Introduction: To document the existence of health disparities even in secondary cities and to understand to what extent historic, social, economic processes can help to explain these disparities, a population based cross-sectional survey was carried out in 2013 in Bobo-Dioulasso.

Method: Based on map observation, aerial photos and satellite-based remote sensing, coupled with effective field survey on infrastructure, five criterions; position (central or peripheral), duration of urbanisation (old or recent), health care infrastructure (good or bad), potable water availability (good or bad), and risk of flood (high or weak), four neighbourhoods was selected for the study. In each of these four neighbourhoods 250 eligible households were randomly selected and in each household an adult (35 to 60 years) coupled with a child of (6 months to 59 months) were randomly selected. Each adult and child went through an interview for socio-demographic, anthropometric, clinical and parasitological data collection.

Results: Among the adults the overall prevalence of overweight/obesity was 43.2% significantly higher in women than men (52.3% vs. 31.7%, p=0.001). Hypertension, and diabetes prevalence were respectively 40.5% and 5.3% with no gender difference. From the low, middle to high-income people, both obesity (20.3%, 30.4%, 49.3%) and hypertension (29.0%, 32.5%, 37.9%) were significantly higher. At the same time 13.1% and 28.6% of the children were respectively wasted and stunted.

Conclusion: The double burden of malnutrition is a reality even in secondary city like Bobo-Dioulasso. Rather than urbanization disparities, socioeconomic status explained the nutrition status of the study population both for children and adults.