



MURIA NEWS

Newsletter of the Medicines Utilization Research in Africa (MURIA) Group. Vol 2. No 1. October 2016.

MURIA HELD SECOND TRAINING WORKSHOP AND SYMPOSIUM ON DRUG UTILIZATION

The Faculty of Medicine of The University of Botswana, Gaborone played host successfully again to the MURIA group for The Second Training Workshop and Symposium between 25th and 27th July 2016. The meeting drew over 120 participants from countries across Africa, Europe and North America including Botswana, South Africa, Swaziland, Namibia, Tanzania, Zimbabwe, Rwanda, Kenya, Nigeria, Canada, Sweden and the United Kingdom. The meeting was sponsored by IUPHAR, Botswana Public Officers' Medical Aid Scheme (BPOMAS), the Ministry of Health in Botswana as well as a VR-Link grant from Swedish Research Council (VR-Link 2013-6710).

It was declared open by Professor Martin Makgwathi, The Deputy Vice Chancellor, Academic Affairs of The University of Botswana. In his opening remarks, he lauded the remarkable achievements of MURIA within a relatively short period of 18 months of its establishment, notably the involvement of members from over 12 African countries, the global visibility of MURIA which keeps improving and its wide range of on-going and planned research activities. Furthermore, he emphasized the importance of drug utilization researches both at national and cross-national levels especially in the areas of anti-infectives, noting the commitments of MURIA to this cause.

While rounding up his speech by appraising the outlined objectives of the workshop and the opportunity it presents for sharing the successes and challenges from African countries, he commended the founders of MURIA for putting in place plans for mentorship programmes for African scientists.

Delegates subsequently attended either introductory or advanced workshops. The Introductory Drug Utilization (DU) workshop covered general introduction to DU research with emphasis on methodologies including ATC/DDD systems, qualitative DU research and introduction to statistical techniques applicable to DU research. The advanced workshop featured the following sessions: advanced statistics including multilevel models and interrupted time series, developing formularies and instigating active Drug and Therapeutics Committees (DTCs) across Africa, Proposal Writing Workshop, Questionnaire design for academic research as well as Designing and Undertaking National and Cross-National Studies.

The workshops were followed on day 2 by presentations from participants across Africa regarding on-going and planned researches and activities towards improving drug utilization especially antimicrobials. Day 3 of the meeting started with a tribute to Dr Matthias Adorka, a founding member of MURIA from Namibia following his untimely death on 17 December, 2015. The team from Department of Pharmacy, University of Namibia joined by other MURIA members paid glowing tributes to the legacies of Dr Adorka. Subsequently, there were other presentations including the results of the African Pharmacology Science Gateway (APSG)/ MURIA survey on African Researchers needs to guide discussions on next steps. Key pertinent areas included continued training in DU and statistics, prescription databases, establishment of PV centres,

greater collaboration/ networks and continued funding for conferences. These themes were taken forward and discussed as part of proposed activities for 2016/2017. All abstracts and workshop presentations can be found on the MURIA website (<http://muria.nmmu.ac.za/>).

The meeting was highly interactive and educative with positive feedbacks from attendees who found the workshops and symposia presenters knowledgeable in their areas, the contents relevant to their needs and applicable to their workplaces. Participants departed with lots of enthusiasm looking forward to next MURIA Group meeting in July 2017 in Namibia. We also thank the University of Botswana team for making the meeting in July such a success!



Participants at The Second Training Workshop and Symposium of MURIA Group held at The University of Botswana between 25th and 27th July, 2016.

MURIA 2 IN PICTURES.





MURIA COLLABORATES WITH WORLD HEALTH ORGANISATION TO CURB ANTIMICROBIAL RESISTANCE

Despite the existence of antibiotic guidelines and other measures to improve antibiotics use in some African countries including Botswana, research findings suggests that guidelines are often not followed and there are growing concerns with the extent of empiric use of antibiotics enhancing antimicrobial resistance (AMR) and limited use of sensitivity laboratory analysis. Botswana has responded to this challenge in different ways to document current activities including resistance patterns and plan future research activities including enhancing the utilization of the 2012 Botswana guidelines. In progressing in this direction, a 2 day capacity building meeting held 1 - 2 February, 2016 in Gaborone drawing key personnel and experts from World Health Organization, health institutions in Botswana including private and public facilities as well as other participants from Tanzania and Zimbabwe.

The Dean of The Faculty of Medicine, University of Botswana, Prof Tanko, gave the opening remarks at the meeting while Prof Brian Godman followed up with a brief introduction to Drug Utilization Research (DUR) with emphasis on standard means of data collection that enables cross-national comparisons of drug utilization patterns. He also introduced the MURIA Group giving an up to date account of its activities. Abayneh Desta from the WHO Regional office for Africa, Republic of Congo discussed concerns and issues with antibiotic prescribing in Africa including the weak laboratory capacity and poor compliance to prescribed medicines occasioned by high prices of treatments, considerable self-medication practices and poor health information system. He outlined the responses of the WHO to these challenges through provision of guidelines for DTC, promotion of Antimicrobial Stewardship Programme (AMS) strategies and policies towards reducing AMR, improvement of knowledge base and optimizing antibiotic use. Arno Muller from the WHO office in Botswana also emphasized the ATC/DDD methodology and discussed projects comparing antimicrobial consumption (AMC) in ambulatory and hospital care, in particular the Point Prevalence Study (PPS) planned for Botswana and other African countries outlining its advantages. Other presenters at the meeting included Celda Tiroyakosi (Ministry of Health, Botswana) and BeneParamadhas (Nyangabgwe Hospital,

Francistown) as well as Brigid Malone, Gobulwang Kurasa and Thatayaone Didimalang from the private health sector of Botswana discussing their AMS programmes including current antibiogrammes (published online at <http://www.tandfonline.com/doi/pdf/10.1586/14737167.2016.1164040?needAccess=true>). Following the presentations, the draft protocol for the PPS for Botswana public and private sectors study was developed with the plan of extending the study to Tanzania and Zimbabwe in the first instance and the rest of Africa subsequently. The intention was to conduct a pilot study to be discussed at the MURIA Conference in July 2016 as a basis for conducting the full study in Botswana and other African countries. We again thank the University of Botswana and the team headed by Professor Amos Masele for making this 2-day meeting such a success.

MURIA HOLDS TRAINING WORKSHOP ON POINT PREVALENCE SURVEY FOR ANTIBIOTIC UTILIZATION IN ZIMBABWE.

Following the pilot Antibiotics Utilization Point Prevalence Study in Botswana and the implications for the data collection tool, a one day training workshop was conducted at The Kadoma Rainbow Hotel, Harare on 8th September, 2016, utilizing the experiences from Botswana and drawing participants from key stakeholders at the Ministry of Health and Child Care as well as potential data collectors among the hospitals in Zimbabwe. The training session began with an opening remark by Mrs Hove, the Director of Pharmacy Services in the Ministry of Health and Child Care. This was followed by presentations on Antimicrobial Resistance (AMR) by Mr Misheck Ndhlovu who also gave an overview on Point-Prevalence Studies and the procedures involved. There was also a presentation on Research Ethics by Dr Sekesai Zinyowera to round off the first segment of the training session.

The session reconvened after a tea break to study in a step by step the PPS tools and also customize the tools to Zimbabwe settings as indicated. This session was led by Mrs Fatima Sinkala who conducted the pilot study in Botswana. Participants were thereafter divided into groups of six each and given a mock exercise of patients' notes to fill into the tools. There were questions and answers sessions as well as training on data entry facilitated by Mr George Nyandoro. Participants were charged to update their head of institutions on the PPS training including planned research activities on their return to their respective work places and work with the Infection Prevention Control (IPC) nurses who had been trained previously in carrying out the study. The results of the survey were expected back on 30th September, 2016.



Participants at the Zimbabwe PPS Training on 8th September, 2016.

MEDICINES UTILIZATION RESEARCH TRAINING, 15-16 March 2016 at the Happy Valley Hotel, Ezulwini, Swaziland.

Prof Ilse Truter, Dr Brent Knoesen and Ms Marike Cockeran **were invited to** conduct a Medicines Utilization Training in Swaziland on 15th and 16th March, 2016. The event was sponsored by SIAPS (MSH), Swaziland Christian University, Swazi pharm, Pharm industry, ASD Medicals, The Clinic Group and Swazimed Centre, in collaboration with the Swaziland Ministry of Health. Mr Fola Amu, Mr Kidwell Matshotyana, Ms Sibongile Mabusa, Ms Zinhle.... and Ms Kholiwe Shongwe played a pivotal role in making this event possible. Participants in the training included pharmacists, nurses, doctors, academic staff from local Universities and final year pharmacy student representatives from SCU. The two-day training workshop started with welcome remarks by the Chief Pharmacist of Swaziland, Ms Fortunate Bhembe. Thereafter, an overview of medicines utilization activities in Swaziland was given by various stakeholders. Topics covered pre- and post-implementation of the Swaziland Standard Treatment Guidelines, the establishment of Pharmacy and Therapeutic Committees (PTCs), PTCs at facilities and the state of pharmacovigilance in Swaziland. Later on day one, a workshop was presented to formally introduce delegates to drug utilisation research, as well as focussing on methodologies including the ATC/DDD methodology. This was followed by a session on qualitative drug utilisation studies, and a hands-on session on the application of the different methodologies in practical scenarios. The second day started with a short overview of aspects covered during the first day, there after an introductory statistics workshop was presented. The two-day workshop concluded with delegates brainstorming the way forward to formalise drug utilisation research in Swaziland. A committee was established to coordinate the national efforts in drug utilisation research.

It was a wonderful opportunity to be part of this initiative. I will never forget the hospitality and the sincere interest in learning more about, and become more involved, in medicines utilisation research by this group of delegates. My Swazi candle that was given to me at the end of the workshop, is proudly on my desk where I see it every day. I wish our colleagues in Swaziland all the best and hope together we will take hands and promote our drug utilisation activities in a world where this research is so relevant!

Ilse Truter
Drug Utilisation Research Unit (DURU)



Participants at the Medicines Utilization Research Training in Swaziland 15-16 March, 2016

TRIBUTE TO DR MATTHIAS ADORKA



Dr. Mathias Adorka passed peacefully from this life on December 17, 2015. He served with passion in the areas of clinical pharmacology, pharmacy consultancy, and academia.

Dr. Adorka had his primary, secondary and higher school certificate education in Ghana, his mother land. In 1977 he acquired a Bachelors (honours) degree in Pharmacy from the University of Science and Technology, Kumasi, Ghana. He served as a pharmacist

superintendent in Tema, Ghana thereafter. His passion for traveling led him to Liberia where he worked as a community pharmacist and branch manager of a pharmaceutical organization.

In response to his desire to practice clinical pharmacy, he obtained a Master's Degree in Clinical Pharmacy at the University of Bradford in 1991 after which he commenced his academic career at the National Health and Training College, Maseru, Lesotho serving as the Principal Tutor in Pharmacology. He was a founding faculty member of the Department of Pharmacy and Nutrition, Faculty of Health Sciences, National University of Lesotho.

While there, he provided pharmacy consultancy and training services for pharmacy managers at Health Research for Action. He obtained a PhD in Pharmacy Practice focusing his thesis on antibiotic resistance in Southern Africa. In 2011 he was appointed a Senior Lecturer at the Faculty of Health Sciences, University of Namibia. He worked towards extending his research on antibiotics resistance, establishing pharmacology laboratories in the new Faculty of Health Sciences.

He strongly supported and was part of the core group that established the Medicines Utilization Research in Africa (MURIA) Group. His passion for research, though truncated by his untimely death, lives on.

MURIA PUBLICATION

MURIA Publication List as at September 2016 (Involving multiple authors across countries)

Publications in journals

Published/Accepted

1. Massele A, Godman B, Adorka M, Fadare J, Gray A, Lubbe M, Ogunleye O, Truter I. Initiative to progress research on Medicine Utilisation in Africa – formation of the MURIA group. *Expert Rev Pharmacoecon Outcomes Res.* 2015 Aug;15(4):607-610
2. Massele A, Burger J, Katende-Kyenda NL, Kalemeera F, Kenaope T, Kibuule D, Mbach O, Mubita M, Oluka M, Olusanya A, Anand Paramadhas B, van Zyl P, Godman B. Outcome of the first Medicines Utilisation Research in Africa Group meeting to promote sustainable and rational medicine use in Africa. *Expert Rev Pharmacoecon Outcomes Res.* 2015;15(6):885-8
3. Fadare O, Gustafsson LL, Godman B, Kgatlwane J, Massele AY, Ogunleye O, Truter I. DEVELOPING COUNTRIES SUBCOMMITTEE OF THE CLINICAL PHARMACOLOGY DIVISION. THE MEDICINE S UTILIZATION RESEARCH IN AFRICA (MURIA) GROUP AND IUPHAR CO-ORGANIZED A WORKSHOP IN BOTSWANA FOR THE PROMOTION OF RATIONAL USE OF MEDICINES. *Pharmacology International.* No. 85 December 2015: 17–20
4. Gaida R, Truter I, Grobler C, Kotze T, Godman B. A review of trials investigating efavirenz-induced neuropsychiatric side effects and the implications. *Expert Rev Anti Infect Ther.* 2016;14(4):377-88
5. Massele M, Tiroyakgosi C, Matome M, Desta A, Muller M, Anand Paramadhas B, Malone B, Kurusa G, Didimalang T, Moyo M, Godman B. Research activities to improve the utilisation of antibiotics in Africa. *Expert Rev Pharmacoecon Outcomes Res.* 2016 Apr 8:1-4 [Epub ahead of print] – now available Open Access <http://www.tandfonline.com/doi/full/10.1586/14737167.2016.1164040>
6. Fadare JO, Adeoti AO, Desalu OO, Enwere OO, Makusidi AM, Ogunleye O, Sunmonu TO, Truter I, Akunne OO, Godman B. The prescribing of generic medicines in Nigeria: knowledge, perceptions and attitudes of physicians. *Expert Rev Pharmacoecon Outcomes Res.* 2015 Dec 28:1-12. [Epub ahead of print]
7. Akunne O, Godman B, Adedapo DA, Truter I, Fadare JO. Statin prescribing among hypertensive patients in south-west Nigeria; findings and implications for the future. *J Comp Eff Res.* 2016;5(3):281-8
8. Kalemeera F, Mbango C, Mubita M, Naikaku E, Gaida R, Godman B. Effect of changing from first- to Second- Line Antiretroviral Therapy on Renal Function: A Retrospective Study based on data from a Single Health Facility in Namibia. *Expert Rev Anti Infect Ther.* 2016;14(8):777-83
9. de Bruijn W, Ibáñez C, Frisk P, Pedersen HB, Alkan A, Vella Bonanno P, Brkičić LS et al. *Introduction and utilisation of high priced HCV medicines across Europe; implications for the future. Frontiers in Pharmacology* 2016; 7; Article 197 ps: 1-18
10. Kibuule D, Kagoya HR, Godman B. Antibiotic use in acute respiratory infections in under-fives in Uganda: findings and implications. *Expert Rev Anti Infect Ther.* 2016 Jul 11:1-10. [Epub ahead of print]
11. Kalungia CV, Burger J, Godman B, de Oliveira Costa J, Simuwelu C. Prevalence and practice of non-prescription sale and dispensing of antibiotics in community retail pharmacies in Zambia. *Eprint Expert Rev Anti Infect Therapy.* 2016 DOI: 10.1080/14787210.2016.1227702
12. Godman B, Fadare J, Kibuule D, Irawati L, Mubita M, Ogunleye O, Paramadhas BDA et al. Initiatives across countries to reduce antibiotic utilization and resistance patterns; impact and implications (Accepted for publication as a chapter in Drug Resistance. Editors: Andaleeb SAJID, Gunjan ARORA and V. C. KALIA by Springer - [https://pure.strath.ac.uk/portal/en/publications/initiatives-across-countries-to-reduce-antibiotic-utilization-and-resistance-patterns\(bb445446-fd1d-47b3-8f91-def5d9e5e3db\)/export.html](https://pure.strath.ac.uk/portal/en/publications/initiatives-across-countries-to-reduce-antibiotic-utilization-and-resistance-patterns(bb445446-fd1d-47b3-8f91-def5d9e5e3db)/export.html))
13. Massele M, Burger J, Kalemeera F, Jande M, Didimalang T, Kalungia AC, Matshotyana K et al. Outcome of the second Medicines Utilisation Research in Africa Group meeting to promote sustainable and appropriate medicine use in Africa. Second MURIA Group Workshop and Symposium, University of Botswana, Gaborone, Botswana 25 to 27 July 2016 (Hopefully soon accepted for publication *Expert Review of Pharmacoeconomics and Outcome Research*)

Submitted publications

1. Ezenduka VV, Nworgu CE, Godman B, Massele A, Esimone CO. Antimalarial drugs treatment pattern among pregnant women attending antenatal care clinics in South East Nigeria (Re-submitted to *International Journal of Clinical Practice*)
2. Oshikoya KA, Oreagba IA, Godman B, Oguntayo FO, Fadare J, Orubu S, Massele A, Senbanjo IO. Potential drug-drug interactions in paediatric outpatient prescriptions in Nigeria and implications for the future (about to be re-submitted to *Exp Rev in Clinical Pharmacology*)
3. Ambetsa MO, Oluka MN, Okalebo FA, Charles NW, Fadare J, Godman B. One-day out-patient prescribing patterns including the use of generics at a national referral hospital in Kenya; implications for the future

- (Submitted to GaBI Journal)
4. Oshikoya KA, Oreagba IA, Godman B, Fadare J, Orubu S, Massele A, Senbanjo IO. Off-label prescribing for children with chronic diseases such as epilepsy, asthma and sickle cell anaemia in Nigeria: a pilot study (Submitted to Pharmacoepidemiology and Drug Safety)⁵. Kalemeera F, Cockeran M, Mubita M, Kibuule D, Naikaku E, Godman B. The potential effect of renal function assessment methods on safety reports and clinical use of Tenofovir Disoproxil Fumarate: implications for the future (Submitted to Expert Review of Clinical Pharmacology)
 6. Olusanya A, Ogunleye O, Godman B, Fadare J, Danesi M. Adverse effects of carbamazepine monotherapy among patients in Nigeria – a pilot study and implications (Submitted to Journal Comparative Effectiveness)
 7. Afriyie DK, Amponsah SK, Dogbey J, Agyekum K, Kesse S, Truter I, Meyer JC, Godman B. Evaluation of the prescribing of ceftriaxone in Ghana: Findings and implications (Submitted to Expert Review of Anti Infective Therapy)

UP COMING EVENTS

The Second Course on Interface Management of Pharmacotherapy

The WHO collaborating center for research and training in pharmacoepidemiology in conjunction with the Catalan Health Services, Fundacio Institut Calata de Farmacologia, Piperska Group, IUPHAR (Subcommittee for clinical pharmacology in developing countries) and WHO Europe is organizing a three day workshop and site visit on second course on Interface Management of Pharmacotherapy between 17 -18 October, 2016 at Barcelona, Spain. Details see: pharacoepi.org or whocc.goeg.at