Indicators of Infant Health Predict Estimated Prevalence of Modern Slavery

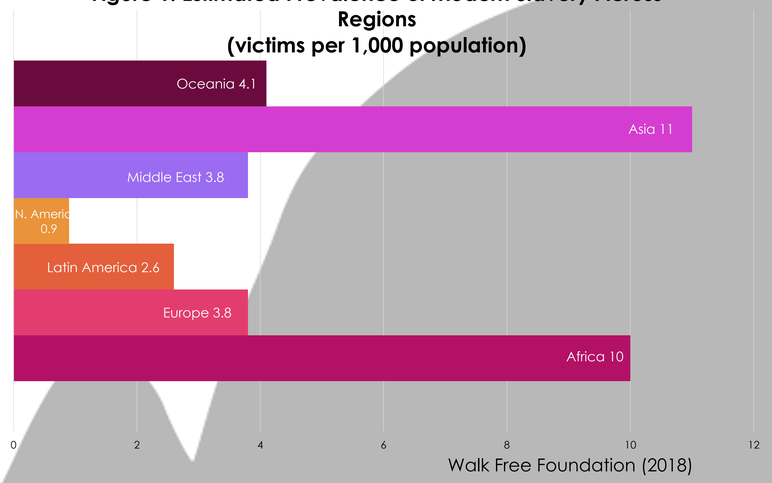
Janine M. Ray, M.A., Erinn C. Cameron, M.A., Fiona Cunningham, M.Ed., & Kristine M. Jacquin, Ph.D.

Abstract

Structural inequality contributes to a lack of access to adequate healthcare for women and increases vulnerability for exploitation. Infant health outcomes are inextricably linked to that of women, and we hypothesized that there would be a significant relationship between infant health outcomes and the estimated prevalence of modern slavery. The results supported this hypothesis.

Of the estimated 40.3 million victims of modern slavery, 74% are female, and 25% are children (ILO, 2019).

Figure 1: Estimated Prevalence of Modern Slavery Across Regions (victims per 1,000 population)



Introduction

Women and girls are disproportionately affected by exploitation (Okech et al., 2018). Research has identified structural inequality as a significant risk factor for female's vulnerability to trafficking (Cameron et al., 2018), and a contributor to poor health outcomes for women (Dadi et al., 2020) and infants (Blakeney et al., 2019; Browne et al., 2019; Dodd et al., 2019; Urdinola-Contreras, 2018).

Method

Data sets were obtained from the World Health Organization, United Nations, and the Walk Free Foundation. Regression analysis with backward removal was conducted to determine the best model.

Predictors	
Child malnutrition under age 5 based on stunting	CM
Infant mortality pre, during, after birth	IM
5 years-old or less mortality	5<M
Infants lacking DPT immunization	LDPT
Infants lacking measles immunization	LM
Female youth literacy	FYL
Male youth literacy	MYL
Primary school enrollment	PSE
Life expectancy at birth (female)	LEBF
Child labor as percentage of 5-17-year olds	CL
Life expectancy at birth (male)	LEBM
Antenatal care (at least one) visit	ACV
Births attended by skilled health care worker	BASW

Dependent Variable:
Estimated prevalence of modern slavery per 1,000 population

Results

- The full model was significant, $F(13, 35) = 4.24$, $p < .0001$, adj. $R^2 = .47$, explaining 47% of the variance in modern slavery.
- Beta values of each predictor contributing to the model are presented in Figure 2.
- The best model, $F(6,42) = 10.18$, $p < .0001$, adj. $R^2 = .53$, explained 53% of the variance in the outcome variable.
- Six predictors contributed to the best model and are presented in Figure 3.

Declaration of the Rights of the Child:
In 1959, the UN General Assembly adopted the Declaration of the Rights of the Child, which defines children's rights to protection, education, health care, shelter, and good nutrition.

Figure 2: Beta Values of Predictors in Full Regression Model

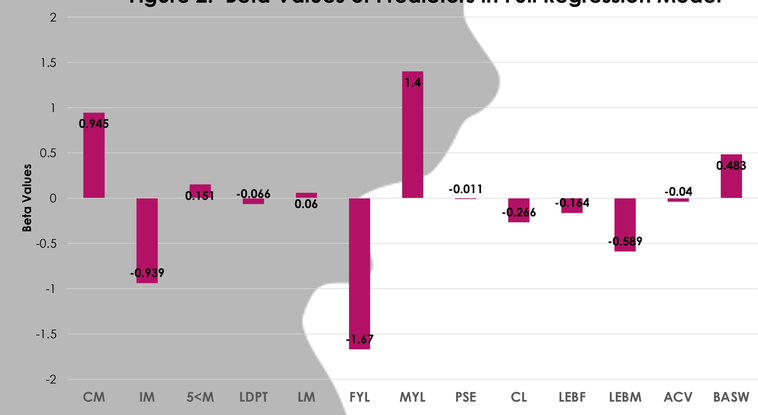
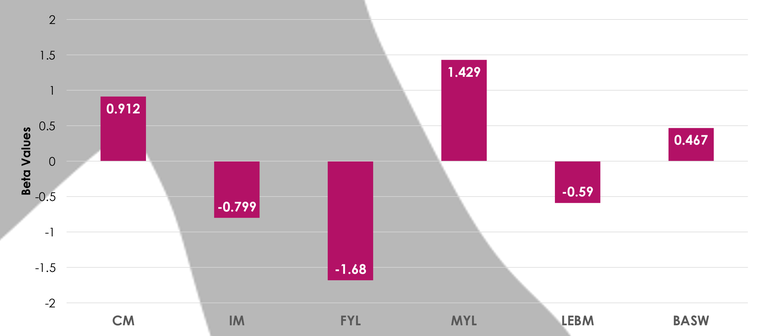


Figure 3: Beta Values of Predictors in Best Regression Model



Discussion

Infant health is inextricably linked to women's health. Past research has connected women's health to structural inequality and poor human development. Our findings highlight a highly significant relationship between infant health outcomes and estimated rates of modern slavery. Providing resources for women's health will inevitably support children and reduce both women's and children's vulnerability to exploitation.

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