

MURIA and the key role of Botswana

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Objectives

To share findings of ongoing studies

To use the findings to map the way forward

To strengthen collaboration between the different groups working in Botswana and across Africa to improve future antibiotic use



MINISTRY of HEALTH
REPUBLIC OF BOTSWANA

MURIA has now been ongoing for a number of years and is rapidly developing

- The concept of a Medicines Utilisation Research Group in Africa (MURIA) built on discussions at the World Congress for Basic and Clinical Pharmacology in South Africa in 2014
- MURIA was officially launched at the Nelson Mandela Metropolitan University in Port Elizabeth South Africa on 27 January 2015
- It was agreed that the MURIA Group should be a multidisciplinary network of healthcare professionals striving to promote sustainable, rational medicine use in Africa
- This achieved through collaborative research and capacity building, with the objective of improving the quality of life of patients as well as the quality of medicine utilisation in Africa

MURIA was officially launched at Port Elizabeth in January 2015



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The vision of MURIA was progressed through a 2.5day workshop and symposium in July 2015

- It was agreed in Port Elizabeth that the vision and mission of MURIA will be achieved through training, collaborative research, information sharing and facilitation of access to data right across Africa
- As a result, addressing challenges regarding DU research in Africa. Subsequently link the findings with potential policy interventions to improve the rational use of medicines in Africa in the future especially around anti-infectives
- The first step was a 2.5 day workshop and symposium around drug utilisation in Gaborone, Botswana, in July 2015, hosted by the University of Botswana. Funding was provided by the Swedish Research Council, AFA (Botswana), MoH Botswana, IUPHAR and the University of Botswana (magnificent facilities)

Some of the participants for the successful first MURIA meeting in Botswana July 2015



Drug utilisation studies on anti-infectives dominated presentations in July 2015

Discussed studies at the First MURIA symposium in July 2015 included:

- A qualitative study among households in Kampala revealed high self purchasing of antibiotics for a common cold
- High prescribing of fluoroquinolones among physicians in the private healthcare sector in South Africa
- Socio-economic status of patients, patient satisfaction, their knowledge of antibiotics and relationships influenced physician prescribing behaviour
- Irrational use of antibiotics among government facilities in Swaziland as a basis for the future
- High degree of empiric prescribing with culture and sensitivity tests rarely ordered among HIV-infected patients at a tertiary care facility in Botswana
- Concerns with antibiotic prescribing in Botswana led to the development of the antibiotic symposium in February 2016

The symposium and training session in UB in February 2016 led by Bene, the WHO, and UB, resulted in the instigation of the PPS studies in Botswana and wider as well as continued activities to improve the use of antibiotics in both hospitals and ambulatory care in Botswana

There was also input from other African countries including Zimbabwe and Tanzania via the WHO

Research activities to improve the utilization of antibiotics in Africa

University of Botswana 1-2nd February 2016

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The pilot PPS study in Botswana (in-patient – 7am in the morning) was based on ESAC and Global PPS adjusted for Botswana - following a 1.5 day training programme

Only interested on in-patients (not day case, A & E, etc.). Only stipulation is that researchers must complete the ward that day and only data from the patient's notes (no DIRECT questioning)

Date:	
Name of the Hospital:	
Hospital Code <i>(Refer to the Hospital Codes provided in the table below)</i>	
Level of Healthcare Facility <i>(Choose and circle the correct one)</i>	Primary / District / Referral
Full Names of the Data Collector: <i>(Print In capital letters)</i>	
Telephone no:	
Mobile No:	
Email:	

Pilot PPS study (cont.)

MURIA Antibiotic Utilization Study

Section 1 - To be completed for all admitted patients

Hospital Code:	<input type="text"/>	Ward Code:	<input type="text"/>	Patient Code:	<input type="text"/>	Consented:	<input type="text"/>	Admission Date:	<input type="text"/>	Age:	<input type="text"/>	Sex:	<input type="text"/>
Employed:	<input type="text"/>	Transfer in:	<input type="text"/>	Prior Hospitalization:	<input type="text"/>	Antibiotic use last 90 days?	<input type="text"/>	Duration of Use:	<input type="text"/>				
Catheterization:	<input type="text"/>	Intubation:	<input type="text"/>	HIV:	<input type="text"/>	Name of last Antibiotics:						<input type="text"/>	
CD4 Count:	<input type="text"/>	On HAART	<input type="text"/>	On Antibiotics now?:	<input type="text"/>	(If you answered "Yes" then fill Section 2 below)							

Section 2 - To be completed only for patients currently on Antibiotic therapy

Prescribed by:	<input type="text"/>	Prophylaxis/Treatment?	<input type="text"/>	Medical or Surgical prophylaxis?	<input type="text"/>	Duration of Prophylaxis:	<input type="text"/>
Indication:	<input type="text"/>	Type of Infection:					<input type="text"/>

Name of the Antibiotic: 1	<input type="text"/>	Dose:	<input type="text"/>	Frequency:	<input type="text"/>	Route:	<input type="text"/>	<input type="text"/>
Start Date:	<input type="text"/>	No. of Doses Missed:	<input type="text"/>	Antibiotic O/S?	<input type="text"/>	Prescription on Drug sheet?	<input type="text"/>	
Name of the Antibiotic: 2	<input type="text"/>	Dose:	<input type="text"/>	Frequency:	<input type="text"/>	Route:	<input type="text"/>	<input type="text"/>
Start Date:	<input type="text"/>	No. of Doses Missed:	<input type="text"/>	Antibiotic O/S?	<input type="text"/>	Prescription on Drug sheet?	<input type="text"/>	
Name of the Antibiotic: 3	<input type="text"/>	Dose:	<input type="text"/>	Frequency:	<input type="text"/>	Route:	<input type="text"/>	<input type="text"/>
Start Date:	<input type="text"/>	No. of Doses Missed:	<input type="text"/>	Antibiotic O/S?	<input type="text"/>	Prescription on Drug sheet?	<input type="text"/>	
Name of the Antibiotic: 4	<input type="text"/>	Dose:	<input type="text"/>	Frequency:	<input type="text"/>	Route:	<input type="text"/>	<input type="text"/>
Start Date	<input type="text"/>	No. of Doses Missed:	<input type="text"/>	Antibiotic O/S?	<input type="text"/>	Prescription on Drug sheet?	<input type="text"/>	
Name of the Antibiotic: 5	<input type="text"/>	Dose:	<input type="text"/>	Frequency:	<input type="text"/>	Route:	<input type="text"/>	<input type="text"/>
Start Date	<input type="text"/>	No. of Doses Missed:	<input type="text"/>	Antibiotic O/S?	<input type="text"/>	Prescription on Drug sheet?	<input type="text"/>	

Rx in INN (generic name)?	<input type="text"/>	CST prior to Empiric Treatment?	<input type="text"/>	CST Results?	<input type="text"/>	Name of Bacteria:	<input type="text"/>
Was Rx changed to sensitive Abx?	<input type="text"/>	Diarrhoea/Vomiting?	<input type="text"/>	Oral Switch?	<input type="text"/>	All Antibiotics from BEDL?	<input type="text"/>

Anti-infectives were again a major theme at the second MURIA symposium in July 2016

- The second MURIA symposium was again held at the UB with assistance from UB, Swedish Research Council, AFA, MoH Botswana, and IUPHAR, and included:
 - ❑ Management of URTIs in the Private Sector (GP) in Botswana
 - ❑ Programmes to optimise antibiotic prescribing in Bokamoso Private Hospital and Gaborone Private Hospital, Botswana
 - ❑ Findings/ update from the Point Prevalence Study among Public Hospitals in Botswana (which resulted in further refining of the PPS forms)
 - ❑ Prevalence and practice of non-prescription sale and dispensing of antibiotics in Zambia
 - ❑ The use of ceftriaxone at the Ghana Police Hospital, Ghana
 - ❑ Infant Cotrimoxazole Prophylaxis Associated with Commensal Gut Flora Resistance in Botswana

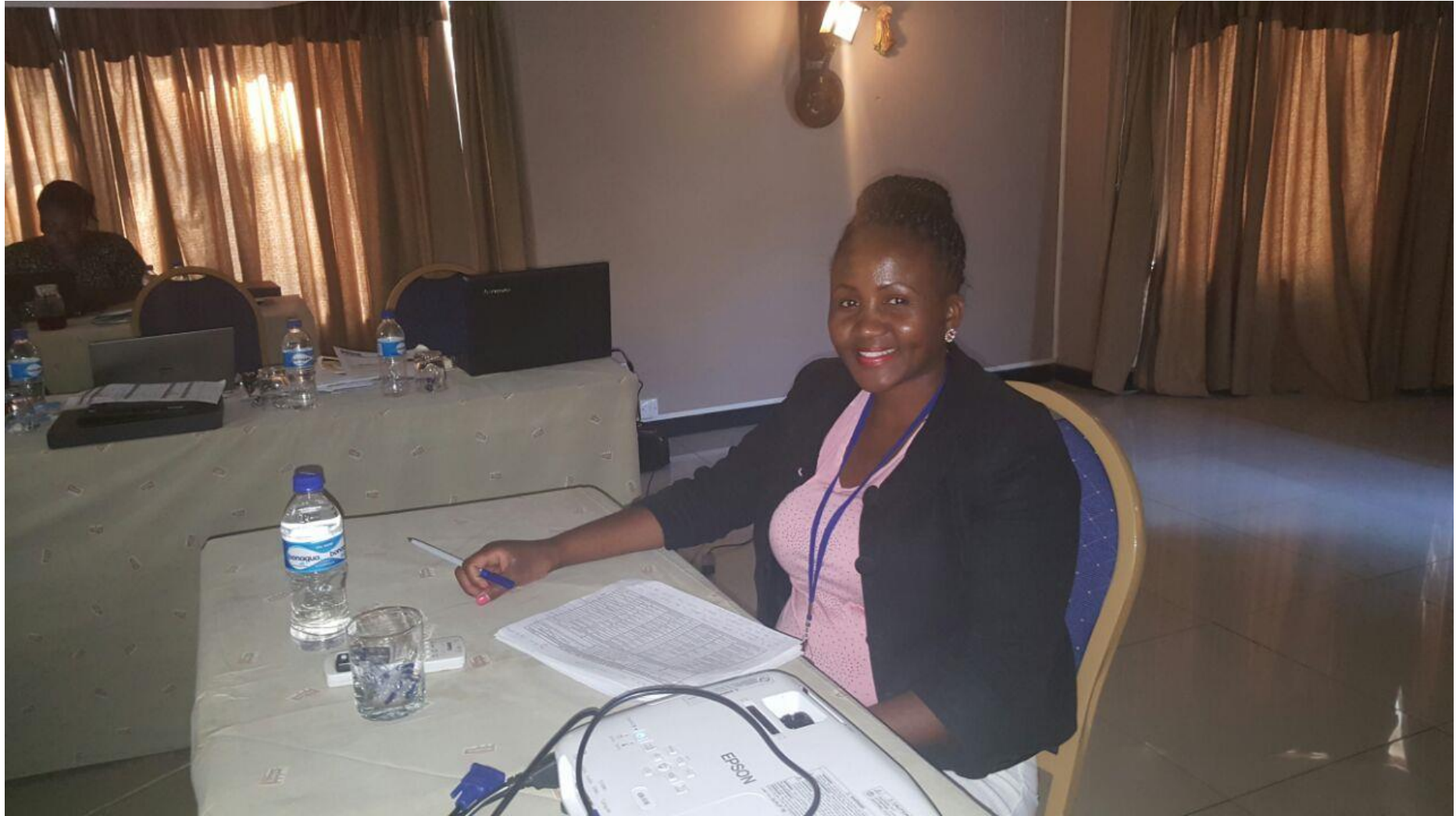
The second MURIA symposium was again a great success with considerable interaction among delegates



As a result of the PPS discussions, Fatima was asked to go to Zimbabwe and launch their PPS programme



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PPS studies are progressing across countries as well as additional research on antibiotics

- PPS studies are developing in Kenya, South Africa and Zimbabwe in addition to Botswana and planned in additional countries including Namibia
- There are also ongoing studies in Botswana surrounding surgical prophylaxis – mirroring those in Kenya and South Africa
- Antibiotics again dominated MURIA 3 in Namibia in June and this will continue, e.g. further PPS studies as well as a Forgotten Antibiotic Survey
- The outputs from today will again show that Botswana is one of the leading countries in Africa undertaking research across sectors (primary and hospital as well as public and private) to improve future antibiotic prescribing

- I look forward to today's discussion and future joint activities!

The Third MURIA symposium was again a great success with considerable interaction among delegates

