

MURIA NEWS

Newsletter of the Medicines Utilization Research in Africa (MURIA) Group. Vol 1. No 1. December 2015.

#### **ABOUT THE MURIA GROUP**

The need to promote rational and cost-effective use of medicines in Africa brought together a number of seasoned professionals and academics in related fields from African nations and Europe at a strategic meeting hosted by Prof Ilse Truter at the Drug Utilization Research Unit (DURU), Nelson Mandela Metropolitan University, Port Elizabeth, South Africa in January 2015. This strategic meeting was co-facilitated by the IUPHAR Developing Countries Sub-Committee of the Clinical Pharmacology Division. Prof Brian Godman and Dr Jaran Eriksen reviewed the on-going cross-country projects in Africa while other participants at the meeting summarized their drug utilization research activities. The meeting drew participants from South Africa, Botswana, Kenya, Namibia, Nigeria, Swaziland, Sweden and the United Kingdom. Among other points, the meeting in Port-Elizabeth agreed on the need for an inter-disciplinary and multi-national group of healthcare professionals to foster research in various aspects of drug utilization research in Africa. This led to the formation of the Medicines Utilization Research in Africa (MURIA) Group. See MURIA homepage at **http://muria.nmmu.ac.za/** 

The goal of promoting the rational use of medicines in Africa was to be achieved through training, collaboration, sharing of information and facilitation of access to data across Africa. The first concrete step towards this goal was a very successful 2.5 day training workshop and symposium on Drug Utilization Research in Africa hosted by the University of Botswana, Gaborone between 27th and 29th July, 2015. The workshop presentations and the abstracts are available at - http://muria.nmmu.ac.za/Botswana-Workshop-and-Symposium-27-29-July-2015

The group has been very active since its inception with a number of national and cross-national collaborative research works being initiated across Africa. Current membership strength as at November 2015 is one hundred and two. Membership is open at no cost to professionals from the Academia and Regulatory Bodies. Employees of Pharmaceutical Industries are excluded from membership for reasons of potential conflicts of interests. Please visit the home page for more information on becoming a member.

# THE FIRST MURIA TRAINING WORKSHOP AND SYMPOSIUM ON DRUG UTILIZATION.

The first MURIA training held at the University of 27th and 29th July, 2015 Research Council, The Ministry of Health Botswana, Botswana Scheme (BPOMAS) its Clinical

The meeting was declared Minister of Health of the Dorcas Makgato, who problems of Antimicrobial promote Rational Use of Antibiotics, anti-



workshop and symposium was Botswana, Gaborone between under sponsors of Swedish University of Botswana, The of The Republic of Public Officers Medical Aid and the IUPHAR through Pharmacology Division

opened by the Honorable Republic of Botswana, Mrs dwelled on the emerging Resistances and the need to Medicines especially of Tuberculosis and the Antiretroviral (ARV) drugs. She also addressed the issues of Non-Communicable Diseases and the importance of generic medicines in reducing healthcare costs and improving access to medicines.

A total of 103 delegates including practicing physicians and pharmacists, researchers from Universities and other healthcare professionals from academia, medical aid schemes and government agencies attended the meeting. Of particular note was the participation of as many as 20 pharmacists from the regional pharmacy service units across Botswana and representatives from the Ministry of Health and other agencies in the health sector of Botswana.

The workshop was highly interactive and it provided the participants the choice of either the introductory or advanced sessions on drug utilization (DU) research. The introductory group dealt with topics including DU data sources, drug classification systems such as The Anatomical Therapeutic Chemical/Defined Daily Doses (ATC/DDD) concepts, and the use of DDDs/1000 inhabitants/day (DIDs) to assess DU across countries and standard drug use indicators. The different approaches of influencing Rational Use of Medicines (RUM) through Education, Economics, Engineering and Enforcements (4Es) were also discussed.

The advanced group addressed mainly antibiotic drug utilization research, assessments of Antibiotic prescribing, use of qualitative methods in DUR, challenges of comparative cross-national and pharmacoeconomic studies in Africa and pharmacovigilance. Questionnaire and household surveys for collecting DU data were highlighted.

The two groups also discussed the importance of ethics in DUR with illustrative case studies in the introductory group. The advanced group also featured practical challenges in DUR as well as the use of databases to explore drug safety. The importance of communication in DUR was illustrated by the high level adherence of Swedish physicians to the concept of the 'Wise List'

The workshops were followed by a one day Symposium that featured 18 oral and 18 poster presentations. The presentations mostly centered around utilization of antibiotics, adverse effects profiles of ARVs, anti-hypertensives, anticonvulsants, medication adherence and generic medicines. Plans for collaborative research projects across Africa in disease areas like Malaria, Tuberculosis/HIV, Central Nervous System Diseases, Non-Communicable Diseases (Hypertension, Diabetes and Cancer) were initiated at the meeting.

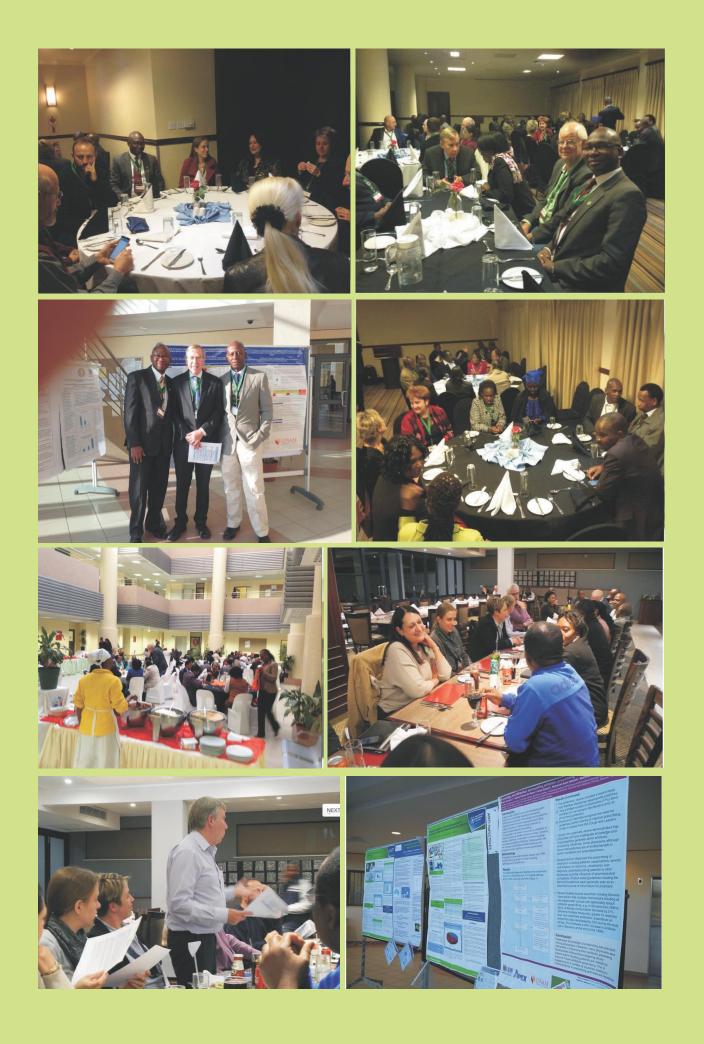
The meeting ended with the following agreed tasks among members to drive the activities of the group forward: Prof Amos Massele in charge of July 2016 meeting in Botswana, to be assisted by Dr Joyce Kgatlwane, Prof Brian Godman and others; Dr Joseph Fadare in charge of membership; Dr Olayinka Ogunleye in charge of Newsletter; Prof Ilse Truter in charge of the website and Prof Brian Godman to coordinate the Pan-African Research activities of the group.



Participants at the first MURIA workshop and symposium in Gaborone, Botswana on July 27-29, 2015 co-organized by the IUPHAR Developing Countries Subcommittee of the Clinical Pharmacology Division

### The First MURIA workshop photo gallery































#### PROF. AMOS MASSELE TAKES MURIA TO EAST AFRICAN COUNTRIES

Prof Amos Massele has commenced working visits to the East African countries starting with Tanzania on behalf of the MURIA group. He visited academic health institutions in Tanzania between 21<sup>st</sup> September and 10<sup>th</sup> October, 2015 to initiate and collect information on medicines utilization and also recruit membership for the MURIA group in this region. The visit also afforded the opportunity of interaction with researchers in medicines utilization, observe available

settings for conducting research, understand the methods and techniques used by these individuals, identify the qualifications and research capacities of the staff and the problems faced in conducting medicines utilization researches in these countries.

The institutions visited include Muhimbili University of Health and Allied Sciences, Dares Salaam, Baylor College of Medicine and Children Foundation, Mbeya, The Ministry of Health and Social Welfare of the United Republic of Tanzania and The University of Dodoma in Tanzania.

A total of 10 scientists were recruited with great enthusiasm into the MURIA group in Tanzania during this visit, six are medical doctors/ pharmacologists, three are pharmacists and one is a dentist who is willing to work with someone else in DUR. One of the pharmacists recruited is Ms Maunjo, a director in the pharmacy section of the Ministry of Health of Tanzania. These individuals bought into the vision of MURIA and would like to be part of crossnational research initiatives of MURIA. They also requested biennial workshops on methods and tools for DUR. Further visits taking December to the region are place in 2015 and January 2016.

## THE SECOND MURIA TRAINING WORKSHOP AND SYMPOSIUM ON DRUG UTILIZATION AND OTHER UPCOMING MEETINGS.

The second MURIA Training Workshop and Symposium on Drug Utilization is scheduled to take place between Sunday 17<sup>th</sup> and Wednesday 20<sup>th</sup> July, 2016 at the University of Botswana, Gaborone. It promises to be highly interactive, inspiring and impactful. Details of the events will be available soon on the MURIA website. Kindly mark the date and prepare to be part of another success story of MURIA.

The Second Course on Interface Management of Pharmacotherapy, Catalan pharmaceutical model for access and use of medicines based on health outcomes is scheduled to be held between October 17 and 19, 2016 in Barcelona, Spain. Contact information: Practical/organizational through Executive Secretary Ana Garcia amgarcia@catsalut.cat and scientific through Eduardo Diogene (ed@icf.uab.cat) and Corine Zara (czara@catsalut.cat).

#### **MURIA PUBLICATIONS**

The following are publications from the MURIA group since inception

- Amos Massele, Brian Godman, Mathias Adorka, Joseph Fadare, Andy Gray, Martie Lubbe, Olayinka Ogunleye, Ilse Truter. Initiative to progress research on Medicnes Utilization in Africa; formation of the Medicines Utilization Research in Africa Group. Expert Rev. Pharmacoecon. Outcomes Res. 15(4), 607-610(2015)
- Amos Massele, Johanita Burger, Norah L Katende-Kyenda, Francis Kalemeera, Thatoyaone Kenaope, Dan Kabuule, Ogochukwu Mbachu, Mwangana Mubitaa, Margaret Oluka, Adedunni Olusanya, Bene D Anand Paramadhas, Pauline van Zyl, Brian Godman(2015). Outcome of the first Medicines Utilization Research in Africa Group meeting to promote sustainable and rationale medicine use in Africa, Expert Review of Pharmacoeconomics and Outcomes Research: http://dx.doi.org/10.1586/147371687.2015.1088386.
- Joseph O Fadare, Adekunle O Adeoti, Olufemi O Desalu, Okezie O Emwere, Aliyu M Makusidi, Olayinka Ogunleye, Taofeek O Sunmonu, Ilse Truter, Onyinye O Akunne, Brian Godman. The prescribing of generic medicines in Nigeria: knowledge, perceptions and attitudes of physicians. *Expert Rev Pharmacoecon Outcomes Res.* 2015 Nov 13. [Epub ahead of print]
- Fadare JO, Gustafsson LL, Godman B, Kgatlwane J, Massele AY, Ogunleye OO, Truter I. Developing Countries Subcommittee of the Clinical Pharmacology Division. The Medicines Utilization Research in Africa (MURIA) Group and IUPHAR co-organised a workshop in Botswana for the promotion of Rational Use of Medicines. Pharmacology International. No. 85 December 2015: 17 – 20. http://www.iuphar.org/files/Newsletters/Pharmacology\_International\_2015\_December.pdf
- Markovic-Pekovic V, Škrbic R; Petrovic A, Vlahovic-Palcevski V, Mrak J, Bennie M, Fadare J, Kwon H-Y, Schiffers K, Truter I, Godman B. Polypharmacy among the elderly in the Republic of Srpska; extent and implications for the future. Expert Review of Pharmacoeconomics and Outcomes Research. http://dx.doi.org/10.1586/14737167.2016.1115347.
- 6. Onyinye Akunne, Brian Godman, Aduragbenro D Adedapo, Ilse Truter, Joseph Fadare. Statin prescribing among hypertensive patients in south-west Nigeria; findings and implications for the future (In Press Journal of Comparative Effectiveness Research)
- 7. J.O.Fadare, O.O.Ogunleye, L.L Gustafsson. The Stockholm "Wise List" of essential medicines is now available online in English: Is it a useful model for promoting the Rational Use of Medicines in developing countries? Pharmacology International. No. 85 December 2015: 21-23.

#### http://www.iuphar.org/files/Newsletters/Pharmacology\_International\_2015\_December.pdf

#### THE AFRICAN PHARMACOLOGY SCIENCE GATEWAY (APSG).

A common problem among many African scientists is that of limited resources to develop and maintain strong research programs and institutions even after they might have had opportunities of training in high income countries. A few who have established key research areas in biomedical sciences are often scientifically isolated with limited opportunities or possibilities for interaction to realize and build synergy from the knowledge and technical skills they have individually established.

In response to the above concerns and challenges, the MURIA Group is facilitating access to relevant resources for Drug Utilization Researchers (for example, Dictionary of DDDs, ATCs, DU90% calculation tools, and Data Management Programs) and others focusing on Genomics and Bioinformatics, Pharmacokinetics/Pharmacometrics, Bioanalysis, Drug Analysis and Metabolism, Drug Development, Clinical Trial Sciences and other areas of biomedical sciences via an e-infrastructure platform named '**The African Pharmacology Science Gateway (APSG)** developed by The Karolinska Institute, Sweden through a project funded by The European Union and the Swedish Research Council (Accessible at http://sgw.africagrid.org/pharmacology-science-gateway)

A survey of the need assessments of African Researchers is being carried out in this respect to be able to provide appropriate resources.

#### **ON GOING RESEARCH ACTIVITIES**

The following are some of the on-going research activities of the MURIA Group.

- Prof Brian Godman is leading the some members of the group to contribute a chapter on "Initiatives across countries to reduce antibiotic utilization and resistance patterns; impact and implications" to a book publication organised by Springer
- 2. Research Tools Needs Assessments of Biomedical Professionals and Researchers Across Africa. In aid of the APSG Project.
- 3. Assessment of Availability and Functions of Drug and Therapeutic Committees in Nigeria. To be extended to other African countries.
- 4. Pattern of Utilization of Antihypertensives, Statins and Antibiotics Drugs in Nigeria: A Pharmacoepidemiologic and Pharmacoeconomic Analysis.
- 5. Single and cross-national comparisons on the use of antibiotics in ambulatory care including selfpurchasing (especially URTIs). This includes the Medical Aid groups in Botswana
- 6. Planned studies to assess antibiotic utilisation among private GPs and public hospitals in Botswana
- 7. Pharmacovigilance activities in Africa (ongoing)

#### FUNDING AND TRAINING OPPORTUNITIES

Check out a recent call for EDCTP-TDR Clinical Research and Development Fellowships on: http://www.edctp.org/call/edcpt-tdr-clinical-research-development-fellowship-2/