later, the police will take the person concerned to the community health center. So, at that time, we immediately took her to the emergency room in the wound care room; after that, we also waited for a request from the police. When violence occurs, we just take care of it but without providing support or help or anything about this…. because of what? Because this is personal. So, because of the type of violence that occurs in society, it is not someone else who is hit; it is the husband... sometimes it is the child who gets hit, and sometimes it is the parents who get hit, so this is private, and we do not ask about those things either."

In West Sumba society, GBV is considered normal, so it does not need to be reported. There are customary fine rules that allow perpetrators who own much livestock to commit violence because they are able to pay the fine if the case is prosecuted. The following respondents conveyed this:

"Regarding GBV, one of our challenges is that they still feel that violence is normal…yes, it is normal. And then secondly, people do not want to report it because it is shameful…"

"Then, in here, there is the term payment…. "Pay Penyala", fine. Customary fines. So, they…. In the end, there is a stigma in society that... which... can lead to sexual violence… because, for example, if I have ten animals, and I get reported for sexual harassment, I can pay a fine."

The incident of GBV in Ambon is also considered as something normal. The consideration is due to the customary or cultural rule that the wife must submit to her husband. Therefore, GBV that wives experienced is rarely reported, as stated by the following participants:

"…in everyday conditions, it actually exists, but it is not reported. There are many incidents in the household, both verbal and physical."

"The reason why GBV is even more extreme is because there is a community with transgender, male sex with male, people living with HIV. However, the handling is always done in a friendly manner and resolved directly, though some are referred to legal aid. In fact, I think we are providing advocacy to the community so that they are braver in reporting the case. However, it is because of culture or habits…"

"So, in fact, there are quite a lot of GBVs, but actually, I do not blame why people are doing it because they have not been exposed to information about what gender-based violence is. Maybe they know about violence against women, violence against children… But, we do not know about gender-based violence yet."

The efforts made by the local government include paying attention to domestic violence cases by visiting victims and ensuring that perpetrators receive appropriate punishment. The local government stated:

"Regarding the domestic violence case that we ever handled at this health center before, we visited the victim first; she is from Patiala Bawah, her husband is from Kaura… The Head of this community health center handled that case, and I visited the patient here first. Now the case has been processed, and the court has given the husband a valid decision, and he is now in prison."

The advocacy carried out by the village government is to provide education and socialization about domestic violence. However, the problem is that social culture and awareness about domestic violence are not yet good. The statement is as expressed by the following village government statement:

"Because of social-cultural problems, there is a problem about awareness, which is why things like that still happen. However, if there is domestic violence in the village, yes, we will also play a role in providing understanding. However, if domestic violence exceeds

the above regulations, then we can no longer handle it, but like it or not, we will report it to the police. So, this will be the next process under the authority of the Women and Child Protection Service. At the village level, we are only limited to providing education to the community so that domestic violence will hopefully decrease slightly."

The Correlation between GBV and Birth Weight

The birth weight of the baby in relation to incidents of violence experienced by the mother is analyzed from the history of whether the mother has ever given birth to a low birth weight (LBW) baby or not, as written in Table III.

Table III: Correlation between GBV in mother and the History of LBW

	LBW history				p-value
	Never gave birth to a LBW baby		Have given birth to a LBW baby		
	n	%	n	%	
Do not experience violence	46	76.7	14	23.3	0.156
Experience violence	40	66.7	20	33.3	
TOTAL	**86**	**71.7**	**34**	**28.3**	

The results of the bivariate analysis using the Chi-square test between GBV and the history of giving birth to an LBW baby showed a p-value of> 0.05 (Table III), so it can be concluded that there is no relationship between incidents of violence and the occurrence of LBW (p=0.156).

In this research, the violence studied is not only physical but also emotional and sexual violence, as well as violence during pregnancy. The baby's birth weight is one of the pregnancy outcomes. Therefore, in this study, the correlation between a specific type of GBV experienced by the mother, namely violence during pregnancy, and the incidence of LBW is also analyzed, which is written in Table IV. Based on the table, violence experienced by the mother during pregnancy is significantly related to the history of giving birth to an LBW baby (p=0.035; p<0.05).

Table IV: The Correlation between Violence during Pregnancy and the History of Giving Birth to LBW Baby

	LBW History				p-value	OR (95% CI)
	Never gave birth to a LBW baby		Have given birth to a LBW baby			
	n	%	n	%		
Do not experience violence	60	77.9	17	22.1	0.035	2,308 (1,022 – 5,212)
Experience violence	26	60.5	17	39.5		
TOTAL	**86**	**71.7**	**34**	**28.3**		

The Correlation between GBV and Stunting

There are 8 stunted children (13.3%) from mothers who experience violence. However, based on data analysis that was carried out using the Chi-square test, the results showed that GBV was not significantly related to the incidence of stunting (p-value=0.369; >0.05).

The Correlation between GBV and Under-Five Mortality Mothers who have experienced violence have a higher mortality rate for children under five years old (5%) compared to mothers who have not experienced violence (1.7%). However, based on the analysis result using the Chi-square test, it is found that there is no relationship between gender-based violence and children's deaths (p-value = 0.619; p> 0.05).

DISCUSSION

GBV in Eastern Indonesia

The results of this research show that data on violence against women in East Nusa Tenggara and Maluku regions is very high. Table I shows that 60 mothers (50%) had experienced violence. This figure is higher than the average rate of violence throughout the world, where, according to WHO, the percentage of women who experience violence is 35%. The percentage of women who experience violence in this study is almost the same as the highest percentage of violence in the world, namely Afghanistan and Bangladesh, where 35-50% of women have experienced IPV (10).

Gender-based violence, particularly against women, is caused by complex factors, from individual, family, and community to national factors, which are associated with a high risk of IPV (10). Childhood experiences of domestic violence increase the risk of boys becoming perpetrators of violence, and girls are also twice as likely to experience IPV, based on Kishor & Johnson in The World Bank data (10). Apart from that, another individual, family, and community factor that is related to GBV is the presence of early marriage, where couples who marry under the age of 18 have a 22% higher risk of experiencing IPV. Furthermore, if a husband has a habit of drinking alcoholic beverages, it will increase the risk of IPV by five times in women (10,20). In addition, the number of women who experience domestic violence is higher among women living in low-income countries (21). This poverty factor is also found in the research location, which, apart from increasing the risk of gender-based violence, is also a risk factor for high levels of human trafficking (22).

Several other factors that cause violence against women are law enforcement, low legal awareness, strong patriarchal culture, economic conditions/poverty, and the habit of drinking alcohol (23). According to research in Indonesia, the Sumba region adheres to a patriarchal cultural system. Patriarchal culture is a culture that prioritizes men; they feel they have control over women and keep women dominated through various means (24). Men feel they have the right to determine the norms

of life and leadership styles, which they feel continue to strengthen their dominance and power. Violence against wives as an illustration of the patriarchal system eliminates women's control over production power, reproduction, sexuality, women's movements, property, and other economic resources (23). The system is what causes violence against women to remain high.

The result of this research is also in accordance with the results of previous research, which states that domestic violence experienced by Muslim women in Maluku has driving motives in the form of infidelity, polygamy, communication barriers, non-compliance between wives and husbands in fulfilling their obligations, innate character, unemployment, social patriarchy, economic dependence, neglect, economic fulfilment, religion, social solidarity, and pull motives in the form of solving problems, covering the husband's shortcomings, feelings of happiness in conquering women, and responsibility (25). With these motives, domestic violence is still high.

Based on the results of interviews during FGD that have been conducted, it can be seen that gender-based violence, especially violence against women, is something that often occurs and is even considered normal. One of the main causes is related to social and cultural background. As stated by previous research in Sumba, patriarchal culture is still very strong in the Sumba region, and this gives rise to toxic masculinity, which is detrimental to women as those who are oppressed due to domination by men (24).

The Correlation between GBV and Birth Weight
Low birth weight (LBW) babies are defined as a birth weight of less than 2500 grams. In this study, the overall incidence of GBV experienced by the mother does not correlate with the incidence of LBW in the last child born nor to the history of LBW in previous babies. These results are in accordance with previous research conducted in different countries (26–28). A prospective cohort study of 1229 mothers in Brazil found that there was no significant relationship between domestic violence perpetrated by a partner and the incidence of LBW or prematurity (26). The factors associated with LBW and prematurity in that study were mothers who had a history of giving birth to premature babies, mothers who smoked, those who gave birth by cesarean section, and whose partners had a low level of education.

The violence experienced by the mother does not directly influence the incidence of LBW but is moderated by the depression variable. This means that violence and depression will influence the incidence of LBW if these two factors occur simultaneously (29). Apart from that, other research shows that violence experienced by mothers has no effect on the incidence of LBW but has more influence on the incidence of abortion. Violence experienced by the mother can result in placental abruption, uterine rupture, chorioamnionitis, and the secretion of prostaglandins, all of which can result in abortion (30).

Based on Table IV, violence experienced by the mother during pregnancy is significantly related to the history of giving birth to an LBW baby ($p=0.035$; $p<0.05$). Mothers who experienced violence during pregnancy had a 2.308 times risk of giving birth to LBW babies compared to mothers who did not experience violence during pregnancy (95%CI: 1.022-5.212). The results of this study are in accordance with previous research conducted by Chen et al. (2017), where violence perpetrated by a partner increases the risk of having an LBW baby by 2.03 times (5). The results of this study also support previous meta-analysis studies, which found that violence that occurred during pregnancy by a partner was a predictor of the birth of a low birth weight baby with AOR=3.69 (95% CI: 1.61-8.50) (31) and violence was associated with LBW (OR=1.18, 95% CI: 1.05-1.31) and prematurity (OR=1.42, 95% CI: 1.21-1.63) (32).

Complications in pregnancy due to violence during pregnancy can occur directly or indirectly. Directly, physical violence can cause abdominal trauma. Meanwhile, indirectly, pregnancy complications can arise due to stress and depression as a result of violence experienced or self-isolation. The stress and depression experienced by the mother added to the lack of social support for the mother, can have an impact on the mother's hormonal condition and nutritional intake by the mother for the fetus, resulting in the birth of LBW and babies that are small for gestational age (SGA) (33–35). Exposure to high stress will increase cortisol levels and disrupt the hypothalamus-pituitary-adrenal axis, which can precipitate labor and also reduce uteroplacental perfusion due to vasoconstriction due to activation of this axis (34). The study result is also supported by the research results of Abadi et al. (2013), which show that the higher the intensity of violence experienced by mothers during pregnancy, the higher the premature birth risk. The violence during pregnancy can then also lead to the birth of babies with low birth weight.

The Correlation between GBV and Stunting
According to WHO, stunting is a condition where the body length or height of children aged 0-60 months is less than -2 Standard Deviation (<-2SD) of the growth curve. Stunting has negative effects in the future, one of which is the aspect on children's cognitive abilities (36). Malnutrition is one of the main risk factors for death and morbidity in children and is also associated with stunting. Various factors contribute to children's health, namely public health, social culture and economics, and violence by partners. Conditions of marital disharmony will affect the mother's ability to care for children, including providing nutrition that meets good nutritional

standards for children. One form of marital disharmony is acts of violence received by the mother of her partner (37).

Gender-based violence consists of physical, sexual, and emotional violence and violence during pregnancy. This GBV is one of the indirect causes of stunting. Research conducted in Sri Lanka shows that there is a relationship between sexual and emotional violence by a partner and the incidence of stunting. However, physical violence and violence during pregnancy are not related to the incidence of stunting (38). Other research conducted in India also shows that violence perpetrated by partners, whether physical, emotional, or sexual violence, has a greater influence on stunting than malnourished or too thin (39). The results of those studies differ from the results of this study, which showed that GBV was not related to the incidence of stunting (p=0.369).

The lack of correlation between GBV and the incidence of stunting in the Sumba and Ambon areas could be related to the history of children's nutritional status. In this study, the majority of children's nutritional status was in the good nutritional status category. A child's nutritional status is greatly influenced by the mother's ability to fulfill the nutrition the child needs. In our opinion, the mothers (respondents) have made efforts to provide good nutrition for their children, in addition to the implementation of government programs related to handling stunting through supplementary feeding programs. Through activities from integrated healthcare centers in the villages, the children's nutritional status will be continuously monitored, and supplementary feeding can be provided using truly appropriate indicators (40).

Research conducted by Barnett et al. (2022) shows that emotional violence is related to children's height at the age of 12 months (41). It is different from the results of this study, which reveals that violence in general does not correlate with children's stunting incidence. However, although there is no correlation between GBV and the incidence of stunting, the percentage of stunted children among respondents who experienced violence was 10.3%. The differences in the results of this study can be closely related to the mother's ability to manage her household, especially in meeting children's nutritional needs. The ability to make decisions to fulfill children's nutrition is a manifestation of women's empowerment, which can be obtained from various aspects. Women's empowerment is closely related to the incidence of stunting. The research result is in accordance with the previous research results, where women's autonomy, as assessed based on five domains of women's empowerment, is closely related to improvements in children's height (42,43).

The Correlation between GBV and Under-Five Mortality Mothers who have experienced violence have a higher mortality rate for children under five years old (5% compared to 1.7% in mothers who do not experience violence), though it is not statistically significant. Gender-based violence, often also known as domestic violence, especially intimate partner violence (IPV), is defined as behavior in a relationship that causes psychological, physical, or sexual harm. There are four forms of violence against women and children: (1) Physical violence, for example, being hit with a hand, being hit with a spoon, being kicked, being strangled, being grabbed, having to be shaved by force, having her Head hit against a wall; (2) Psychological violence, for example: being threatened, being sworn at, the victim's opinion is not respected, they are prohibited from socializing, they are never invited to weigh in, they are humiliated by saying words that degrade the position of women; (3) Economic violence, for example: charging household costs entirely to women (women who work formally) or not providing financial fulfilment to women, thus neglecting the household (44).

In this study, the incidence of GBV experienced by the mother (physical, emotional, sexual violence, and violence during pregnancy) was not related to the incidence of under-five deaths (p=0.691; p>0.05). The results of this study are in accordance with previous research conducted by Liimatainen & Ziaei (2021), which showed that emotional violence, physical violence, and any violence were not significantly related to the death of children under five (45). However, sexual violence shows a relationship with the death of children under five (p-value=0.002). In this study, it was not categorized whether the deaths of children occurred in mothers who experienced sexual violence or not. However, the results of the study showed that mothers who experienced violence had higher deaths of children compared to those who did not experience violence.

The results of this research are different from previous research, which was conducted in 32 developing countries, where the research results showed a positive and strong relationship between domestic violence and the death of children (46). In that study, the deaths of babies aged one month, one year old, and five years old were not separated but combined as a whole, namely the deaths of children under five years old. When compared with the results of this study, those study has a similarity in that mothers who experienced GBV have a higher mortality rate for their children compared to those who did not experience domestic violence.

Several factors can drive the relationship between domestic violence and child death. If violence occurs during pregnancy, the influencing factor is the health of the unborn child, which can be directly affected if the mother experiences physical violence in the household due to blunt physical trauma to the foetus (47). Indirect (and negative) effects can also arise because mothers who are victims of domestic violence have

inadequate access to health care before giving birth, have inadequate nutrition, engage in risky behavior, and experience high levels of psychological stress related to low birth weight and premature birth, which in turn are risk factors for increased child mortality. Apart from that, another influencing factor is that domestic violence has a negative impact on children's health, and children grow up in an environment full of violence. Victims of domestic violence may only be able to provide childcare with limited access to postnatal health care and inadequate nutrition (48). The impact of domestic violence on the death of babies or toddlers can also occur because the children directly experience violence, where such a family environment has a negative impact on the child's survival and can cause pain and death in babies and children.

Efforts that can be made to prevent the impact of violence are by increasing women's awareness of their rights and obligations under the law, increasing public awareness about the importance of efforts to overcome violence against women and children, increasing awareness of law enforcers to act quickly in dealing with violence against women and children, providing assistance and counseling to victims of violence against women and children, reforming the health service system which is conducive to tackling violence against women so as to prevent the impact of violence on child deaths (49).

CONCLUSION

From the results of this research on GBV, it is known that 50% of respondents experienced gender-based violence, consisting of 15% experiencing 1 type of violence, 15.83% experiencing two types of violence, 10% experiencing three types of violence, and 9.17% experiencing four types of violence. The types of violence studied were physical violence, emotional violence, sexual violence, and violence during pregnancy. Even though the GBV is high, data analysis shows that there is no correlation between the overall incidence of violence and the occurrence of LBW ($p>0.05$). However, a specific type of GBV, namely violence that occurred during pregnancy, was associated with a history of LBW incidents ($p=0.035$), where mothers who experienced violence during pregnancy were 2.3 times more likely to experience the birth of an LBW baby compared to mothers who did not experience violence during pregnancy. There was no significant association found between GBV and the incidence of stunting ($p=0.369$) nor the death rate of children under five ($p=0.619$); however, the death rate for children under five years old was higher for mothers who experienced violence (5%) compared to deaths of children under five for mothers who did not experience violence (1.7%).

Regarding the very high incidence of GBV, it is very necessary for all parties, both PELKESI and health workers, as well as the government or related agencies, to strive for outreach and advocacy for the prevention and handling of GBV.

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