## Knowledge, Attitude and Practice of Antibiotics and their Determinants in Eritrea: Urban Population-based Survey

Mulugeta Russom<sup>1</sup>, Merhawi Bahta<sup>1\*</sup>, Merhawi Debesai<sup>1</sup>, Iyassu Bahta<sup>1</sup>, Abrahalei Kessete<sup>1</sup>, Aziza Afendi<sup>1</sup>, Yodit Fitsum<sup>1</sup>, Josephina Nambozi<sup>2</sup>, Soliana Kidane<sup>2</sup>, Eyasu H. Tesfamariam<sup>3</sup>

<sup>&</sup>lt;sup>1</sup>National Medicines and Food Administration, Ministry of Health, Asmara, Eritrea

<sup>&</sup>lt;sup>2</sup>WHO Country Office, Asmara, Eritrea.

<sup>&</sup>lt;sup>3</sup>Biostatistics and Epidemiology Unit, Department of Statistics, College of Science, Eritrean Institute Technology, Mainefhi, Eritrea.

<sup>\*</sup>Correspondence: Merhawi Bahta, National Medicines and Food Administration, Ministry of Health, e-mail: meramcp19@gmail.com, Tel: +291-7294279, Postal address:212, Asmara Eritrea.

**Part I: Identification Particulars** 

Supplementary file 3: Questionnaire on Knowledge, Attitude and Practice of Antibiotics and their Determinants in Eritrea: Urban Population-based Survey, 2019

Zoba					
Subzoba					
City/Town					
Kebabi					
Respondent number					
		Interview	er Visits		
	1	2	3	Final	Visit
Date				Day	
				Month	
				Year 2 0	1 9
Interviewer's Name				Int. No.	
Result*				Result*	
Next visit: Date					
Time				Total number of visits	
*Result codes:				Total persons	
				In household	
Completed Not comple				Total eligible	
Not willing Other		.0)		persons (≥18)	
	(SI	pecify)			
Super	visor		Field editor	Keyed by	
Name	Number	Name	Number	Name	Number
ranic	Mullioei	rame	rumoei	rame	Tunioci

**Part II: Demographic Information** 

No.	Indicators	Coding categories	Skip
201	Age (in completed years)		
202	Sex	Male       1         Female       2	
203	Ethnicity	Tigrina       1         Afar       2         Tigre       3         Saho       4         Rashida       5         Kunama       6         Blien       7         Hidarb       8	
		Nara 9 Other (please specify) 10	
204	Religion	Christian         1           Muslim         2           Other (please specify)         3	
205	Level of education (Highest level of education)	Illiterate 1 Primary school 2 Middle school 3 Secondary school 4 Higher education 5	
206	Main occupation	Farmer       1         Government employee       2         Private employee       3         Housewife       4         Self-employed       5         Unemployed       6         Student       7         Fisher man       8         Other (please specify)       9	

Part III: Knowledge

No.	II: Knowledge  Questions	Coding categories	Skip
301	Have you ever heard about antibiotics?	Yes 1→	303
301	Thave you ever heard about unitibioties.	No 2	
302	Have you ever heard of any one of the following medications? ASK FOR EACH MEDICATION.	Amoxicillin A Tetracycline B Oxytetracycline C I haven't heard all of them D	END
303	Which of the following do you think are antibiotics? ASK FOR EACH MEDICATION. If the response in Q301 is No and heard of any one of the examples of antibiotics, explain, after completing Q303 and before continuing to Q304, that the term 'Antibiotics' refers to such drugs.	Y N DK	
304	Which of these diseases do you think are treated with antibiotics?	Common cold       1 2 3         Watery diarrhea       1 2 3         TB       1 2 3         Dengue fever       1 2 3	
	ASK FOR EACH ILLNESS.	Deligue level       1 2 3         Pneumonia       1 2 3         Dry cough       1 2 3	
305	Do antibiotics treat viral infections?	Yes       1         No       2         Don't know       3	
306	When do you think you should stop taking antibiotics once you've begun treatment?	When I feel better	
	MULTIPLE RESPONSES ARE POSSIBLE. PROBE: Are there any other reasons	It should not be stopped	
307	Have you ever heard of the term antibiotic resistance (ABR)?	Yes	
308	Antibiotic resistance occurs when your becomes resistant to antibiotics and they no work.	Yes	404
309	Where did you hear about antibiotic resistance	Health facility         A           Pharmacy         B           Radio         C	
	MULTIPLE RESPONSES ARE POSSIBLE	TV D Newspaper E	
	PROBE: Are there any other sources	Campaign/Seminar F Other (please specify) G	

310	Antibiotic resistance is an issue that could affect me or my family.	Yes       1         No       2         Don't know       3
311	Antibiotic resistance is an issue in other countries but not here.	Yes
312	Bacteria which are resistant to antibiotics can spread from person to person.	Yes

## Part IV: Attitude

No.	Questions		Skip
401	Proper handwashing play a role in ABR.	Strongly disagree1Disagree2Neutral3Agree4Strongly agree5	
402	Taking antibiotics when it is not required can facilitate ABR.	Strongly disagree1Disagree2Neutral3Agree4Strongly agree5	
403	You have a role to fight ABR	Strongly disagree       1         Disagree       2         Neutral       3         Agree       4         Strongly agree       5	
404	We can use antibiotics without prescription	Strongly disagree       1         Disagree       2         Neutral       3         Agree       4         Strongly agree       5	
405	It is okay to share antibiotics with family members or friends for similar illness	Strongly disagree1Disagree2Neutral3Agree4Strongly agree5	
406	It is okay to keep leftover antibiotics and use them later	Strongly disagree1Disagree2Neutral3Agree4Strongly agree5	

407	Farmers can give antibiotic without	Strongly disagree 1
	consulting veterinarian	Disagree 2
		Neutral
		Agree 4
		Strongly agree 5
408	Leftover antibiotics should be	Strongly disagree 1
	disposed with regular garbage	Disagree 2
		Neutral
		Agree 4
		Strongly agree 5
409	Leftover antibiotics should be	Strongly disagree 1
	disposed at toilets	Disagree 2
		Neutral
		Agree 4
		Strongly agree 5

## Part V: Practice

No.	Questions	Coding categories	Skip
501	Have you ever used antibiotics?	Yes       1         No       2         Don't remember       3	509
502	When was the last time you took antibiotics?	Now       1         Last month       2         Last six months       3         Last year       4         More than a year ago       5         Don't remember       6	
503	Source of the last course of antibiotic  MULTIPLE RESPONSES ARE POSSIBLE.	Health facility A Drug retail outlet B Friend or family member C Saved up from a previous time D From abroad E Don't remember F	
504	On that occasion, did you get a prescription for the antibiotics from a doctor/nurse?	Yes       1         Don't remember       2         No       3	506
505	What was (were) your reason(s) of self-medication with antibiotics?  MULTIPLE RESPONSES ARE POSSIBLE.	Long queue A Had no time to visit a health facility B To get a quick relief C Disease was not serious D To save expenses E Own previous successful experience F Other (please specify)	

506	Did you ever stop taking antibiotics before completing the full course?	Yes
	before completing the run coarse.	Don't remember 3 508
507	Why did you stop taking the antibiotics?	Condition didn't improve 1
		Condition improved 2
		Due to adverse effects
		Advised by a friend or family member 4
		I didn't think it works 5
		Told to stop by a healthcare profession. 6
		Other (please specify) 7
508	Ever used antibiotics on your own, though	Yes 1
	health care professionals advice	No 2
	you not to take	Don't remember 3
509	Have you ever given antibiotics	Yes
307	to your animals?	No
	to your animais.	Don't remember
		Don't have an animal
		Bont have an ammad
510	Which antibiotic did you use for	Amoxicillin A
010	your animal?	Erythromycin B
	ASK FOR EACH MEDICATION.	Oxytetracycline
		Penicillin D
		Tylosin E
		Didn't use all of these antibiotics F
		Other (please specify) G
511	Source of the antibiotics	Bought from the market A
		Bought from Drug retail outlet B
		Veterenarian
		Friends/family membe D
		Other (please specify) E
512	How many times did you buy antibiotics for	Once 1
312	your animal in the last one year?	Once
	your animar in the last one year?	Three times
		More than three times 4
		Never 5

Y: Yes; N;No; DK: Don't Know

END OF INTERVIEW

<u>INTERVIEWER'S OBSERVATIONS</u>
TO BE FILLED IN AFTER COMPLETING THE INTERVIEW
COMMENTS ABOUT THE INTERVIEW
COMMENTS ON SPECIFIC QUESTIONS
ANY OTHER COMMENTS
SUPERVISOR'S OBSERVATIONS
EDITOR'S OBSERVATIONS