AMR CONTROL IN DISCUSSION WITH...

DR MARC SPRENGER, DIRECTOR, ANTIMICROBIAL RESISTANCE SECRETARIAT, WORLD HEALTH ORGANIZATION

Q: When you came to WHO, you stated that you wanted to improve and facilitate cooperation across teams working on AMR, such as Infection Prevention and Control (IPC), the platform for diagnostics at point-of-care, water and waste management and R&D for new antibiotics, surveillance with advocacy... Where do we stand today?

Marc Sprenger: When the global action plan was approved, it was clear to the senior management that there should be a mechanism in place for the coordination of all the different parts. And that went quite well. We were able to develop a comprehensive programme. I began by setting up an informal coordination structure with workstreams and that has resulted in a comprehensive programme area (now numbered 1.6) and you can now find a WHO programme with a budget, so that is a big win compared to the past. And now there is very good cooperation here among the teams inhouse.

Q: Indeed. Groundbreaking. Are you finding that some agenda items are progressing quickly and others are less-advanced in implementation?

Marc Sprenger: Of course WHO is a norm standard-setting organization. But I am also interested in seeing real change come about at the country level. But what is real change, that's the question? Certainly, it is important to have rigorous standards on the core requirements for IPC, for example, or how antibiotics should be used in human or animal health sectors. These are the basics, but just as important is the question of how these can be implemented.

What I have learned recently is that the practice in many developing countries is that they are not prescribing the right antibiotics. The question is: do they have access to the right antibiotics and if they do, do they use them prudently and not in irrational or expensive combinations when cheaper and equally effective alternatives are available? Are these being prescribed for the correct duration and not for the two-week course which is commonly seen but not necessary? So, from that perspective I am not satisfied.

But I was very pleased when I visited the Kenyatta Hospital in Nairobi and was able to meet the main nurse who was in charge of IPC, and I thought, "Great!" that is good. And then in another hospital I could see that they were adhering very closely to good practice on handwashing.

Q: It's good news that most countries have set up a national action plan (NAP), not so good news (to quote Dr Mirfin Mpundu, chair of the Ecumenical Pharmaceutical Network) is that not many have started implementation. Do you agree that this is the case?

Marc Sprenger: Yes, most countries have one or are in the final stages, all good news, but is that enough? No! We need to see implementation of these plans. There are targets, for example, of a decrease of about 25% in the use of antibiotics, and that's all fantastic, but of course that needs to be matched with a programme and with money, so that you can train people and make a real difference.

We have to be realistic and I should be happy and pleased that we have already reached that level of awareness. But in the end, what counts is where there is a real difference? And that's for the next five years.

Regarding the guidelines for medically important antimicrobials in food-producing animals, it's a big step forward, but again it is about the implementation. We know that some countries like the Scandinavian countries, the United Kingdom and The Netherlands, have done that; they implemented restricting antibiotic use in husbandry and they even increased productivity at the same time. But the question is: are all countries willing to change? To go along with the guidelines? Together with the reduction in human use, this will really make a difference.

Q: Access to old medicines is in danger. Even in wealthy countries, like France, there is an increasingly shortage of older generic antibiotics (as well as of old vaccines).

Marc Sprenger: We are aware of that and it should be high on

the political agenda. But it's not a sexy topic, it's more sexy to talk about new R&D, new innovative drugs, no one wants to talk about the old generics. Yet it's important to remember that most infections do not need the most advanced antibiotics. We can still treat them with simple antibiotics.

This is a challenge for communication, because we talk about superbugs and then people with a common pneumonia assume that it is always caused by a superbug, and assume therefore, that they always need a super antibiotic, which is not the case. It's all about prudent use and appropriate diagnostics.

Q: And the right duration. For example, if you look at recent scientific studies on antibiotic prescribing and HAI in surgery, you see that in LMICs they use a lot more antibiotics over longer periods of time, before, during and after surgery, while having higher rates of surgical site infections (probably because their health structure is weak in terms of hygiene and IPC standards – and these weak standards may be the cause of higher dosage and duration in antibiotics, a vicious circle)...Your thoughts? Dosage has decreased by perhaps 30% over the past 15 years and duration as well.

Marc Sprenger: From a global public health perspective, a much shorter course is better. It would be good if the guidelines would reflect this. WHO has been asked to take the lead in developing new guidelines, but this is a costly and lengthy exercise.

We also need tailor-made packages, so you don't buy 20 pills for a five- or seven-day course. It would be good if countries would pay more attention to this in order to reduce the use of antimicrobials.

Q: At Thailand's Prince Mahidol Conference, the incoming head of the GFATM, Peter Sands gave a tremendous speech; he said that to be efficient we need to focus on existing infectious disease and build healthcare systems. That, he said, is true of AMR and global health security. To think not only of infectious threats of the future, but to treat the existing ones was the best and only path and that was true also in the face of AMR. Do you agree?

Marc Sprenger: I fully agree with that. In fact, it goes back to my own ideals, which is the Alma Ata declaration, which will be renewed. Alma Ata was about primary health care, and I think we should pay more attention to this, because doctors, vets, nurses, or midwives can play an important role and could have the knowledge about prescribing and IPC (infection, prevention and control). And even further back, it's about WASH; it's about having basic facilities like safe drinking water, like well-managed sewage. How can we be seriously talking of AMR if we don't pay attention to these basic elements?

Q: At the WHO Executive Board meeting last November, the new head of Dr Tedros' cabinet, Dr Bernhard Schwartländer deplored the lack of interest from health ministries in countries, and the lack of power and funding for these MoH, and he called for empowering them. I thought that very important to achieve the GPW (Global Program of Work) of the WHO which includes AMR. Your thoughts?

Marc Sprenger: It's a very political issue, and it varies from one country to the next. In some countries the ministry of health plays a very important role, while in other countries, like India, health governance is decentralized to federal states. But it is, nevertheless, important that they all take on their responsibility for AMR. On the other hand we need to recognize the power of NGOs, of FBOs (faith-based organizations) and of professional associations (such as nurses and midwives). In that respect, I am very pleased that the Director General of WHO has appointed a chief nurse officer. Working with her, we hope to empower the nurses and midwifes.

Regarding the FBO, it is important to recognize that in some countries they play a very important role in health delivery. For example, FBOs in some countries run 70% of healthcare facilities, as in Nigeria. I have seen impressive work being conducted by the Ecumenical Pharmaceutical Network.

The challenge is to find out how NGOs and FBOs can help achieve the AMR objectives in countries.

I think we are still examining the narrative of AMR; it is hard to explain. We need to reflect and discuss that with others: how to get the narrative right.

Q: The role of the environment as a source and conveyor belt for bacterial genes conferring resistance is now coming up in the news: notably the dumping of antibiotic-containing waste in lakes, rivers, soil and from factories, or the waste from the meat industry to hospital systems. It was also presented to the STAG meeting for the first time this winter.

Marc Sprenger: The UNEP programme, Frontiers, has come up with a great document on the environment as a source of AMR.

We try to keep WASH (Water-Sanitation-Hygiene) on the political agenda. But it has also been noted that there is a relation between environment and AMR. I think we don't have a clear insight on the environment's contribution to the problem because there are different aspects: waste water facilities, antibiotics in manure and many more. We need to get a clearer understanding in order to develop recommendations. This is something to work on.

Q: There is a lot of emphasis on getting new antibiotics, but are countries doing enough on infection control?

Marc Sprenger: In my talks, I always stress the importance of IPC. I don't believe we will get a lot of new antibiotics, the pipeline doesn't look promising. Only one, maybe two new products are expected in the next seven years, so we need to pay a lot more attention to prevention in all its forms, including better waste

management and sewage systems.

Q: How do you see the interlink between AMR and the Global Health Security Agenda (GHSA)? It's a subject of debate as we go towards the first international conference on GHS in Sydney?

Marc Sprenger: There is a clear link with the Health Security Agenda, but also a strong link with Universal Health Coverage. Both are priorities for WHO.

Q: In the outcomes of the STAG, it says there is "increasing awareness on IPC, however, improved communication with policy-makers who do not think IPC is important as a key next step".

Ebola expert, Professor Nasidi, who built the Nigerian CDC, told me in an interview that we could save millions of lives if ministers understood the key role of hygiene, of prevention. Today, IPC is seen as secondary, and not viewed as the main conveyor belt for solving the AMR epidemic.

To quote ECDC's Dr Dominique Monnet: "If we just put new antibiotics on the market without better IPC, it will be pouring oil on the fire".

Marc Sprenger: We should first go for the basics: sewage and a safe water supply, because you cannot advocate handwashing when there is no water. And the reality is that there is a real lack of safe water and proper sewage management in health structures. From a political perspective, this should be number one. Then more attention to IPC is needed.

If you look at the priority pathogen list, at the top are the Gram negatives that are spread, in particular in hospitals, in healthcare settings.

It's not very sexy to say that cleaning the beds and the floors is of real importance. And this has often been outsourced because it's not seen an important work. But, in fact, all these things are very important in order to prevent HAI. So I think we should invest a lot more in that. It goes without saying that we also need new innovative antimicrobials or treatments. But let's make sure that first of all the basics are well done.

Q: We can remember the WHO EU event with Suzanna Jacob on the anniversary of Simmelweiss, in these times, two centuries ago, advice on handwashing was not always followed and as a result patients' lives were put at risk. In 2015, health staff put on the web a video of a most filthy hospital in West Africa. But the lack of cleaning personnel and training, in the era of the return of the 'fecal threat' is a gaping hole, globally.

The right to clean care is the right not to kill, the right to health, part of Alma Ata.

Lack of understanding of AMR, all the emphasis is on new drugs and new diagnostics as in the framework meeting at WHO, but leaders don't see how IPC is the only barrier for outbreaks of AMR infections, and it's not costly. IPC can mean tremendous savings for national budgets and for societies, and most importantly, it saves lives. Yet, IPC is seen as an aside.

Marc Sprenger: It's difficult because if you look at hospitals in the western world, they would like to make a profit. In order to make a profit you need to reduce costs, so you outsource food, outsource cleaning... Some are inclined to reduce the costs of hiring infection control nurses and question whether they contribute to the wellbeing of the patients? In fact, yes, they do. Because a hospital-acquired infection will always result in a prolonged stay and increased costs. In other words, it is a good investment to spend money on IPC.

I think we should have norms about IPC and pay more attention to accountability. In my own country, the Netherlands, there was a huge outbreak of nosocomial pneumonia, over 30 people died and the question was who was responsible? Everyone was evading responsibility, although in the end the hospital's executive management team was held accountable and had to step down. So the lesson we can learn here is that the management of a hospital is accountable. Of course, I realize that this is more difficult in low-resource settings. Nevertheless, the executives should take responsibility by paying attention to infection prevention. The STAG recommended that IPC should be implemented at different minimum levels, because the WHO guideline may be too ambitious for LMICs. Therefore, a grading system should be considered. I really hope that this gets the highest attention from the healthcare management. ■

Marc Sprenger spoke to AMR Control's co-Editor in Chief, Garance Upham

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