

## **ABSTRACT**

**Background** Uganda has one of the highest Total Fertility Rates (TFR) in the world estimated at 5.4 children born per women in 2017. The Ugandan government has taken strides to curb fertility, due to its known social and development consequences. Numerous researchers have attempted to investigate factors that could be influencing the high fertility rates. Both research and policy have been met with only minimal success, specifically on the African continent. Therefore, new and innovative investigations are required to identify and unpack critical variables – given that efforts to date have led to slower than desirable fertility transitions in several African countries, including Uganda. Gender-Based Violence (GBV) has major Reproductive Health (RH) consequences for the victim. Women with a history of physical abuse are at increased risk for a host of RH outcomes such as high parity, inconsistent and lower levels of contraceptive use, unintended pregnancies, and adverse pregnancy outcomes. Women who have experienced GBV have also been found to seek abortion services more than those who have not experienced GBV. The effect of GBV on women's ability to control their fertility has not been widely investigated in sub-Saharan Africa and may in fact be a contributing determinant to high fertility rates in the region. Globally, as well as in Africa, a woman is more likely to be injured, raped and killed by a domestic partner, and Ugandan has high levels of physical GBV. This study aims to find the mechanisms through which GBV impacts on fertility in Uganda.

**Methodology** This study uses a cross-sectional dataset - the 2011 Ugandan Demographic and Health Survey. Firstly, the patterns and trends of fertility in Uganda

from 1989 until 2011 are assessed, using both direct (mean CEB, mean achieved fertility and reported TFRs) and indirect (Brass' P/F Ratio method and the Relational Gompertz Model) methods. Selected socio-demographic variables, severities of physical GBV, and RH outcomes (current use of contraception, planning status of previous pregnancy, and ever had a pregnancy terminated) were investigated using descriptive and inferential statistics. Furthermore, their association with fertility levels amongst Ugandan women were also analysed. Children Ever Born (CEB), as the measure used for fertility, is examined using both Poisson regression and multilevel models to assess the influence of individual and social determinants on fertility. Pathway Analysis determines the direct and indirect pathways, as well as the total effects, in which less and more severe physical GBV influences fertility in Uganda.

**Key Findings for Objective 1** The average number of children was 21% higher for women who had experienced less severe GBV and 25% higher for women who had experienced more severe GBV, compared to those that had not. Women who were on traditional and modern contraceptives had 38% and 22% more children than those who were on no contraceptives, respectively. Those who had ever experienced the termination of a pregnancy had 53% more children than those that did not; whilst those that had planned their previous pregnancy had 19% less children than those who stated that the previous pregnancy was unplanned. Further, CEB decreases with each level of education achieved and the age at which a woman first cohabitates also shows a significant relationship with CEB – the lower the age of first cohabitation the higher the CEB. Women living in communities with medium and high percentages of women with a secondary or higher level of education had 11% and 38% less children than women

living in communities where percentages were low. Women who lived in communities where the number of women who experienced less and more severe physical GBV was medium had 16% and 15% more children than women who lived in communities where either severity of GBV was low, respectively.

**Key Findings for Objective 2** The RH outcomes are significant predictors of CEB and explain much of the variation in variances in CEB both between and within communities in Uganda. Physical GBV, irrespective of the severity, was also a significant predictor of CEB – moderating the effects of individual-level predictors, and household predictors to a lesser extent. Once all factors are controlled for, community level factors (except for place of residence) no longer show a significant relationship with CEB.

**Key Findings for Objective 3** RH outcomes, as well as each severity of physical GBV, have significant effects on CEB – in total, but also directly and indirectly. The path models show that the total effects of physical GBV is moderated by the effect of experience of GBV on the RH outcomes. However, it is also affected by the influence of the endogenous factors as well. Furthermore, the additional direct effect of GBV on CEB suggests the cumulative importance of physical GBV in explaining variations in fertility in the country. In fact, the models which included both less and more severe physical GBV were shown to be models of better fit than the first model which did not include GBV. The effect that abuse has on the RH outcomes is amplified by the moderating effect of physical GBV.

**Main Conclusion** Physical GBV is a moderating factor of fertility, influencing fertility rates both directly and indirectly by moderating the effect of RH outcomes. Further, both severities of GBV were found to influence fertility directly and indirectly through the three RH outcomes – the effects and magnitude were different. Unmet need for contraception in Uganda is extremely high for all women, but it is particularly worrying that young women or women whom have not experienced fertility are not using contraception to avoid early pregnancy and to limit births. Extremely young ages at first cohabitation contributes significantly to both high incidence of physical GBV (both less and more severe), as well as fertility levels in the country. Women who cohabit at such young ages have lower chances of completing education, assuring gainful employment, and having the means to opportunities that could increase their empowerment and further decrease the risk of GBV and reach their desired family size.

**Policy and Research Recommendations** Programmes aimed at increasing women's educational status (including programmes at school), behaviour change communication strategies to decrease the incidence of early age at first cohabitation, and family planning programmes at public health facility must all be complimented with pro-active measures dealing with violence in intimate relations. This should also include men. Future research should include partner-level factors and analyses on partner socio-demographic asymmetries, as well as cultural factors. Path models should be investigated in other contexts where pathways may differ – such as in South Africa which has lower fertility levels but high levels of GBV.