Examining Stability and Change in Types of Intimate Partner Violence

Prior to, During, and After Pregnancy: A Latent Transition Analysis

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Intimate partner violence (IPV) against women of reproductive age is a global health problem and a human rights abuse with direct and indirect effects on women's physical, mental, sexual and reproductive health (Campbell, 2002; Ellsberg, Jansen, Heise, Watts, Garcia-Moreno, 2008). Poor health, preterm delivery, low birth weight, small size for gestational age, surgical delivery, kidney infections, maternal mortality and infant mortality are more likely to occur among abused pregnant women than non-abused pregnant women (e.g., Alhusen, Lucea, Bullock, & Sharps, 2013; Saito, Creedy, Cooke, & Chaboyer, 2013).

Prenatal care is one of the rare windows of opportunity for identifying women abused during pregnancy. For many women with limited resources, prenatal care appointments are the only contact point with health care providers (Devries et al., 2010). Therefore, knowing the prevalence, correlates, and patterns of IPV prior to, during and after pregnancy is the first step in helping to inform violence screening programs in health care clinics. Knowing correlates and risk factors for IPV surrounding pregnancy may not provide specific information as to how to intervene in prenatal violence, but may help researchers and health care practitioners identify vulnerable groups to target for IPV prevention.

Examining the patterns of IPV, correlates and risk factors for IPV has been challenging to researchers due to the-difficult-to- capture heterogeneity of IPV experiences among women.

Prior studies defining IPV as a unitary construct have predominantly used a variable-centered approach and corresponding data analytic techniques such as ANOVA and regression which assumes that inter-individual differences are negligible, and focuses on predictors of IPV (Ansara & Hindin, 2010; Bogat, Levendosky, & von Eye, 2005). Working with a unitary construct of IPV may increase the predictive power in detecting health effects of IPV due to increased construct validity achieved by including different types of IPV experiences in a single operational definition of IPV. Furthermore, employing a variable –centered approach and data analytic techniques such as ANOVA and regression allows researchers to identify relations between IPV and associated risk factors in the general population. For instance, variable-centered studies have reported increased risks for IPV among single, unemployed, younger, and poorer women (e.g., Bourassa & Bérubé, 2007; Cokkinides & Coker, 1998; Gazmararian et al., 1996). However, the heterogeneity of IPV experiences within a population is difficult to elucidate using this approach (Bogat et al., 2005). In contrast, a person centered approach, which focuses on uniqueness of IPV experiences, and corresponding data analytic techniques such as latent class analysis and traditional cluster analysis can illuminate individual differences in IPV experience within a population, and may be particularly helpful for identifying distinct subtypes or patterns of IPV and their potential effects on health outcomes.

The present study employed a person-centered approach and corresponding data analytic technique, latent transition analysis (LTA) to model change in self-reported occurrences of IPV across the pre-pregnancy, pregnancy, and the postpartum period in a sample of 2,709 diverse women. First, a model of IPV classes was established. Second, its measurement invariance was tested across groups of various individual and contextual backgrounds. When measurement

invariance was established, group differences were examined in the prevalence and transition of IPV classes across pre-pregnancy, pregnancy, and the postpartum period using multi-group LTA.

Latent transition analyses revealed three classes of women based on shared characteristics of IPV experiences: those who experienced No IPV, Predominantly Sexual IPV, or Physical IPV Only. Presence of violence in one period increased the likelihood of violence in subsequent periods (see Figure 1). Change in IPV type was explained by individual and contextual factors including pregnancy intendedness of women and of their partners. Physical violence prior to conception was more likely to continue during pregnancy among women with an unintended pregnancy than among those with an intended pregnancy. Women whose partners did not want their pregnancy were at greater risk for initiation of physical violence during pregnancy than those whose partners wanted their pregnancy.

In conclusion, intimate partner violence surrounding pregnancy is a complex problem which requires a person-centered approach and corresponding data analytic techniques to understand its etiology and resolution. Pregnancy, which is a particularly vulnerable period for women, but one in which most women have contact with health care providers, is a fitting and opportune context in which to investigate and identify distinct patterns of violence as well as their stability across time and to develop effective screening, prevention, and intervention programs.
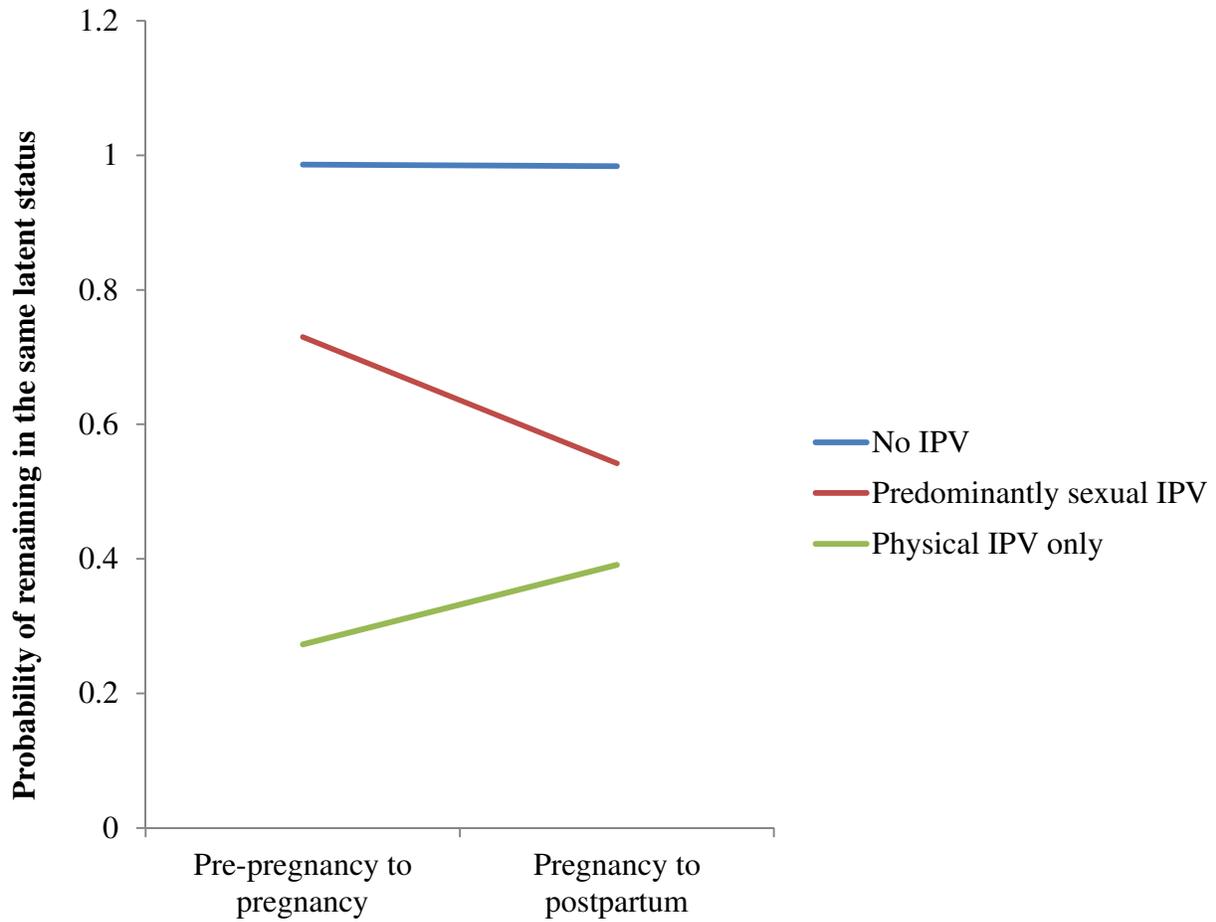
Figure 1. Stability of each latent status across time. Individuals in the No IPV class remained stable. Individuals in the Predominantly Sexual IPV class were more likely to change their status during the postpartum period, whereas those in the Physical IPV Only class were more likely to stay in the same status during the postpartum period.