PS16/TUE/19 – Is there a difference in hypertension screening and care in urban population vs rural company in the Democratic Republic of Congo (DRC)?

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Objectives: Although the burden of hypertension still rises worldwide, there are rare comparative studies of detection and care in rural and urban areas in sub Saharan Africa. Thus, we undertook a public screening of HBP in a rural company and an urban area in Democratic Republic of Congo (DRC). **Methods:** In 2007, a cross-sectional study was conducted in Muanda (600 Km from Kinshasa) among healthy employees and their relatives (n=274) and in the capital Kinshasa (n=3 018). Interviews (medical story, dietary salt restriction) and all measurements (blood pressure and BMI) were carried out. Locality differences in detection rate, care and control of HBP were compared. **Results:** Among all participants, 37.2% and 52.9% had hypertension in Kinshasa and in Muanda, respectively ($P<0.001$). But, the peasants were older than the city-dwellers (49.4 ± 8.9 vs 44.3 ± 15.3 years old, respectively, $P<0.001$). Proportions of detection rate of HBP were similar in both areas (51.9% in urban vs 51.0% in rural areas, $P=0.9$). By contrast, urban participants received more treatment (26.1% vs 15.1%) with higher control rates (13.4% vs 7.5%) than rural patients (figure 1). But, this difference was statistically significant only for the rate of treatment ($P<0.01$). In both sites, high salt diet (unadjusted OR 3.7, 95% CI 1.8-7.7, $P<0.0001$), HBP duration ≥ 10 years (unadjusted OR 1.9, 95% CI 1.1-3.2; $P < 0.01$) and high pulse pressure (unadjusted OR 14.7, 95% CI 7.4-29.1; $P<0.0001$) were associated with uncontrolled hypertension in univariate logistic regression. In multivariate analysis, pulse pressure (>60 mmHg) was the most important independent predictor of poor control of HBP (adjusted OR 23.1, 95% CI 10.4-50.9; $P<0.0001$). **Conclusion:** Our study has shown a high frequency of hypertension in DRC, even higher in rural company, but with worrying low rates of detection, treatment and control. It will need to formulate national guidelines for detection and management of hypertension.