

# 28<sup>th</sup> WORLD NUTRITION CONGRESS

November 12-13, 2018 Sydney, Australia

## Quantile regression analysis of modifiable and non-modifiable drivers' of blood pressure among urban and rural women in Ghana

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High blood pressure is an increasing public health problem in many developing countries due to the associated cardiovascular and renal complications. This study is set out to investigate the drivers of blood pressure among urban and rural women. The study used the recent Ghana demographic and health surveys data. Diastolic blood pressure (DBP) and systolic blood pressure (SBP) were used as outcome variables. Our findings suggested that body mass index (BMI) had significant positive effect on DBP and SBP in both urban and rural settings, with the largest effect occurring among women in the 75<sup>th</sup> quantile. Arm circumference had positive effect on DBP and SBP across all quantiles in both settings. Age had an increasing effect along with the entire conditional DBP and SBP distribution in both settings, with DBP and SBP increasing with increasing age. Women who were breastfeeding had lower DBP and SBP relative to those who were not breastfeeding. The results highlight the important drivers of DBP and SBP, the differential effects of these drivers and similarities in the effects in urban and rural settings. Interventions to address high BP should integrate these similarities and differences to increase their effectiveness.

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