PREVALENCE OF CARDIOVASCULAR DISEASE RISK FACTORS IN URBAN GARISSA RESIDENTS

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DECLARATION

I certify that this dissertation is my original work and has not been presented for a degree at any other University.

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ABSTRACT

Background: Cardiovascular diseases are becoming rampant in the developing countries due to such factors as urbanization, adoption of sedentary lifestyle, and change in dietary behavior. Common preventable risk factors underlie most CVD.

Objective: We set out to determine the prevalence of modifiable CVD risk factors among urban Garissa residents. The residents are generally semi nomadic Somalis who also practice conventional and settled lifestyle.

Methods: The study is a descriptive cross-sectional community based survey carried out at Central division, Garissa Town, North Eastern Kenya over a 3-week period.

Cluster sampling of households in 15 villages of the central division, Garissa town was used to obtain the total sample size of 1850. Adults 18 years or older who were residents for more than three months were subjected to interview using WHO STEPS questionnaire on socio-demographic information, anthropometric and BP measurements. Blood samples were taken for blood sugar and total cholesterol levels.

Results: A total of 1823 subjects (702 males and 1121 females) of whom 98.5%were Somalis were studied. The mean age was 38.5 ± 10 (range 18-96) years. Prevalence of modifiable CVD risk factors screened for were as follows: Hypertension 12.6% (95% CI 11.1-14.2%), Diabetes Mellitus 3.7%(95% CI 2.9-4.7%), Overweight 23.9%(95% CI 21.9-25.9%), Obesity 12.6%(95% CI 11.2-14.3%), Abdominal obesity 20.4%(95% CI 18.5-22.3%), Smoking 5.2%(95% CI 4.4-6.5%), hypercholesterolemia 16.9%(95% CI 11.0-24.3%) and Physical inactivity 8%. Only 16% of the study population consumed the recommended ≥5 servings per day of fruits and vegetables. Male sex, increasing age and overweight/obesity were independently associated with Hypertension and Diabetes

Mellitus. At least 47% of the participants had one or more combination of the risk factors screened for.

Conclusion: Prevalence of CVD risk factors is high in this Garissa Somali population with low levels of physical activity and fruits/vegetable consumption.