

**A REPORT FOR THE PRE AND POST ASSESSMENT OF A TWO-DAY WORKSHOP ON AMR,
AMS AND IPC AMONG COMMUNITY PHARMACY STAFF, LOWER-LEVEL FACILITY HEALTH
PRACTITIONERS, AND VETERINARY WORKERS**

SECTION A: Demographics

	Frequency (Percentage)	
HIGHEST LEVEL OF EDUCATION	PRE N = 52(%)	POST N = 52 (%)
Secondary	1 (1.9)	1 (1.9)
Certificate	8 (15.4)	8 (15.4)
Diploma	22 (42.3)	22 (42.3)
Bachelors	16 (30.8)	16 (30.8)
Master's degree	3 (5.8)	3 (5.8)
Other :		
Post graduate diploma	1 (1.9)	1 (1.9)
PhD	1 (1.9)	1 (1.9)
GENDER		
Male	26 (50)	26 (50)
Female	26 (50)	26 (50)
CADRE		
Pharmacist	11 (21.15)	11 (21.2)
Pharmacy technician	5 (9.6)	5 (9.6)
Nurse / Enrolled Nurse	9 (17.3)	9 (17.3)
Laboratory staff / Technician	1 (1.)	1 (1.9)
Medical / Clinical officer	5 (9.6)	5 (9.6)
Midwife	3 (5.8)	3 (5.8)
Private veterinary officer	10 (19.2)	10 (19.2)
Government Veterinary officer	4 (7.7)	4 (7.7)
Other		
Nursing assistant	1 (1.9)	1 (1.9)
Orthopedic officer	1 (1.9)	1 (1.9)
Farmer	1 (1.9)	1 (1.9)

Internal mentor	1(1.9)	1(1.9)
NATURE OF FACILITY		
Health centre	12 (23.1)	12 (23.1)
Government Veterinary care centre	5 (9.6)	5 (9.6)
Private (community) veterinary practice	5 (9.6)	5 (9.6)
Private (community) pharmacy	23 (44.2)	23 (44.2)
Human health drug shop	0 (0)	0 (0)
Animal health drug shop	4 (7.7)	4 (7.7)
Veterinary pharmacy	0 (0)	0 (0)
Other		
Hospital (NGO)	1 (1.9)	1(1.9)
Mixed farm	1 (1.9)	1 (1.9)
Research and bioethics firm	1 (1.9)	1 (1.9)
ROLE / RESPONSIBILITY		
Prescribing antibiotics	21 (40.4)	21 (40.4)
Administering antibiotics	24 (46.1)	24 (46.2)
Supplying antibiotics	13 (25)	13 (25)
Dispensing antibiotics	31 (59.6)	31 (59.6)
Procuring / purchasing antibiotics	18 (34.6)	18 (34.6)

SECTION TWO

*Antibiotics are effective against?	Responses	Frequency (Percentage)	
		PRE N = 52 (%)	POST N = 52 (%)
<i>Correct response: BACTERIA only</i>	Bacteria	41 (78.8)	52 (100)
	Viruses	12 (23.1)	3 (5.8)
	Fungi	9 (17.3)	0 (0)
	Parasites	7 (13.5)	0 (0)

*Antibiotics are effective against

Count of 1_GENDER	Column Labels		
Row Labels	Bacteria	Bacteria, VIRUSES	Grand Total
clinical medical officer/physician	6		6
FEMALE	2		2
MALE	4		4
Lab technologist	1		1
MALE	1		1
Mid wife	3		3
FEMALE	3		3
nurse	11		11
FEMALE	9		9
MALE	2		2
orthopaedic officer (other)	1		1
MALE	1		1
Pharmacist	11		11
FEMALE	3		3
MALE	8		8
Pharmacy technician	5		5
FEMALE	3		3
MALE	2		2
Veterinary officer (other)	11	3	14
FEMALE	6	1	7
MALE	5	2	7
Grand Total	49	3	52

Which of the following can become resistant to antimicrobials? (MCQ)	Responses	Frequency (Percentage)	
		PRE N = 52 (%)	POST N = 52(%)
	Bacteria	51 (98.1)	52 (100)
	Viruses	50 (96.1)	52 (100)
	Fungi	42 (80.8)	50 (96.1)
	Parasites	35 (67.3)	49 (94.2)
	Humans	15 (28.8)	0 (0)
	Animals	27 (59.9)	2 (3.8)

What are the causes of antimicrobial resistance? (multiple choice question)	Responses	Frequency (Percentage)	
		PRE N = 52 (%)	POST N = 52 (%)
	Poor infection prevention control	41 (78.8)	51 (98.1)
	Inadequate hand hygiene	32 (61.5)	50 (96.1)
	Use of antibiotics	12 (23.1)	52 (100)
	Overuse of antibiotics	48 (92.3)	52 (100)

Choose WHO's most preferred category aimed at optimizing use of antibiotics and minimizing their resistance (MOST PREFERRED OPTION FIRST)?	Responses	Frequency (Percentage)	
		PRE N = 52(%)	POST N = 52 (%)
	Access, Reserve and Watch	20 (38.5)	2 (3.8)
	Access, Watch and Reserve	22 (42.3)	50 (96.1)
	Reserve, Watch and Access	10 (19.2)	0 (0)

What is the main disadvantage of using syndromic management as it related to AMR?	Responses	Frequency (Percentage)	
		PRE N = 52(%)	POST N = 52(%)
	Many patients may receive antimicrobials unnecessarily in the absence of proper diagnostics	25 (48.1)	47 (90.4)

	Too many diagnostics are used before prescribing a treatment	4 (7.7)	3 (5.8)
	Treatment is significantly delayed for patients	20 (38.5)	2 (3.8)
	All the above	3 (5.8)	0 (0)

Please give your opinion on the statements below	Responses	Frequency (Percentage)	
		PRE N = 52(%)	POST N = 52(%)
Microbes / germs can fail to respond to antimicrobials/ medicine.	YES	49 (94.2)	52 (100)
	NO	3 (5.8)	0 (0)
Microbes can be resistant towards medicine in humans if antimicrobials are used incorrectly in livestock.	YES	45 (86.5)	51 (98.1)
	NO	7 (13.5)	1 (1.9)
Microbes can be resistant towards medicine if antimicrobials are dumped in the environment	YES	25 (48.1)	48 (92.3)
	NO	27 (51.9)	4 (7.7)

Please indicate how much you agree with the following view points	Responses	Frequency (Percentage)	
		PRE N = 52(%)	POST N = 52(%)
**Hand hygiene and sanitation in our homes and communities can help support the antimicrobials / medicines to effectively kill the microbes / germs.	AGREE	32 (61.5)	52 (100)
	DISAGREE	20 (38.5)	0 (0)
It is NOT very important to test for an infection before a patient takes medicine	AGREE	5 (9.6)	1 (1.9)
	DISAGREE	47 (90.4)	51 (98.1)
	AGREE	29 (55.8)	43 (82.7)

Microbes can be resistant towards medicine if antimicrobials are dumped in the environment	DISAGREE	23 (44.2)	9 (17.3)
Medicine may fail to kill the microbes because of continued self-medication within our communities.	AGREE	42 (80.8)	50 (96.1)
	DIASGREE	10 (19.3)	2 (3.8)
I feel I am knowledgeable enough to educate my community about proper use of medicine.	AGREE	35 (67.3)	52 (100)
	DISAGREE	17 (32.7)	0 (0)

Please indicate how much you agree with the following view points	Responses	FREQUENCY (PERCENTAGE)	
		PRE N = 52(%)	POST N = 52 (%)
Antimicrobial resistance is an important issue in my daily practice	AGREE	46 (88.5)	52 (100)
	DISAGREE	6 (11.5)	0 (0)
Prescribing guidelines will be / are easy to implement in my workplace	AGREE	44 (84.6)	45 (86.5)
	DISAGREE	8 (15.9)	7 (13.5)
I feel motivated to advocate for the fight against antimicrobial resistance	AGREE	39 (75)	49 (94.2)
	DISAGREE	13 (25)	3 (5.8)
Patients and the public will take antibiotics inappropriately regardless of what I do	AGREE	27(51.9)	9 (17.3)
	NOT SURE	15 (28.9)	3 (5.8)
	DIASGREE	10 (19.2)	40 (76.9)
My actions can protect the effectiveness of antimicrobials and prevent resistance	AGREE	30(57.7)	50 (96.1)
	NOT SURE	6 (11.5)	2 (3.8)

	DISAGREE	16 (30.8)	0 (0)
**By practicing good hand hygiene / handwashing, I can support efforts to prevent the spread of infections and antibiotic resistance as a healthcare worker	AGREE	27 (51.9)	48 (92.3)
	NOT SURE	15 (28.8)	2 (3.8)
	DISAGREE	10 (19.2)	2 (3.8)
When I identify inappropriate antibiotic prescribing, I feel confident to challenge it with colleagues	AGREE	24 (46.1)	50 (96.1)
	NOT SURE	17 (32.7)	2 (3.8)
	DISAGREE	11 (21.2)	0 (0)
It is important I give advice to patients / public about antibiotic resistance	AGREE	45 (86.5)	52 (100)
	NOT SURE	7 (13.5)	0 (0)
	DISAGREE	0 (0)	0 (0)
I worry about the quality of antibiotic formulations available for me to supply to patients and the impact this has on patient care	AGREE	29 (55.8)	49 (94.2)
	NOT SURE	13 (25)	3 (5.8)
	DISAGREE	10 (19.2)	0 (0)
Antimicrobial resistance has negative impacts on my patients	AGREE	45 (86.5)	52 (100)
	NOT SURE	7 (13.3)	0 (0)
	DISAGREE	0 (0)	0 (0)

** By practicing good hand hygiene / handwashing, I can support efforts to prevent the spread of infections and antibiotic resistance as a healthcare worker

Count of 44_post_By_practicin	Column Labels		
Row Labels	FEMALE	MALE	Grand Total
clinical medical officer	2	4	6
AGREE	2	4	6
Lab technologist		1	1
AGREE		1	1

Mid wife	3		3
AGREE	3		3
nurse	9	2	11
AGREE	8	2	10
DISAGREE	1		1
orthopaedic officer		1	1
AGREE		1	1
Pharmacist	3	8	11
AGREE	3	7	10
DISAGREE		1	1
Pharmacy technician	3	2	5
AGREE	2	2	4
NOT SURE	1		1
Veterinary officer	7	7	14
AGREE	7	6	13
NOT SURE		1	1
Grand Total	27	25	52

***At what level(s) do you think it is most effective to tackle resistance to antibiotics? (MCQ)	Response	Frequency (Percentage)	
		PRE N = 52(%)	POST N = 52(%)
	The public	41 (78.8)	45 (86.5)
	Only prescribers	22 (42.3)	50 (96.1)
	All health care workers	50 (96.1)	52 (100)
	Environmental health / animal health / human health	39 (75)	45 (86.5)
	***Action at all levels	51 (98.1)	52 (100)
Have you heard of World Antimicrobial Awareness Week (WAAW)?	Response	Frequency (Percentage)	
		PRE N = 52(%)	POST N = 52(%)
	YES	25 (48.1)	52 (100)
	NO	27 (51.9)	0 (0)

SECTION THREE: FEEDBACK ON THE WORKSHOP.

What is your overall assessment of the workshop? (1 = insufficient, 5 = excellent)	Frequency N = 52	Percentage (%)
1	0	0
2	0	0
3	2	3.8
4	10	19.2
5	40	76.9

Which session of the workshop did you find most interesting or useful?	Frequency (N = 52)	Percentage (%)
All sessions	15	28.8
Case studies	8	15.4
Interventions to combat AMR	4	7.7
Hand hygiene in relation to AMR	10	19.2
Differential diagnosis	3	5.8
Quiz sessions	2	3.8
One Health and AMR	10	19.2

Did the workshop achieve the objectives?	Frequency (N = 52)	Percentage (%)
YES	52	100
NO	0	0

Knowledge and information gained from participation at this workshop		Frequency (N = 52)	Percentage (%)
Met your expectations?	YES	49	94.2
	NO	0	0
	SOMEWHAT	3	5.8
Will be useful/applicable in your work?	DEFINITELY	52	100
	SOMEWHAT	0	0
	NOT AT ALL	0	0

How do you think the workshop could have been made more effective?	Frequency (N= 52)	Percentage (%)
Presence of facilitators from Ministry of Health	5	9.6
The online/ UK facilitators should speak slowly in order for the audience to follow properly	10	19.2
Increase transport refund	3	5.8
Extension to other districts, municipalities and regions	32	61.5

Please comment on the organization of the workshop (1 = insufficient; 5 = excellent)	Frequency (N = 52)	Percentage (%)
1	0	0
2	0	0
3	6	11.5
4	4	7.7
5	42	80.8

Do you have any comments or suggestions (including activities or initiatives you think would be useful for the future)?	Frequency (N = 52)	Percentage (%)
More awareness at the grass root levels e.g. tv shows, VHTs, social media	40	76.9
More support from government should be sought	5	9.6
More duration for workshop and frequency	6	11.5
More support supervision in health facilities	1	1.9

*Number of LMIC healthcare staff able to demonstrate how to practice their new knowledge

** Number of LMIC healthcare staff trained and tested demonstrating improved knowledge after training in IPC [Mandatory]

*** Number of LMIC healthcare staff trained and tested demonstrating improved knowledge after training in AMS principles, antimicrobial prescribing, and consumption surveillance [Mandatory]