

"He hit me many times. I did not do anything wrong, but he was still angry with me and beat me ... I think the cause of the preterm birth is that I was beaten by him."

(Woman exposed to physical violence and giving birth preterm to a child with low birth weight)

When focusing on exposure to physical violence, adjusting for the effect that previous adverse pregnancy outcome, emotional, physical, and sexual violence during pregnancy, maternal age, education, occupation, BMI, hemoglobin status, and depression during pregnancy may have on the occurrence of low birth weight and preterm birth, the association between exposure to physical violence and preterm birth became even more pronounced. Physically abused women were then about six times more likely to experience a preterm birth, whereas the risk of experiencing a low birth weight did not change after adjustment for possible confounding factors (Figure 6).

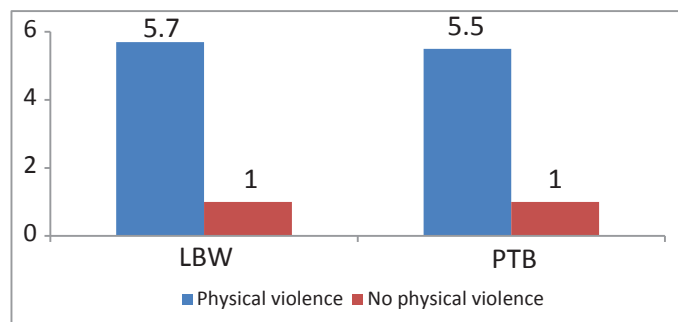


Figure 6: Association between physical violence and preterm birth (PTB) and low birth weight (LBW) after adjustment

CASE STORY: LIÊN

Liên was only 18 years old when she got married, and her husband was 19. When she and her husband first met, she found him handsome and polite. Soon, however, he started to change and it became clear to her that he had a very unpredictable temper. Liên then informed her parents that she did not want to marry him, but they pressured her to go through with the wedding. Shortly after, she dropped out of school. Her husband had already left school and had no job, so his parents supported him financially. After the wedding, he started treating her very badly. He

spent large sums of money gambling and often went out drinking until late. When he came home, he showed no interest in Liên; he ignored her and rarely talked to her. Sometimes he came home in a very bad mood. In these situations he would sometimes beat her, without any reason. Once he grabbed her hair and dragged her up the stairs. While she was pregnant, he often forced her to have sex even though she protested. Liên feared that her husband's abuse could harm the baby, so she felt constantly worried while she was pregnant. When she was 33 weeks into her pregnancy, she started to bleed and was taken to hospital where she gave birth. The child weighed only 1.9 kg. Liên thought that she gave birth too early because of her husband's violence against her and because she had felt so sad throughout her pregnancy.

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Project: "The Impact of Violence on Reproductive Health in Tanzania and Vietnam" (PAVE)

INTIMATE PARTNER VIOLENCE AND ADVERSE BIRTH OUTCOMES

KEY FINDINGS

1. Intimate partner violence is common during pregnancy: 35% of pregnant women in this study had experienced physical, sexual or emotional violence during their pregnancy.
2. Low birth weight and preterm birth were common delivery complications among women in this study: one in 20 women (4.9%) gave birth to a low birth weight infant and one in 16 women (6.2%) gave birth preterm.
3. Women exposed to physical violence during pregnancy are more likely to have a history of a previous low birth weight child or a preterm birth in comparison with women who are not exposed to violence.
4. Women exposed to physical violence during pregnancy have a nearly six times increased risk of delivering a low birth weight child or a preterm birth in comparison with women who are not exposed to physical violence.

INTRODUCTION

This research update presents preliminary findings from the Vietnamese part of the interdisciplinary research project PAVE (The Impact of Violence on Reproductive Health in Tanzania and Vietnam). The PAVE project focuses on the intersections between intimate partner violence and women's reproductive health, investigating particularly how violence affects the birth outcomes and the mental health of pregnant women.

Violence against women is a global public health problem. According to a recent report from WHO, 35% of women worldwide have experienced physical and/or sexual violence [1]. Pregnant women constitute a particularly vulnerable sub-group, with prevalence rates of intimate partner violence during pregnancy ranging between 2% and 57% in low- and middle-income countries [2]. Exposure to intimate partner violence during pregnancy has been associated with a number of adverse maternal and fetal outcomes, including delivery of a low birth weight (LBW) child and preterm birth (PTB) [1, 3-7]. However, conflicting findings have been reported from other studies and there is a paucity of data from low- and middle-income countries. Preterm birth (delivery before 37 weeks of gestation) and low birth weight (birth weight <2500g) are the leading causes of death among newborns and are also associated with severe long-term morbidity which has significant health, economic and emotional consequences for both the child and the family [8].

In Vietnam, 63,000 children aged less than five years die every year and 50% of these deaths occur among newborns. One of the main causes of newborn deaths is complications related to OR complications arising from low birth weight and preterm birth which together account for almost 50% of all newborn deaths (Figure 1) [9].

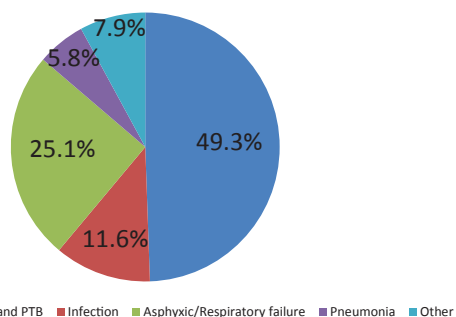


Figure 1: Estimated causes of newborn deaths in Vietnam

Antenatal care programmers do acknowledge the effect of maternal health on child health, but the role of violence as an underlying factor in women's ill-health during pregnancy and postpartum remains an area where robust evidence is lacking. The PAVE project aims to help close this knowledge gap by providing information on the dynamics of violence against pregnant women and how it is associated with low birth weight and preterm births.

METHODOLOGY

Combining epidemiological and ethnographic approaches, the PAVE project aims to generate insights into the prevalence, forms, and consequences of intimate partner violence. In Vietnam, PAVE project epidemiological data collection was conducted among women attending antenatal care in Hanoi's Dong Anh district from March 2014 to July 2015. The women were enrolled before 24 weeks' gestation and their gestational age was determined by ultrasound. Data collection was conducted in three stages: at enrollment where socio-demographic and reproductive health information was collected; at 30-34 weeks of pregnancy where detailed information on exposure to violence before and during pregnancy was collected; and at delivery where the birth weight and gestational age of the child were determined. Information from 1,276 women was used to analyze the association between intimate partner violence and the occurrence of low birth weight or preterm birth. In addition, to generate insights into the dynamics of intimate partner violence and how it affects pregnancy care and pregnancy outcome, repeated in-depth interviews were performed among some women who had been exposed to physical violence during pregnancy and had either delivered a low birth weight child, had a preterm birth, or both. Two focus group discussions with health providers and key community people were also organized.

The PAVE project is funded by DANIDA (the Danish International Development Agency) and conducted in collaboration between Tanzanian, Danish, and Vietnamese researchers from four universities: Kilimanjaro Christian Medical College (KCMC), Hanoi Medical University, University of Copenhagen, and University of Southern Denmark. In Viet Nam, ethical approval of the research was obtained from Hanoi Medical University's Research Ethics Committee.

MAIN FINDINGS

1. Prevalence of low birth weight and preterm birth in Đông Anh district

Among the 1,276 women followed during pregnancy, 62 women (4.9%) gave birth to a low birth weight infant and 79 women (6.2%) gave preterm birth (Figure 2).

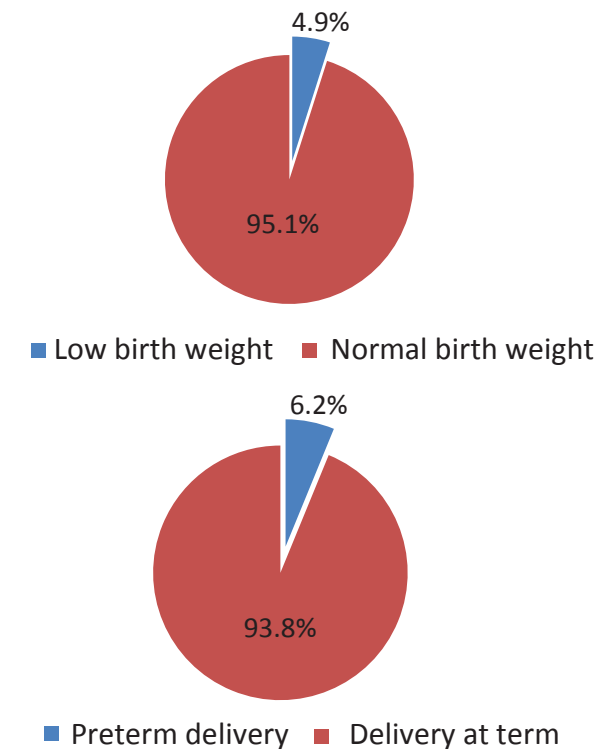


Figure 2: Prevalence of low birth weight and preterm birth in Đông Anh District

2. Violence is common during pregnancy

The prevalence of IPV during pregnancy was 35.2%. The most common form of violence was emotional violence; this type of violence was reported by 32.2% of the pregnant women. Ten percent had experienced sexual violence and 3.5% had experienced physical violence (Figure 3).

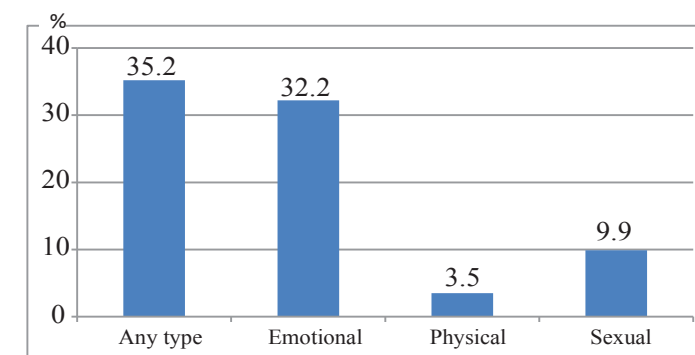


Figure 3: Prevalence of intimate partner violence during pregnancy

3. Previous adverse pregnancy outcomes are common among women who experience physical violence

Women who were exposed to physical violence during pregnancy had a three times increased risk of having had a previous pregnancy that ended in a low birth weight child or a preterm birth.

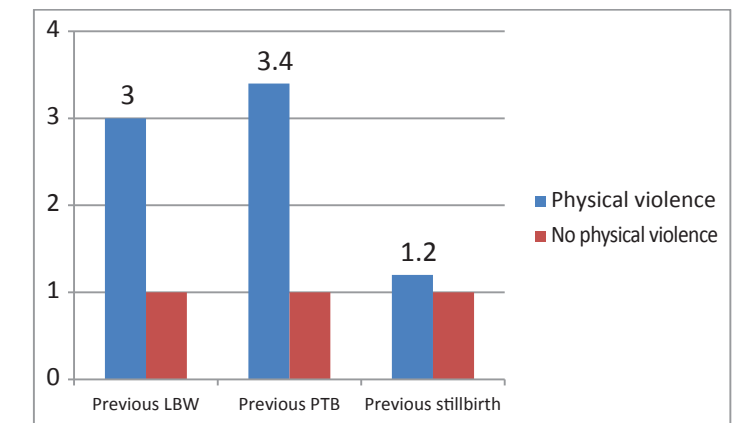


Figure 4: Risk of previous adverse pregnancy outcome among women exposed to physical violence

*"From the day he hit me, I was so sad and always in a state of stress and fear. I read a book, it said that during pregnancy, the mother should not be stressed because it could affect the baby, but I was still sad. So I very much feared that this might harm my baby."
(Woman exposed to physical violence and giving birth preterm to a child with low birth weight)*

4. Intimate partner violence increases the risk of low birth weight and preterm birth

The research found a strong relationship between exposure to intimate partner violence and low birth weight or preterm birth. Women who were exposed to physical violence during pregnancy had a more than seven times increased risk for giving birth to a low birth weight child and an almost five times increased risk of giving birth preterm (Figure 5).

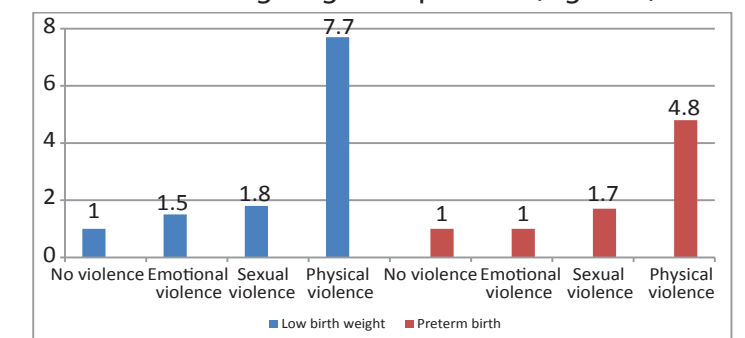


Figure 5: The risk of low birth weight and preterm birth among women exposed to intimate partner violence