Tackling antimicrobial resistance
a story of a community playing its part

You too ... can take action!

So you see my friend, there is a lot for people to learn about their health and using medicines the right way.

Oh yes, nurse Waja. Thank you for teaching me. I will go and tell my friends!!
Antimicrobial treatment is a major lifesaving intervention for infectious diseases but Antimicrobial Resistance (AMR) is rapidly reducing the effectiveness of antimicrobials. As a result, many first line treatments for diseases such as malaria, TB and opportunistic infections of AIDS are no longer effective and the cost of care is inevitably increased.

The spread of antimicrobial resistance is a global problem with particularly dire consequences for Africa which is grappling with high levels of infection in the face of limited resources.

Poor quality medicines, inappropriate use of medicines, as well as poor hygiene and waste management, all facilitate the development of resistance. This means treatments with antimicrobials such as antibiotics, antifungals and antivirals are no longer effective.

The containment of antimicrobial resistance requires an increased awareness by all actors in health, including the public, as well as collective action. These comic strips were developed by EPN to provide information to the general public, through graphic art. This edition and the previous 2 volumes are also available in French and Kiswahili.

Storylines: Donna Kusemererwa, Elisabeth Goffin, Andreas Wiegand, Tasneem Yamani, Leah Mwai, Serah Muteru
Design and layout: Elisabeth Goffin
Illustrations: David Radoli

EPN wishes to thank its partners for supporting the development of these strips.
At the bus stop

My little one has diarrhoea! I hope the bus comes quickly so I can get some antibiotics.

At the village market

Hi mama Babie, it’s been long! What happened to your foot?

How ironic, I was in your shoes a few days ago. But now I know better...

I struck my foot against a stone two months ago. It was a minor bruise but now the wound is serious and getting worse.

What do you mean?

Have you seen a doctor?

Prepare a solution with 6 teaspoons of sugar, half a teaspoon of salt mixed in 1 litre of clean boiled water and give the baby 2 teaspoons per kg body weight every time he runs.

Not exactly but a good substitute. If the diarrhoea is mild, you are better off doing that and monitoring the baby instead of spending time going to town.

Is that the same as ORS?

You seem to be in luck, here comes my neighbour, she’s a nurse at Good Samaritan Hospital. She’s very helpful.

This is my friend mama Babie, please have a look at her leg. She says the wound is not healing even after taking 3 courses of antibiotics in the past month.

How do I do that?

They help protect him so that if he gets diarrhoea again it won’t be so severe. You may have to get some for your baby.

My sister, thank you, meeting you today was such a blessing!

Mama Babie, have you been feeling any other unusual symptoms lately?

You should have gone to the hospital for a proper diagnosis. Self medication is dangerous and can make it worse. Even antibiotics won’t work anymore. Here, go to the Good Samaritan Hospital immediately and give Dr. J this note. He’ll help you.

Zinc? I have never heard of that, what are they for?

I’ve been getting very tired and thirsty lately but I thought it was the strong antibiotics that my daughter sent me from the city. And euhm, I’ve also been having persistent vaginal thrush.

Thank you nurse Waja. I’ll go there immediately.
Mama Bable, I must say you’re very lucky to have met nurse Waja this morning. Your blood sugar is very high. Nurse Waja was right to suspect diabetes. We’ll run additional tests tomorrow morning to confirm this.

Diabetes? How can that be? I thought these were minor symptoms and a bruised foot!

At GSH, in Dr J’s office

Poor wound healing, frequent need for passing urine, thirst, and feeling dizzy are common signs of diabetes. Does that sound familiar?

I should have come 6 months ago! I have been taking vitamins and using vaginal creams but no success! I hope it’s not too late.

With the right mediciness and a proper diet you will be back to your active self in no time. Make sure you get professional advice from now on.

Self medication can alleviate some of the symptoms but cover up the underlying disease, with irreversible consequences.

I will be sure to advise my friends who are doing the same thing.

We’ll do another blood test tomorrow morning. Make sure you don’t take any breakfast. For now, just let the nurse clean and dress your wound. Good day.

Thank you again.

In a small village

Hello sister, I am just running to get my little Wangeci some cough mixture and augmentin. She is coughing heavily.

They get infected in school. My son Tom had a cough and fever recently.

I bought a syrup and gave him some leftover antibiotic tablets from my cupboard. 3 days later, my little boy was so bad that I rushed to the Good Samaritan Hospital. Nurse Waja was really cross with me.

I can’t believe it. She is such a nice person. What happened?

By the time we got there his breathing was so bad. Nurse Waja said I waited too long.

Oh dear.

They also said that I used the wrong antibiotic and gave the wrong dose. Even the cough mixture was not for his age. It seems I really didn’t know what I was doing. He could have died.

So what should I do now? It takes me another hour to get to the GSH.

Three weeks later

Oh mama Bable, you look much better today. What happened?

Yes, I am much better. My wound is healing. I have to change my eating, reducing things like potatoes, bread and even fat. I take a tablet every day to keep my blood sugar low.

I was so lucky to meet nurse Waja that day. Next time I feel sick, I will save me and my daughter some money and go directly to the clinic or hospital for help!

If Wangeci has the same infection as Tom, you better see a professional. You can go to the health centre in the next village, it’s not far.

Good idea. Let me go then. Good bye.

Let me know if they were able to help!
At the health centre

Hello madam, what happened to your daughter?

She has been coughing for 3 days. It started with a running nose and today morning she got a fever and the cough has increased. I noticed she is breathing faster than normal.

It appears that she may have pneumonia. There are different types of germs that can cause this lung infection. I suspect hers is caused by bacteria. Your daughter also looks weak and is quite thin for her age.

She had diarrhoea twice this month.

Did you get the recommended vaccinations?

Unfortunately not. I had a sick mother at home as well and a lot of work in the field. I'm so sorry...

I can understand. First Wangeci will get the right antibiotic for 1 week. Don't stop giving it earlier. In 2 weeks, if she is OK, come for vaccination.

Yes. I will come again. A friend recommended that I come here instead of buying medicine myself.

That was good advice. If infections are not treated with the right medicine in the right dose, for the right time, bacteria get resistant. The medicine won't work anymore.

Beside the vaccination, Wangeci should gain weight when she's recovered. Don't give any other medicine. The vaccination will help her to get sick less often.

It's not good when people buy antibiotics on their own.

Oh yes, instead of buying extra medicine, I save the money for transport and food. Thank you.
At the GSH outpatient department

Please help me. David has been coughing for 5 days and has high temperature!

Oh yes. I will measure his temperature and take some samples for the lab.

David has a fever, 39.8°C. I think he is suffering pneumonia. I remember you have been here at OPD several times with either infections of the chest or diarrhoea?

That’s true. I’ve come here many times. It’s expensive, because our village is far from here.

How are you living?

We live at a small farm. We grow vegetables and keep goats. There’s a small dam nearby for water.

Do you use the dam as a water source? It is probably used by the animals, and I can’t imagine it is clean water.

It is not really clean, but I boil it before I use it for cooking or drinking.

That’s very important. The dam can be a source for spreading germs. What about a latrine and a place for washing hands after?

There is a small latrine. But the children don’t like using it.

Our hands can transport a lot of germs which cause diarrhoea and chest infections. After going to the toilet, before preparing food, before eating, everybody has to wash their hands with soap. Soap makes it easier to remove grease and dirt which carry germs.

Is that why he is getting sick so much? If soap can make such a difference, I will do my best to buy it!

Mama Abi, David seems to be quite sick. What happened?

He is suffering a chest infection and has a high fever. Nurse Waja took some samples for the lab. I have to wait for the results.

Wasn’t it only 2 weeks ago that he was suffering diarrhoea?

Oh he has been sick so often in his young life. I am afraid. Our neighbour lost her youngest child because of a chest infection. But nurse Waja has now advised me to buy soap to avoid him getting sick.

We lose too many children. A few months ago I convinced my husband to get a wheelbarrow. Now we are 3 neighbours who share it to transport good water from a well 2 kilometers away.

The water in our dam is always brown and animals step all into it. Sometimes I can’t even find enough wood for cooking and for boiling the water.

I also invited nurse Waja to meet with the women to advise us. She explained to always use soap for hand-washing, and inspired us to talk to our husbands to get latrines built. Then we discussed cooking.

Cooking? Every woman can cook.

We talked about washing fruits and vegetables well, after we have washed our hands properly, also how to store food and cover it against insects. Nurse Waja also advised to wash dishes and pots with hot water and soap. I even made my own fly trap out of an old plastic bottle!

Please mama Abi, The doctor wants to see you and David.

I am coming. Oh Mama Abi it was really good to learn from you. I will call you. Maybe you can advise us in the village.
Much later, at Obi’s drug shop

Brother Obi, my husband is in a lot of pain, give me another bottle of magnesium, a better one this time. The one I took yesterday morning is finished.

This is the third time you’re buying a bottle of antacids this week. Are you sure he is suffering from acidity?

I am also worried but he doesn’t want to go. We have already spent a lot of money because baby David has been sick a lot.

The charges at Good Samaritan Hospital are friendly and besides, buying medicines that don’t even seem to work is also expensive.

I also think we should sensitise members of our community on the dangers of self medication.

Self medication is becoming alarming in this community. Something needs to be done.

I wish we came here sooner, this seems to be serious!

Later that day, in Dr J’s office

Mama Abi, for how long has he been complaining of pain?

Abdominal pain can have many causes. We need to look into the stomach with an endoscope and take some tissue for the lab to see the cause of his pain. In the meantime he’ll be admitted and started on painkillers.

I wish I had come in sooner instead of taking antacids for a year, this would have been detected and the prognosis would have been better.

Two days later

I was a fool taking antacids for so long and not going to see a doctor. I had a tumor. I could have died!

Now it turns out I am suffering some sort of infection. It needs antibiotics.

Let us inform the wife about this diagnosis. He has to go to theatre for surgery tomorrow.

I’m no better. I have been taking antimalarials but was getting more and more sick.

My friends, I want to organise community meetings where you will tell your story about how you could have died if you had continued to be your own doctor.

Count me in! I’ve seen the light.

Yes! We need to help others before someone dies.

A few days later, the results are in

This patient has a tumor in his stomach. It is a miracle he walked into the hospital. Unfortunately the results show it’s cancerous and at an advanced stage.

I think you should take him to a doctor. He could be suffering from a more serious condition and self medication will only make it worse.
On a Sunday afternoon

Thanks for inviting us. We haven’t talked for a long time. Your youngest is such a cute boy.

It’s my pleasure hosting you here in my house.

Oh, no! Child, stop, don’t eat that!!!

Tackling antimicrobial resistance - Keeping medicines in the home

Nathan, you are not supposed to take that! It’s very dangerous! Dear Lord!

Did you hear the story of Mercy? Her 2 year old daughter got hold of the grandfather’s pills. She took 8 and died on the way to the hospital.

Oh, what a sad story. My doctor prescribed me that antibiotic. I keep it in my handbag.

A few weeks ago the nurse at the health centre gave me a syrup against the infection for Nathan. She told me I have to keep it even in the fridge.

Always check the expiry and the way to keep the medicine on the label.

Some medicines, often liquids, are even more sensitive to high temperatures. It is like food. Some last long, others go bad very fast.

You are right. Some medicine can be used only a short time, others last very long. My husband gets all his tablets for his high blood pressure once a month.

Sometimes I have tablets left. They are old and the expiry date is already past. What should I do?

You should not use these anymore. They can cause bad reactions in your body. It’s best to take such medicines to a pharmacy.

My friends, I did not think that I have to organise my medicines in such a complicated way!

Medicines can help us a lot. But if we don’t handle them properly, they will not work anymore.

My friends. Medicines should be handled with care. All medicines should be clearly labelled, stored in the original package we received, properly closed, and kept in a cool, dry, and dark place in the house. Heat, sun and moisture can make them not work or go bad.

Then where can I find a safe place to put our medicines?

You have a nice small and cool store room with only a small window. You can use a tiny cupboard kids cannot reach, and store the medicine there.

What a serious topic we have this afternoon! If Nathan hadn’t grabbed that pill, we wouldn’t have discussed so long about medicine.

But you see, it is really important to take such matters seriously. We, the women, have to take a lot of responsibility for the family.

Thank you very much for your visit. We should keep in touch and meet again soon!

Bye! Take care!
30 years of strengthening pharmaceutical services in church health systems

Professionalism and good governance
Institutional strengthening through capacity building and distribution of tools to impact governance
Training on pharmacy for health facility staff as well as provision of guidelines and standards to strengthen pharmacy practice

Access to medicines
Addressing supply systems, medicine use, quality of medicines, pharmaceutical care and affordability

Campaign against antimicrobial resistance
Activities on rational use of antibiotics and implementation of hospital-based infection control interventions reached more than 500 health professionals in 9 countries in 2010.

Ecumenical Pharmaceutical Network
4th Floor Rosami Court, Muringa Road, Kilimani, Nairobi, Kenya. P.O. Box 749 - 00606 Nairobi, Kenya
Tel: +254 572 522702 | 724 301755    E: info@epnetwork.org
EPN – Ecumenical Pharmaceutical Network    EPNetwork

Visit us: www.epnetwork.org