

# USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTaPS) PROGRAM

*Improved Access. Improved Services. Better Health Outcomes.*

Approaches and Tools for Strengthening Pharmaceutical Systems

## The Aga Khan Health Service, Tanzania

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# Who We Are- Overview of The Aga Khan Hospital, Dar es Salaam

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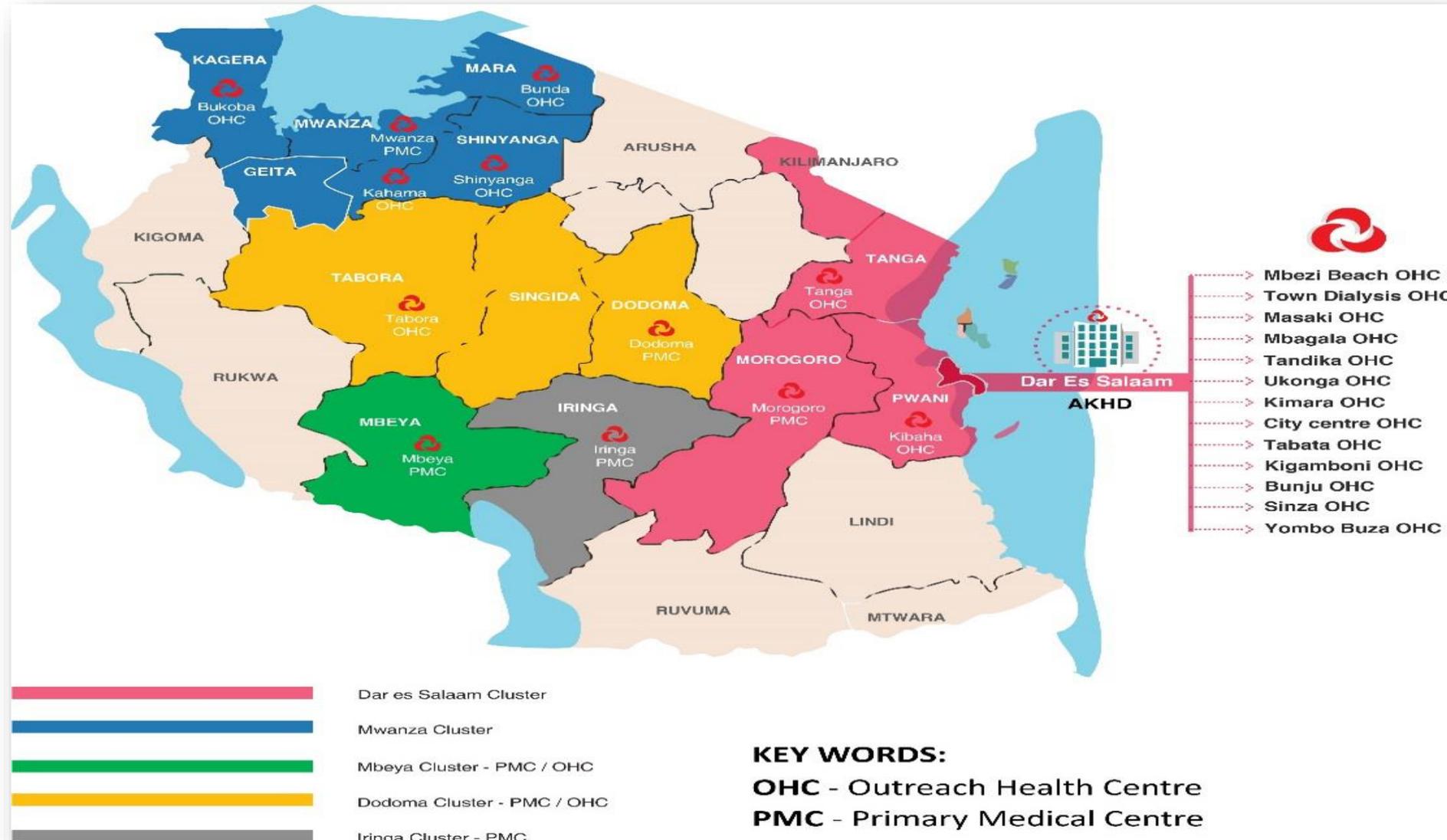
# Who We Are- Overview of The Aga Khan Health service, Tanzania

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- AKHST is an agency of Aga Khan Development Network (AKDN) which operates the largest private not for profit health care system in Tanzania.
- The institution has established an integrated health systems approach through a robust hub at tertiary level (The Aga Khan Hospital – Dar es Salaam), sub- hub (Mwanza Medical Center) and spokes (Outreach Health centers across the country) model and in partnership with other private and public health facilities.
- These facilities are effectively bridging the gaps in healthcare systems and are providing health care with a more accessible, available and affordable quality to people in urban underserved areas.
- AKHST has a strong Governance and Leadership function with board of directors which is well engaged and representative, with defined governance practices.

For more info: [Aga Khan Hospital, Dar-es-Salaam \(agakhanhospitals.org\)](http://agakhanhospitals.org)

# Who We Are- Overview of The Aga Khan Health service, Tanzania



# What We Do - In Pharmaceutical Systems Strengthening (PSS)

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- AKHD has a strong ASP (Antimicrobial Stewardship Program) including diagnostic capacity (pharmaceutical, infection prevention and microbiology)
- The journey of ASP began in mid-2016 after the JCI recommendation for the program. A working team was formed and a guiding document on its implementation was prepared.
- By end of 2016, the ToR was drafted with multi-disciplinary team involvement. By mid of 2017, a comprehensive policy and the KPIs were developed and implemented.

# Achievements in PSS-AMS AKHD

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- To prevent use of antibiotics POST SVD unless there is an indication such as episiotomy, premature rupture of membranes and avoid use of Antibiotics POST C/section unless there was an indication such as PROM, prolonged labor.
- Restoring Meropenem sensitivity after keeping it in quarantine
- Preventing post-op antibiotics (extended prophylaxis) for clean surgeries and reduction of SSI
- To participate in World antimicrobial awareness week.
- Take part in reviewing NAP-AMR plan 2017-2022 and developing NAP-AMR 2022-2028.
- The best practices learnt and implemented in our hospital, such as: Extended infusions of Piperacillin/Tazobactam that was found to reduce hospital stay, Extended infusions of Cefepime that also reduce hospital stay, VANCOMYCIN TDM and IV TO ORAL PROTOCOL



# REPORTING ANTIBIOGRAM

The laboratory department prepares the blood and urine AntibioGram which is discussed by ASP committee and circulated to the clinicians:



## AGA KHAN HOSPITAL BLOOD ANTIBIOGRAM

ORGANISM		ANTIBIOTICS SCEPTIBILITY(%)	AMIKACIN	AMPICILLIN	AUGMENTIN	AZITHROMY	AMOXICILLIN	CEFEPIME	CEFTRIAXONE	CEFTAZIDIME	CEFTAZOLONE	CEFTIOXIME	CIPROFLOXACIN	ERYTHROMYCIN	GENTAMICIN	IMIPENEM	MEROPENEM	METRONIDAZOLE	LEVOFLOXACIN	OXACILLIN	PIPERACILLIN TAZOBACTAM	VANCOMYCIN	POLYMYXIN B
	<i>Isolates (#)</i>																						
<b>GRAM NEGATIVE</b>																							
<b>Escherichia coli</b>	25		96	64	96		72	100		96	96	88	88		64		100				88	72	100
<b>Klebsiella pneumoniae</b>	18		94	0	78	0		67		88	78	78	94		88	100	100		88		94	68	100
<b>Pseudomonas aeruginosa *</b>	5		80	0	0	0	0	60	0	80	60	80	80	0	0	75	89				67	62	100
<b>Acinetobacter baumannii</b>	2		100	0	0			50		0	0	100	50	50	100	100	100		100		20	0	100
<b>Enterobacter cloacae *</b>	5		80	40	60			80	80	80	80	100	100	0	100	40	100				100	25	100
<b>Elizabethkingia meningoseptica</b>	2		100		100			50		50	0		50				100				100	0	100
<b>Salmonella spp.</b>	2		100	0	100	50	0	100	100	100	100				50	100	100	50					
<b>Serratia odorifera *</b>	5		50		75			100	60	80	75	100	100		40	100	100				50	0	
<b>Pseudomonas luteola *</b>	1							0		0		0	0				0						100
<b>Aeromonas hydrophila *</b>	2		0		25	0		0	0	0	0	0	0				0				0	0	100
<b>GRAM POSITIVE</b>																							
<b>Staphylococcus aureus</b>	20		95	85	95	40	60	95	100	95	95	70	85	100	95	95	95	50	60	100	95	95	100
<b>Streptococcus pneumoniae</b>	0																						
<b>Streptococcus pyogenes</b>	2		0	0	0				0	100	100						100				100		
<b>Staphylococcus – Coagulase Negative</b>	93																						
<b>Corynebacterium spp.</b>	1			0	100	0			100	100	100				100								
<b>Total growths</b>	183																						
<b>Total Blood cultures</b>	1380																						

\* - Bacteria causing Nosocomial infections



# QUARANTINING OF ANTIBIOTICS DUE TO RESISTANCE

- After getting our Antibiogram, a MEMO was released where the ASP decided to QUARANTINE Meropenem due to growing resistance .



THE AGA KHAN HOSPITAL, DAR ES SALAAM  
An Institution of the Aga Khan Health Service, Tanzania

## MEMORANDUM

Date: August 16<sup>th</sup>, 2018

From: Antibiotic Stewardship Program Committee

To: All clinical staff, HODs Clinical & Non Clinical, Pharmacy and Pathology Depts.

CC: Senior Leadership Team,

### **SUBJECT: MEROPENEM QUARANTINE**

Dear Clinicians,

This is to inform you all that based on the Antibiogram attached from our Laboratory, many pathogens were found to be resistant to Meropenem, hence the Antibiotic Stewardship Committee has decided to "Quarantine" Meropenem for three (3) months from 20<sup>th</sup> August 2018 to 20<sup>th</sup> November 2018.

NB: Quarantining an Antibiotic means,

**-It cannot be used for Empiric treatment**

**- It can only be used when an isolated Pathogen is sensitive to it proven by culture and sensitivity result.**

This is necessary in order to restore Meropenem Sensitivity and it is an evidence based practice. We expect maximum cooperation from all clinical leaders.

# Particular PSS Gaps We See

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# Tools and Approaches We Use

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- Communication/decision aid tools
- Education of nursing staff and providers about guidelines
- Facility-specific antibiograms
- Post–prescription review of antibiotics
- Prospective audit and feedback



# Resources

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- [Aga Khan Hospital, Dar-es-Salaam \(agakhospitals.org\)](http://agakhospitals.org)
- [The Aga Khan Hospital, Dar es Salaam - The Aga Khan Hospitals](#)
- Institutional AMS policy and guidelines
- **THANK YOU**



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