



Febrile **Illness** Evaluation in a Broad Range of Endemicities

Drug bag questionnaire data collection form

This data collection form was developed for use in rural and urban settings in Malawi to capture data about antibiotic use (ABU) in both humans and animals. Prior to implementation, two 'drug bags' were prepared, one containing antibiotics for humans and the other containing antibiotics for animals. The data collection form includes both qualitative and quantitative questions, exploring themes including: household/farm demographics; common illnesses and medicines; antibiotic recognition, use and access (using the drug bags); and narrative elicitation around particular antibiotics from the drug bags. We welcome others to adopt, adapt and translate this questionnaire. If you do so, please contact Professor Clare Chandler at: Clare.Chandler@lshtm.ac.uk.

For more detail on assembling and using the drug bags, see:

Justin Dixon, Eleanor MacPherson, Salome Manyau, Susan Nayiga, Yuzana Khine Zaw, Miriam Kayendeke, Christine Nabirye, Laurie Denyer Willis, Coll de Lima Hutchison & Clare I. R. Chandler (2019) The 'Drug Bag' method: lessons from anthropological studies of antibiotic use in Africa and South-East Asia, *Global Health Action*, 12:1, 1639388, DOI: 10.1080/16549716.2019.1639388.

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For more information about the FIEBRE project, please visit: <https://www.lshtm.ac.uk/febre>

For more information about the Antimicrobials in Society (AMIS) project, please visit:

<https://www.lshtm.ac.uk/research/centres-projects-groups/amis-hub>

Variables / answer choices
1. Takes the GPS coordinates
2. Please select your name (List of names)
3. Household Number (integer)
4. Date of enrolment (confirm date)
5. Time (confirm time)
6. Please enter the village name
7. Are you able to locate the household head or a primary caregiver? Yes/No If no, end interview here
8. Has the adult consented to the survey? Yes/No
9. Duration they have lived in the area Less than a year/more than a year
10. Months / years lived in area Months_____ (if less than a year) Years _____ (if more than a year)
RESPONDENT CHARACTERISTICS
11. Scan the participant's barcode Prompt to enter manually if this doesn't work
12. Role of respondent in the household Head of household Primary caregiver Child Relative Friend Other (Specify)

<p>13. Sex of respondent</p> <p>Male</p> <p>Female</p>
<p>14. Age of respondent (In absolute numbers)</p>
<p>15. Highest level of education of respondent</p> <p>Never went to school</p> <p>Primary education</p> <p>Malawi primary leaving certificate</p> <p>Secondary school</p> <p>Malawi school certificate of education</p> <p>Diploma</p> <p>Vocational training</p> <p>University degree</p> <p>Other (Specify)</p> <p>Refused to answer</p>
<p>16. Primary occupation of respondent</p> <p>Unemployed</p> <p>Farmer</p> <p>Bicycle/motorcycle taxis driver</p> <p>Market vendor</p> <p>Tailor</p> <p>Builder/Mason</p> <p>Carpenter</p> <p>Refused to answer</p> <p>Government employee</p> <p>NGO employee</p> <p>Sugar worker</p> <p>Other (specify)</p>
<p>17. Ethnicity of respondent</p> <p>Mang'anja</p> <p>Sena</p> <p>Tumbuka</p> <p>Lomwe</p> <p>Yao</p> <p>Chewa</p> <p>Other (Specify)</p>

18. Illnesses frequently experienced in the household (tick all that apply)

Malaria
Fever / hot body
Stomach pain
Diarrhoea
Coughing
Sore throat / tonsils
Headache
Eye problems
Cold, flu, runny nose
Asthma
Blood pressure
Diabetes
Dental/tooth pain
HIV
TB
Skin problems
Wounds
Gynaecological
Male genital problems
Urinary tract infections
Don't know
Other (please specify)

19. Medicines used to treat the frequently experienced illnesses in the household (tick all that apply)

Antimalarials
Painkillers / antipyretics
BP / hypertension
Rehydration solutions
Hay fever / allergies
Flu medicines
HIV medicines
Cough medicines
Herbal medicines
Amoxicillin
Cotrimoxazole
Metronidazole
Ciprofloxacin
Erythromycin
Doxycycline
Tetracycline
Don't know

Other (please specify)

20. Medicines stored in the household (list medicines)

Free text

Prompt: Ask if you can take photos of the medicines (if they say yes, switch to the tablet's camera and take photos, then return to ODK)

21. Sources of medicines commonly used in the household (Tick all that apply)

- Other household member
- Friend or neighbour
- Traditional/faith healer
- Informal drug vendor
- Retail Pharmacy
- Other shop selling medicines
- Public clinic
- Public hospital
- Private health facility
- Other: please specify (free text)
- Don't know

We would now like to continue asking you about medicines. To do this, we would like to show you some medicines that we have brought with us. (Present the antibiotic library to participant). Doctors often call these kinds of medicine 'antibiotics'. We would like to do some exercises with you, where we will ask you to sort these medicines into different piles. The exercises are not to test your knowledge, but to find out whether you have seen any of these before and which you have used. The reason that we are doing the exercises is that it helps to actually show you these medicines to help you remember which ones you have seen. As you will see, the exercises do not take very long. If you are OK to continue, we will begin.

Hint: For each pile sorting exercise, encourage the participant to narrate to you the stories behind the relevant piles (e.g. the story of not being able to access a particular medicine)

22. Sorting Medicines activity one: Which of these medicines have you seen or heard of before? Please pick out the ones that you have seen or heard of before and put them into one pile

Hint: Show the bag of medicines to the respondent and then give them each medicine / packet in turn to look at and classify

1. Amoxicillin (Tablets)
2. Amoxicillin (Suspension)
3. Ampicillin (Tablets)
4. Azithromycin (Tablets)
5. Benzathene Penicillin (Injectable)
6. Benzylpenicillin (Injectable)
7. Cefalexin (Tablets)
8. Cefixime (Tablets)
9. Ceftriaxone (Injectable)
10. Cefuroxime (Tablets)
11. Chloramphenicol (Tablets)
12. Chloramphenicol (Injectable)
13. Ciprofloxacin (Tablets)
14. Clarithromycin (Tablets)
15. Amoxicillin / clavulanic acid (Tablets)
16. Clindamycin (Tablets)
17. Clindamycin (Injectable)

18. Cloxacillin (Tablets)
19. Cloxacillin (Suspension)
20. Cotrimoxazole (Tablets)
21. Cotrimoxazole (Suspension)
22. Doxycycline (Tablets)
23. Erythromycin (Tablets)
24. Erythromycin (Suspension)
25. Flucloxacillin (Tablets)
26. Flucloxacillin / amoxicillin (Tablets)
27. Gentamicin (Injectable)
28. Levofloxacin (Tablets)
29. Metronidazole (Tablets)
30. Metronidazole (Suspension)
31. Norfloxacin / metronidazole (Tablets)
32. Ofloxacin / ornidazole (Tablets)
33. Phenoxymethylpenicillin (Tablets)
34. Tetracycline (Tablets)
35. Chloramphenicol (Eye/Ear)
36. Ciprofloxacin (Eye)
37. Gentamicin (Eye/Ear)
38. Tetracycline (Eye)

23. Sorting Medicines activity two. We would now like you to pick out the medicines that you have ever used before in your household. Please place them together in a pile.

***Hint:** Remove the medicines from the unrecognised pile (they're now gone for good). Put out the recognised medicines in front of the respondent. Resort recognised medicines into two piles (used, and all other recognised)*

1. Amoxicillin (Tablets)
2. Amoxicillin (Suspension)
3. Ampicillin (Tablets)
4. Azithromycin (Tablets)
5. Benzathene Penicillin (Injectable)
6. Benzylpenicillin (Injectable)
7. Cefalexin (Tablets)
8. Cefixime (Tablets)
9. Ceftriaxone (Injectable)
10. Cefuroxime (Tablets)
11. Chloramphenicol (Tablets)
12. Chloramphenicol (Injectable)
13. Ciprofloxacin (Tablets)
14. Clarithromycin (Tablets)
15. Amoxicillin / clavulanic acid (Tablets)
16. Clindamycin (Tablets)
17. Clindamycin (Injectable)
18. Cloxacillin (Tablets)
19. Cloxacillin (Suspension)
20. Cotrimoxazole (Tablets)
21. Cotrimoxazole (Suspension)
22. Doxycycline (Tablets)
23. Erythromycin (Tablets)
24. Erythromycin (Suspension)
25. Flucloxacillin (Tablets)
26. Flucloxacillin / amoxicillin (Tablets)
27. Gentamicin (Injectable)
28. Levofloxacin (Tablets)
29. Metronidazole (Tablets)

30. Metronidazole (Suspension)
31. Norfloxacin / metronidazole (Tablets)
32. Ofloxacin / ornidazole (Tablets)
33. Phenoxymethylpenicillin (Tablets)
34. Tetracycline (Tablets)
35. Chloramphenicol (Eye/Ear)
36. Ciprofloxacin (Eye)
37. Gentamicin (Eye/Ear)
38. Tetracycline (Eye)

24. Sorting Medicines activity three. We would now like you to pick out the medicines that you use frequently when someone in your household is sick. Please place them together in a pile.

Hint: Put the unused medicines to one side. They are not needed for this exercise. Place the used medicines in front of the respondent. Re-sort used medicines in to two piles (frequently used, and all other used medicines)

1. Amoxicillin (Tablets)
2. Amoxicillin (Suspension)
3. Ampicillin (Tablets)
4. Azithromycin (Tablets)
5. Benzathene Penicillin (Injectable)
6. Benzylpenicillin (Injectable)
7. Cefalexin (Tablets)
8. Cefixime (Tablets)
9. Ceftriaxone (Injectable)
10. Cefuroxime (Tablets)
11. Chloramphenicol (Tablets)
12. Chloramphenicol (Injectable)
13. Ciprofloxacin (Tablets)
14. Clarithromycin (Tablets)

15. Amoxicillin / clavulanic acid (Tablets)
16. Clindamycin (Tablets)
17. Clindamycin (Injectable)
18. Cloxacillin (Tablets)
19. Cloxacillin (Suspension)
20. Cotrimoxazole (Tablets)
21. Cotrimoxazole (Suspension)
22. Doxycycline (Tablets)
23. Erythromycin (Tablets)
24. Erythromycin (Suspension)
25. Flucloxacillin (Tablets)
26. Flucloxacillin / amoxicillin (Tablets)
27. Gentamicin (Injectable)
28. Levofloxacin (Tablets)
29. Metronidazole (Tablets)
30. Metronidazole (Suspension)
31. Norfloxacin / metronidazole (Tablets)
32. Ofloxacin / ornidazole (Tablets)
33. Phenoxymethylpenicillin (Tablets)
34. Tetracycline (Tablets)
35. Chloramphenicol (Eye/Ear)
36. Ciprofloxacin (Eye)
37. Gentamicin (Eye/Ear)
38. Tetracycline (Eye)

25. What do you use this medicine for? (Asked of each frequently used antibiotic)

Fever / hot body

Malaria

Cough

Sore throat

Cold / flu / runny nose

Gastrointestinal (e.g. diarrhoea)

Gynaecological problems
Male genital problems
Urinary tract infections
Eye problems
Ear problems
Headache
Musculoskeletal pain / problems
Skin problem, rashes, lumps, aches, boils
Dental / toothache
Wounds
Pain
Weakness / malaise
Every kind of sickness
Preventative
Surgery related
Whatever the doctor says
Don't know / prefer not to say
Other
Please specify (if "other")

26. How often do you use this medicine? (Asked of each frequently used antibiotic)

Every day
Every week
Every two weeks
Every month
Between 1 - 6 months
Between 6 - 12 months
Between 1 - 2 years
Between 2-5 years
Less than every 5 years

27. Sorting Medicines activity four. We would now like you to pick out any medicines that you have needed before in your household but you could not get. To say this another way, for each medicine here, has there ever been a time when you have needed the medicine but could not get it? Please place them together in a pile.

Hint: Bring back all recognised medicines from activity one and spread them out in front of the respondent. Re-sort into two piles again (medicines that could not be accessed, and all other recognised medicines)

1. Amoxicillin (Tablets)
2. Amoxicillin (Suspension)
3. Ampicillin (Tablets)
4. Azithromycin (Tablets)
5. Benzathene Penicillin (Injectable)
6. Benzylpenicillin (Injectable)
7. Cefalexin (Tablets)
8. Cefixime (Tablets)
9. Ceftriaxone (Injectable)
10. Cefuroxime (Tablets)
11. Chloramphenicol (Tablets)
12. Chloramphenicol (Injectable)
13. Ciprofloxacin (Tablets)
14. Clarithromycin (Tablets)
15. Amoxicillin / clavulanic acid (Tablets)
16. Clindamycin (Tablets)
17. Clindamycin (Injectable)
18. Cloxacillin (Tablets)
19. Cloxacillin (Suspension)
20. Cotrimoxazole (Tablets)
21. Cotrimoxazole (Suspension)
22. Doxycycline (Tablets)
23. Erythromycin (Tablets)
24. Erythromycin (Suspension)
25. Flucloxacillin (Tablets)

- 26. Flucloxacillin / amoxicillin (Tablets)
- 27. Gentamicin (Injectable)
- 28. Levofloxacin (Tablets)
- 29. Metronidazole (Tablets)
- 30. Metronidazole (Suspension)
- 31. Norfloxacin / metronidazole (Tablets)
- 32. Ofloxacin / ornidazole (Tablets)
- 33. Phenoxymethylpenicillin (Tablets)
- 34. Tetracycline (Tablets)
- 35. Chloramphenicol (Eye/Ear)
- 36. Ciprofloxacin (Eye)
- 37. Gentamicin (Eye/Ear)
- 38. Tetracycline (Eye)

**28. The last time you could not access this medicine, why could you not get the medicine?
(Asked for each antibiotic in the non-access pile)**

- It is not available in the government health facility
- It is not available in the drug shop/pharmacy
- It is too expensive
- Other (Specify)

29. Please tell me about your most recent experience using one of the antibiotics you frequently use to manage illnesses in your household? (Select antibiotic from drop-down list)

Hint: Audio record the following questions (switch to the tablet's recording app, then once recording has started, return to ODK)

- What happened that led you to use this medicine?
- How did you get to know about this medicine?
- Where did you get it from?
- What did it cost you – in terms of money, time, etc?
- What is it like to take the medicine?
- How often is this medicine needed in this household?
- What would you do next time?

<ul style="list-style-type: none"> • What happens when you can't get an antibiotic you need?
<p>30. Does this household undertake farming activity for their own subsistence or income? (Farming includes livestock, poultry and agriculture)</p> <p>Yes No (If no, end interview here)</p>
<p>31. What types of farming activity do you undertake? (Tick all that apply)</p> <p>Crop farming Livestock farming Poultry Other: please specify</p>
<p>32. What is the scale of farming activity? (Tick all that apply)</p> <p>Subsistence Subsistence with surplus sold Commercial Other (please specify)</p>
<p>33. What crops are grown? (Tick all that apply)</p> <p>Maize Sugar cane Beans Rice Sweet potatoes Cassava Millet Groundnuts Bananas Cotton Sorghum Other (Specify)</p>
<p>34. What livestock are kept? (Tick all that apply)</p> <p>Pigs Cows Goats Sheep Donkeys Other (Specify)</p>

35. What poultry are kept? (Tick all that apply)

- None
- Chicken
- Turkey
- Ducks
- Pigeons
- Guineafowl
- Other (Specify)

36. Do you have any domestic animals such as dogs and cats?

Yes/No

What types? (if yes)

- Dogs
- Cats
- Other

____ dogs (if dogs selected)

____ cats (if cats selected)

____ other please specify (if other selected)

37. Duration the household has undertaken farming activity

Months _____ (if less than a year)

Years _____ (if more than a year)

38. Who in the household is primarily responsible for farming activities? (Tick all that apply)

- Head of household
- Primary caregiver
- Child
- Relative
- Friend
- Other (Specify)

39. Commonly experienced illnesses in livestock farming (Tick all that apply)

- Worms
- Eye problems
- African Swine fever
- Swine Erysipelas
- Caseous Lymphadenitis
- Black quarter

- Foot and mouth disease
- Mastitis
- Sudden death
- Skin disease/wounds
- Diarrhoea
- Typhoid
- External parasites
- Cough/Flu/Pneumonia
- Other (Specify)

40. Commonly experienced illnesses in domestic animals (*Tick all that apply*)

- Worms
- Foot and mouth disease
- Mastitis
- Sudden death
- Skin disease/wounds
- Diarrhoea
- Typhoid
- External parasites
- Cough/Flu
- Other (Specify)

41. Commonly experienced illnesses in poultry

(Tick all that apply)

- Diarrhoea
- Worms
- Typhoid
- Newcastle disease
- Coccidiosis
- Chicken pox
- Flu/cough
- Sudden death
- Skin disease/wounds
- General weakness
- External parasites
- Other (Specify)

42. Commonly experienced diseases in agriculture (Tick all that apply)

- Maize weevil
- Maize worms
- Cassava mosaic
- Cassava worms
- Sweet potato worms
- Rice worms
- Banana weevil
- Other (Specify)

43. When your animals are sick, what do you do? (Tick all that apply)

- Consult someone with experience
- Consult a qualified professional (Veterinarian or Agricultural officer)
- Visit the Vet Drug shop vendor/Agro vet shop
- Other (specify)

44. Where do you source your medicines for your animals? (Tick all that apply)

- Veterinary Drug shop
- Veterinary Pharmacy
- Agro veterinary Shop
- Human medicines Pharmacy
- Other farmers
- Veterinary officer
- Agricultural officer
- Imported
- Research clinic/NGO
- Other (specify)

45. Can you show me any medicines you keep yourself for livestock, poultry or domestic animals? (List medicines)

Hint: Ask if you can take photos of the medicines (if they say yes, switch to the tablet's camera and take photos, then return to ODK)

46. Can you show me any medicines you keep yourself for crops? (List medicines)

Hint: Ask if you can take photos of the medicines (if they say yes, switch to the tablet's camera and take photos, then return to ODK)

47. Pile sorting for animals. We have brought some medicines that are commonly used in livestock. We would like you to go through and show us the antibiotics you recognise (Tick all that apply)

Hint: Show the bag of medicines to the respondent and then give them each medicine / packet in turn to look at and classify

Oxytetracycline
Chlortetracycline hydrochloride
Doxycycline & Colistin sulphate
Procaine Penicillin & dihydrostreptomycin sulphate
Trimethoprim & Sulphamethoxazole BP
Amprolium & sulphaquinoxaline & vitamin k3
Amprolium hydrochloride
Sulfadimidine sodium
Norfloxacin 20%
Gentamicin Sulphate
Sulfadiazine & trimethoprim
Tylosin tartrate
Flumequine
Enrofloxacin

48. Pile sorting activity 2. We would like you to return to this pile and pick out the antibiotics frequently used in livestock, poultry or domestic animals (Tick all that apply)

Hint: Remove the medicines from the unrecognised pile (they're now gone for good). Put out the recognised medicines in front of the respondent. Resort recognised medicines into two piles (frequently used, and all other recognised)

Oxytetracycline
Chlortetracycline hydrochloride
Doxycycline & Colistin sulphate
Procaine Penicillin & dihydrostreptomycin sulphate
Trimethoprim & Sulphamethoxazole BP
Amprolium & sulphaquinoxaline & vitamin k3
Amprolium hydrochloride
Sulfadimidine sodium
Norfloxacin 20%

Gentamicin Sulphate
Sulfadiazine & trimethoprim
Tylosin tartrate
Flumequine
Enrofloxacin

49. What do you use this medicine for in livestock, poultry or domestic animals? (Asked of all frequently used antibiotics)
(Free lists)

50. How often do you use this medicine? (Asked of all frequently used antibiotics)

Every day
Every week
Every two weeks
Every month
Between 1 - 6 months
Between 6 - 12 months
Between 1 - 2 years
Between 2-5 years
Less than every 5 years

51. Which, if any, of these frequently used antibiotics do you use in anticipation of sickness – without the animal becoming sick yet?

Hint: Put out the frequently used medicines in front of the respondent. Resort recognised medicines into two piles (used preventatively, and all other frequently used medicines)

Oxytetracycline
Chlortetracycline hydrochloride
Doxycycline & Colistin sulphate
Procaine Penicillin & dihydrostreptomycin sulphate
Trimethoprim & Sulphamethoxazole BP
Amprolium & sulphaquinoxaline & vitamin k3
Amprolium hydrochloride
Sulfadimidine sodium
Norfloxacin 20%
Gentamicin Sulphate
Sulfadiazine & trimethoprim
Tylosin tartrate
Flumequine
Enrofloxacin

52. Pile sorting activity 3. Of the recognised antibiotics, which have you needed for your animals but been unable to get?

Hint: Bring back all recognised medicines and put them in front of the respondent. Resort recognised medicines into two piles (medicines that could not be accessed, and all other recognised)

Oxytetracycline
Chlortetracycline hydrochloride
Doxycycline & Colistin sulphate
Procaine Penicillin & dihydrostreptomycin sulphate
Trimethoprim & Sulphamethoxazole BP
Amprolium & sulphaquinoxaline & vitamin k3
Amprolium hydrochloride
Sulfadimidine sodium
Norfloxacin 20%
Gentamicin Sulphate
Sulfadiazine & trimethoprim
Tylosin tartrate
Flumequine
Enrofloxacin

53. The last time you could not access this medicine, why could you not get the medicine?

- It is not available in the vet drug shop
- It is too expensive
- Other (Specify)

- **Please tell me about your most recent experience using antibiotics to manage illnesses in farming in your household? (select antibiotic from drop-down)**

Hint: Audio record the following questions (switch to the tablet's recording app, then once recording has started, return to ODK)

Antibiotic selected by respondent (select from list of antibiotics)

- What happened that led you to use this medicine?
- How did you get to know about this medicine?
- Where did you get it from?
- What is it like to use the medicine in farming?
- What did it cost you – in terms of money, time, etc?
- What would you do next time?
- What would it be like doing your farming activities without antibiotics?