

Maternal exposure to domestic violence and health and nutritional outcomes of their offspring in Zambia

Chisa Shinsugi^{1,2}, Rodgers K Mwale², Apurva Chaturvedi², Ann Mizumoto³

¹National Institute of Population and Social Security Research, Tokyo, Japan, ²UNICEF Zambia Country Office, Lusaka, Zambia, ³Independent Consultant



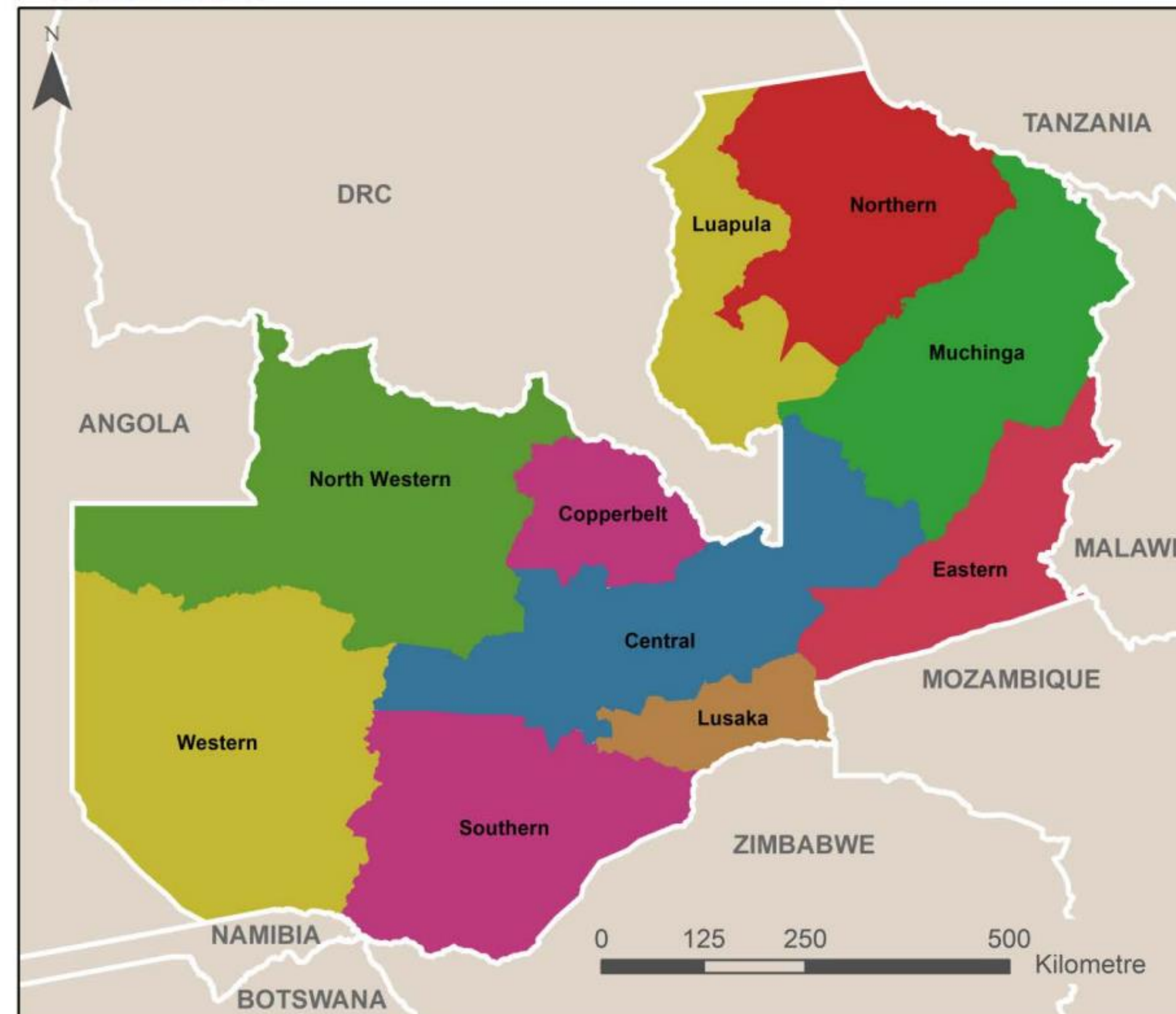
- Maternal exposure to domestic violence (DV) is associated with long-term adverse health and nutritional outcomes of their offspring.
- Maternal malnutrition is associated with child malnutrition.

BACKGROUND

- Zambia is a young country, a 2022 population estimate found that 43% were aged 15 years and below, with a high prevalence of adolescent pregnancy.
- Maternal nutritional status may affect their children's growth, but studies on the intergenerational malnutrition are scarce.
- Moreover, gender-based violence (GBV) has long been a serious public health issue but little is known about the health and nutritional consequences of GBV across generations.

Objective To study the impacts of maternal exposure to domestic violence (DV) on the health and nutritional outcomes of their offspring.

ZAMBIA



Source: ZDHS 2018

METHODS

- Data: Zambia Demographic and Health Survey (ZDHS) 2018 (n = 9,841)
- Outcome: Child health and nutritional status (low birth weight, anemia, stunting, underweight, wasting, overweight, and recent diarrhea episode)
- Exposures: Anemia in mothers and maternal exposure to DV
- Confounding factors: Child age and sex, birth weight, number of living children, residential area, marital status, mother's education, and wealth index

CONCLUSIONS

- This study shows that maternal malnutrition is associated with child malnutrition, and furthermore, maternal exposure to DV adversely affects the long-term health and nutritional outcomes of their offspring.
- Further studies on nutritional status assessed by physical measurements and diet among adolescents and GBV survivors are required to develop interventions to improve maternal and child malnutrition as well as GBV prevention and care.

ADDITIONAL KEY INFORMATION

Funding Source: This study was supported by the Grants-in-Aid for Scientific Research (KAKENHI) program (grant number 21K13555) from the Japan Society for the Promotion of Science (JSPS) and Japan Epidemiological Association (JEA) travel award.

Conflicts of Interest: None declared.

RESULTS

- The percentage of subjects who gave birth as adolescents (age 15-19 years) was 20.5%.
- The percentages of all mothers who experienced physical, sexual, and emotional violence were 32.6%, 13.2%, and 22.8%, respectively.
- The percentage of anemia in mothers (15-49 years) was 27.5%, while the percentage of anemia and diarrhea in children regardless of mother's age were 45.7% and 14.5%, respectively.
- When adjusted for confounding factors, **mothers with anemia were more likely to have children with anemia** (adolescents – adjusted odds ratio (aOR) 1.62, 95% confidence interval (CI): 1.19 – 2.20, adults – aOR 1.47, 95% CI: 1.28 – 1.68), **underweight** (adolescents – aOR 1.47, 95% CI: 1.02 – 2.11, adults – aOR 1.22, 95% CI: 1.02 – 1.46), and **stunting** (adults – aOR 1.15, 95% CI: 1.01 – 1.30).
- **Mothers who had DV experience were more likely to have newborn with low birth weight** (adults – aOR 1.31, 95% CI: 1.04 – 1.66) and **children with diarrhea** (adolescents – aOR 1.53, 95% CI: 1.11 – 2.10, adults – aOR 1.76, 95% CI: 1.50 – 2.05).

Figure 1. Multiple logistic regression analyses of the associations between maternal factors (anemia and DV experience) and child malnutrition and diarrhea by maternal age group in Zambia DHS2018.

*** p < 0.001, ** p < 0.01, * p < 0.05

