

Abstract of Master's Thesis

No.1

Course	International Health Development (MPH)	Name	Meguru Yamamoto
Thesis Title	Cross-sectional study describing characteristics and disease severity of adult patients with hypertension attending MRC Keneba Clinic, The Gambia		
<p>Background: Hypertension is increasing in sub-Saharan Africa, but limited data exist to describe its magnitude and epidemiology, especially in rural populations. Medical Research Council (MRC) Keneba clinic is based in the rural field station of MRC Unit The Gambia. The clinic records and stores clinical data of its patients with Keneba Electronic Medical Records System (KEMReS). All the residents of Kiang West, where the field station is located, are captured in Kiang West Demographic Surveillance System (KWSS). The unique environment of the clinic was considered to be suitable for the study to investigate hypertension in rural Gambia and in rural Africa.</p> <p>Objectives: The primary objective was to describe the age and sex distribution of adult patients with hypertension (excluding pregnancy-induced hypertension) attending MRC Keneba clinic. As a part of this objective, prevalence of hypertension in Kiang West was estimated. The secondary objectives were to describe sociodemographic characteristics and health and disease management factors associated with hypertension and to describe the characteristics and factors associated with blood pressure management.</p> <p>Methods: A cross-sectional study was undertaken at MRC Keneba clinic serving residents of the KWSS and those from outside of Kiang West. Study participants were the adult patients aged 18 years and over with clinically confirmed or diagnosed hypertension who attended MRC Keneba clinic during the eight weeks (12 April to 1 June 2017) of the data collection. Potential participants were those who had clinically confirmed hypertension recorded in KEMReS within the previous five years. As these patients attended the clinic during the study period, they were identified by KEMReS and were recruited in the study. Those who were newly diagnosed on the study day were also included. The study participants were interviewed using structured questionnaire and went through waist and hip circumference and blood pressure measurement. Their relevant clinical data were also collected from KEMReS. To estimate prevalence, data of all patients with clinically confirmed hypertension recorded within the previous five years extracted from KEMReS were</p>			

Abstract of Master's Thesis

No.2

Course	International Health Development (MPH)	Name	Meguru Yamamoto
<p>assessed with population data extracted from KWDSS.</p> <p>Results: The crude prevalence and estimated age-standardised (world standard population) were 12.3% and 13.5% respectively. Among the interviewed hypertensive clinic patients (N=297), 69.7% were women and 53.2% were aged 60 and over. The proportion of participants with blood pressure on the study day in normal range, grade 1, 2, and 3 (World Health Organization/International Society of Hypertension blood pressure classification) were 41.4%, 33.7%, 15.5%, and 9.4% respectively. Women had higher odds of uncontrolled blood pressure defined as non-improvement or deterioration in blood pressure severity since diagnosis, while men were found to have higher blood pressure than women in younger age groups. Apart from age and sex, mean blood pressure was higher among those with less geographical accessibility to the clinic, those who lacked availability of cash for medical purpose, and those who were taking herbal/traditional medicine. Uncontrolled blood pressure was associated with location of residence, weight reduction, and knowledge of dietary cause of hypertension.</p> <p>Conclusion: Women were predominant among hypertensive population and had higher prevalence than men, because there were less men in total population due to the large number of men out-migrating for work opportunities, and presumably because health-seeking behaviours were practiced more by women compared to men. Therefore, different approach is needed for men and women. Geographical accessibility to the clinic may be affecting blood pressure control. Having correct knowledge of dietary causes of hypertension associated with higher and uncontrolled blood pressure. These results appear contradictory, but could indicate that those patients with more severe hypertension were receiving proper patient-education at the clinic or elsewhere. However, more investigation on behavioural change due to education, adherence to medication, and secondary hypertension are required.</p>			