Equivalent In Active Pharmaceutical Ingredient of Generic Antihypertensive Medicines Available In Three Nigerian States (EQUIMEDS): A Case For Further Surveillance


1Sydney Medical School, University of Sydney, Sydney, Australia, 2Department of Medical Rehabilitation, College of Health Sciences, Obafemi Awolowo University, Ile-Ife, 3Department of Internal Medicine, University of Port Harcourt and University of Port Harcourt Teaching Hospital, Rivers state, Nigeria, 4Department of Epidemiology Program Coordinator, Indian Institute of Public Health, Hyderabad, 5Public Health Foundation of India, Haryana, India, 6Department of Medicine, State University of Maringa, Maringa, Brazil, 7Peruvian Society of Hypertension, Lima, Peru, 8Health Systems/Policy, Department of Global Health & Development, London School of Hygiene & Tropical Medicine, London, United Kingdom, 9Department of Medicine, Bayero University Kano & Aminu Kano Teaching Hospital, Kano, Nigeria

Introduction: Prevention and optimal management of hypertension in the general population is paramount to the achievement of the WHF goal of reducing cardiovascular disease mortality by 25% by the year 2025. Widespread access to good quality antihypertensive medicines is a critical component for achieving the goal. Poor quality medicines including those that are of substandard quality pose serious health concerns however, there remains a knowledge gap about the quality of generic antihypertensive medicines especially in low-middle income countries.

Objectives: To determine the quality of generic antihypertensive medicines available in the retail market of a developing country.

Methods: We purchased samples of the two most commonly prescribed classes of antihypertensive medicines from three states in three different geopolitical zones in Nigeria following a semi-random sampling framework. Samples were purchased by a mystery shopper from each of 24 pharmacy outlets from six local government areas (1 rural and 1 urban per state) across each of the three states. Samples were analyzed for content at the London School of Hygiene and Tropical Medicine, bioanalytical facility. The stated active pharmaceutical ingredient (SAPI) in each sample was measured using high-performance liquid chromatography photodiode array detection with results expressed as percentage of SAPI. Samples were classified as good quality (acceptable pharmaceutical quality, if compliant with pharmacopeia tolerance limits of 90-110% SAPI), poor quality (substandard, standard, if contains either less or more than the acceptable dose, <0.90 or >1.10% SAPI) and falsified (no SAPI).

Results: Amlodipine and Lisinopril were identified as the most commonly prescribed anti-hypertensive drugs in Nigeria. In total, 440 samples from 24 pharmacies were collected and tested. We found 69.4% of Amlodipine and 69.9% of Lisinopril samples were of acceptable pharmaceutical quality. However, 30.6% of Amlodipine and 33.1% of Lisinopril samples were of substandard quality. We did not detect any falsified samples of either Amlodipine or Lisinopril.

Conclusion: About one-third of commonly prescribed anti-hypertensive drugs available in Nigeria appear to be of substandard quality. Enhanced quality assurance processes in low-middle income countries such as Nigeria are needed to support optimum management.

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MS06.5

Role of Community Health Volunteers In Addressing Cardiovascular Diseases: Lessons From A Large Scale Hypertension Project In Kenya

L. K. Miah*, J. Onwudi, T. Namasooge, S. Kasanja

1Non-communicable Diseases, Amref Health Africa in Kenya, Nairobi, Kenya

Introduction: Hypertension is an important cause of premature death. In Kenya, 24% of adults have High Blood Pressure (HBP) or are currently on medication. More than half of Kenyans have never been screened, 92% of patients are not on treatment and only 30% of treatment is controlled. This is a serious health concern however, there remains a knowledge gap about the quality of generic antihypertensive medicines especially in low-middle income countries.

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Disclosure of Interest: None declared

MS06.7

Cardiac Rehabilitation Availability and Density Around the Globe


2Department of Medical Rehabilitation, College of Health Sciences, Obafemi Awolowo University, Ile-Ife, 3Department of Internal Medicine, University of Port Harcourt and University of Port Harcourt Teaching Hospital, Rivers state, Nigeria, 4Department of Epidemiology Program Coordinator, Indian Institute of Public Health, Hyderabad, 5Public Health Foundation of India, Haryana, India, 6Department of Medicine, State University of Maringa, Maringa, Brazil, 7Peruvian Society of Hypertension, Lima, Peru, 8Health Systems/Policy, Department of Global Health & Development, London School of Hygiene & Tropical Medicine, London, United Kingdom, 9Department of Medicine, Bayero University Kano & Aminu Kano Teaching Hospital, Kano, Nigeria

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