World Health Organization

European Region

STORIES OF AMR

antimicrobial resistance

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ANTIMICROBIAL RESISTANCE (AMR) occurs when microorganisms, such as bacteria, viruses, parasites or fungi, change over time and become resistant to antimicrobial medicines to which they were previously susceptible. The rise of resistant pathogens are rendering once treatable infections increasingly difficult, and in some cases, impossible to manage. Without effective interventions, AMR has the potential to reverse decades of medical progress, leading to increased morbidity, mortality and health-care costs.

ANTIMICROBIALS include antibiotics, antivirals, antifungals and antiparasitics. These are vital medicines widely used to prevent and treat infections in humans, animals, aquaculture and crop production. Their effectiveness is now in jeopardy...

Abstract

The *Stories of AMR* photobook was developed by the WHO Regional Office for Europe as part of an awareness raising campaign that uses the power of photography and storytelling to illustrate the urgent reality of AMR.

Keywords: ANTIMICROBIAL RESISTANCE, ANTIMICROBIALS, INFECTION PREVENTION AND CONTROL, ONE HEALTH.

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FOREWORD

Antimicrobial resistance (AMR) is one of the greatest challenges of our time. The emergence and spread of AMR have reached an alarming level and resistance to antimicrobial medicines is growing. Infections that were previously treatable are claiming lives, affecting livelihoods, compromising health systems and undermining our ability to achieve universal health coverage.

In 2019, bacterial AMR in the WHO European Region was associated with over half a million deaths. Each year, increased health expenditure and reduced workforce productivity due to AMR are costing countries of the European Union and the European Economic Area nearly €11.7 billion.

The challenge is not only to keep life-saving medicines working; there are also widespread supply issues with existing medicines and new ones are not being developed fast enough.

AMR jeopardizes our efforts to prepare for and respond to future and current pandemics and health emergencies. Confronting this global burden requires everyone to be on board.

In October 2023, the 53 Member States of the WHO European Region endorsed the Roadmap on AMR (2023–2030) to accelerate the implementation of national action plans and strategies, moving forward as one Region. As we respond to the AMR crisis, it is critical that we speak and act in unison.

Stories of AMR is a collection of first-person accounts from all 53 Member States across the Region, giving compelling insight into their experiences and views.

It's a wake-up call for all of us. Now is the time to act.

Dr Hans Henri P. Kluge

Regional Director,
WHO Regional Office for Europe

INTRODUCTION

Storytelling is a powerful tool to get a message across. AMR is one of the top global public health and development threats of the 21st century, yet it is not an easy issue to convey. However, personal stories about AMR provide a human element to the complexity of this global health challenge, making the topic more relatable. Memorable stories can build awareness and improve understanding. Importantly, stories can be persuasive in calling for collective action.

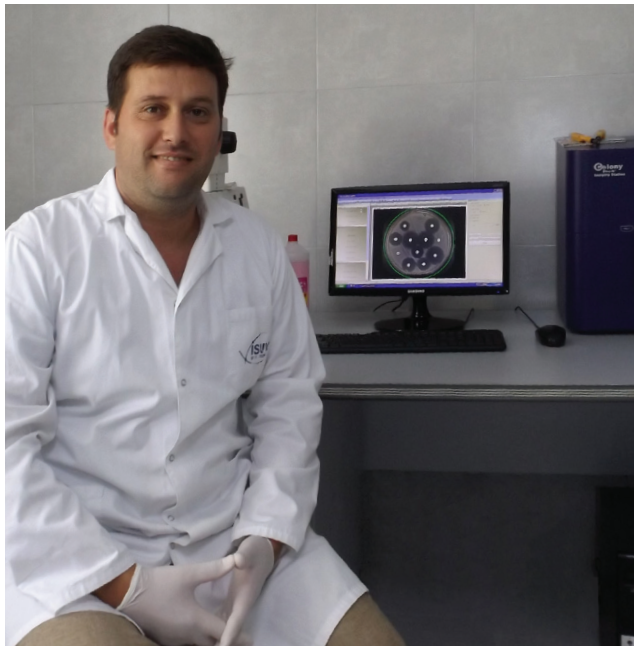
The goal of this photobook is to illustrate the urgent reality of AMR to everyone. It showcases a collection of candid stories and testimonies from inspiring people from all 53 Member States of the WHO European Region. They are teachers, parents, patients, "a restaurant owner", "a gardener", medical doctors, farmers, "a food safety specialist", next of kin, dentists, "a lawyer", nurses, students, "a psychologist", caregivers, epidemiologists, researchers, AMR survivors, health ministry representatives, veterinarians, "an economist", midwives, microbiologists, pharmacists, policy-makers, surgeons, infectious disease specialists, journalists, antimicrobial stewards, youth leaders, ambassadors of AMR, and beyond…

Together they are using their voice to raise awareness about the increasing and serious threat of AMR. Through their professional perspectives and personal experiences, they spotlight the dangers AMR poses to human, animal and environmental health. Their concerns, fears, hopes and actions converge on a single powerful message, which is the critical need to preserve antimicrobials – the cornerstone of modern medicine that has saved millions of lives.

This is a collective call to action, urging everyone to play a part in using antimicrobials responsibly and increasing efforts to curb the emergence and spread of infections. Meet people who have a real story to share. Let their words resonate with you, inspiring you to act today to ensure that this global health crisis is not left for future generations to resolve.

RENIS MACI

Food safety microbiologist, Albania



For 15 years, I have worked as a microbiologist at the Food Safety and Veterinary Institute, so I`m aware of resistant salmonella strains. It is my responsibility to collaborate with food producers and authorities to help protect public health. I help to track the levels of bacteria in food products, so that any threats to public health can be mitigated.

Strengthening border inspections and controls for antibiotic-resistant salmonella strains, breaking the transmission of food-borne pathogens, and improving hygiene practices in the food industry and at home are all important measures in preventing the spread and lowering exposure to antibiotic-resistant salmonella.

Reducing the volumes of antibiotics used in farming is another vital step. Probiotics, bacteriophages and essential oils are just some of the alternative methods that can be used to regulate bacterial growth and accomplish this goal. Antibiotics should be used properly and sparingly, and only when absolutely necessary, to reduce the development and spread of antibiotic resistance.

YOLANDA GOMEZ

Science teacher, Andorra

In my long career as a science teacher in a secondary school, I have observed the lack of a basic understanding in students about infectious diseases, as well as their treatment. Often, students don't know the difference between viral and bacterial infections and don't know in which cases an antibiotic should be administered. They confuse antibiotic medications with analgesics or anti-inflammatories. Antimicrobial resistance (AMR) is one of the most worrying health problems in today's society. As a result, we have realized the need to include, in the science curriculum, content related to the prevention and control of infectious diseases and the development of AMR.

MARGARITA MELIKYAN

Pharmacist, Armenia

I am an experienced pharmacist from Yerevan, and throughout my extensive career I have frequently faced the inappropriate use of antimicrobial medicines. Despite the continuous efforts undertaken by the responsible authorities, including legislative changes and awareness raising campaigns, the misuse of antimicrobials in Armenia continues to be an urgent and ongoing problem. On a daily basis, to the best of my ability, I try to promote the rational use of antimicrobials, by explaining and clarifying to patients the possible negative consequences of misusing antibiotics, especially through self-medication. I also work with physicians to optimize antibiotic prescriptions. Health-care professionals, including pharmacists, have a significant role to play in preventing irrational prescribing and the inappropriate use of antimicrobial medicines. Through advocacy and education, we can help to prevent the further development and spread of resistance. In addition, I believe that there is a need for real changes in the legislative field including the development of consistent law enforcement practices to solve this issue at all levels.

AMR SYMPOSIUM

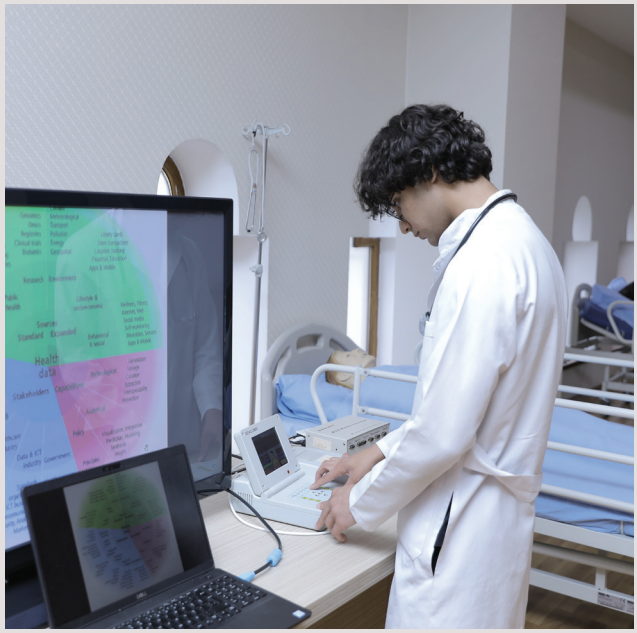
Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection, Austria

Our department is responsible for the national coordination of antimicrobial resistance (AMR) activities in the human medicine sector. Early on, Austria implemented measures to prevent AMR, such as adopting the National Action Plan, which we first published in 2013. Since then, the field of AMR has evolved and current initiatives focus on "One Health", where experts from human and veterinary medicine, environment, food industry, education and communication work together to apply a comprehensive approach to this growing issue. In our day-to-day working lives, we try to convey AMR messages in an enjoyable, welcoming manner. Our accompanying picture displays us preparing an interactive activity for participants of our yearly AMR symposium during World AMR Awareness Week. The battle against AMR is best fought together.

JEYHUN SARUKHAN

Student of public health, Azerbaijan

We cannot assume everything has returned to normal simply because the COVID-19 emergency is over. As we witnessed during the pandemic, many individuals were misinformed about the use of antibiotics against viruses, such as COVID-19. It is imperative to note that antibiotics do not affect viruses. From a public health perspective, it is important to prevent all kinds of infections. This is why I recommend that we make the habits we acquired during the pandemic, such as regular hand washing and the use of antiseptics, a norm in our lives. I also want to advocate against self-medication, in particular, with the use of antibiotics.



DARYA PETRECHUK

Paediatric infectious disease specialist and paediatrician, Belarus

Parents do not always understand that antibiotics are not effective for viral infections. I encounter situations where parents ask me to prescribe an antibiotic to their child, believing that this will help them to get better faster. Sometimes, parents give their children antibiotics without consulting a doctor. Self-medication with antibiotics, that are often bought over-the-counter at a pharmacy, can lead to a situation where antibiotics do not treat the infection and instead contribute to the development of antimicrobial resistance (AMR). Also, despite good intentions, one should not share antibiotics prescribed to them with others. The principle "it helped me, it will help you too" is not applicable and can cause harm. Intestinal (natural) microflora is unique to each person and essential for digestion as well as one's overall health. The uncontrolled use of antibiotics results not only in AMR; it can also lead to an imbalance of the intestinal microbiome in a child. It is the responsibility of a medical doctor to make a correct diagnosis and determine which antibiotic should be used for the treatment of a bacterial infection and in what dose and duration.

As a mother of two daughters, I understand the worries of parents when their child is sick, but as a doctor I recommend strengthening children's immunity by prioritizing routine vaccinations and avoiding self-medication with antibiotics.

CLAIRE READING

Sexual and reproductive health advisor, Doctors Without Borders, Belgium

As a midwife for more than 10 years, I have seen the direct impact of antimicrobial resistance (AMR) on women's health. The increasing global rates of sexually transmitted infections (STIs), such as gonorrhoea, is a major public health emergency. I remember seeing newborns, born at home with no access to antibiotic eye ointment to prevent mother-to-child transmission of gonorrhoea. Left untreated, these infections can cause blindness.

The impact of not effectively treating STIs or reproductive tract infections with the correct antimicrobials can not only lead to early infertility but can also result in maternal death. I have spent time with women expressing their sadness and stress of not being able to carry a pregnancy to term or not becoming pregnant at all, both of which can be linked to AMR. The impacts of infertility are wide-ranging physically, mentally and socially for women and their families.

Midwives have an important role to play in educating women about STIs and ways to prevent these infections. By raising this awareness, we can help preserve antibiotics for their necessary and correct use.

DR JASMINA BUKEJLOVIC

Dentist,
Bosnia and Herzegovina

There is a growing tendency of irrational and incorrect use of antibiotics among patients due to a lack of knowledge and awareness. I encounter many patients who initiate treatment on their own initiative, for example, in the case of an acute toothache, and discontinue treatment when they feel the pain is resolved or extend treatment by buying a new pack of antibiotics. Stricter controls are necessary when dispensing and selling antibiotics. We also need to inform the public about the importance of the rational use of antibiotics, and the danger of antimicrobial resistance (AMR) and its consequences.

Today, we must prioritize and support updating and optimizing treatment protocols as well as the development of new antibiotics. As dental professionals, we have the responsibility to apply evidence-based medicine daily in the fight against AMR.

ALEXANDRA PETROVA

Psychologist and gestalt therapist, Bulgaria

There is a Chinese idiom about the negative effect of overdosing. It goes like this: “Painting a snake, adding legs. The addition invalidates the drawing – so does supplementing our body with medicine it does not specifically need.”

SVEN PAL

Paediatric surgeon, Croatia

As a medical student, I became aware of the antimicrobial resistance (AMR) problem and wanted to contribute to raising awareness among the population about rational antibiotic use and infection prevention. Today, as a paediatric surgeon I see the serious and life-threatening consequences of resistant organisms in the most vulnerable population.

To help raise awareness about AMR, we wrote an educational children's book entitled, *How Hedgy beat the cold,* about common cold symptoms and how to prevent the spread of infections. It was printed and translated in several languages. Based on the book, a theatre play was produced and performed over 50 times across Croatia.

In conjunction with the theatre performance, lectures were organized for teachers in kindergartens and primary schools on hand hygiene, infection prevention methods and rational antibiotic use. In this regard we are raising awareness among children, parents and teachers. The main motivation for the project was investing in the future. By educating children, we hope that they will become aware and responsible adults, professionals, parents and maybe even health-care workers. The results are yet to be seen, but we are optimistic. It is our responsibility to fight against AMR and every one of us has an important role to play.

MELINA CHRYSOSTOMOU

Science teacher, Cyprus

Public health threats are now intensified as climate change worsens. As a science teacher, I regularly present my students with real-life problems to encourage their creativity and problem-solving abilities. At the beginning of the school year, I had the opportunity to participate in MULTIPLIERS, a European-funded project in collaboration with the University of Cyprus, with a focus on promoting open schooling while raising awareness about antimicrobial resistance (AMR). I was thrilled about the learning experience it would provide for my students. Initially, they had no awareness of this issue, but through research and engagement in science practices, meetings with experts and creating surveys for our community, they became actively involved in raising public awareness about the dangers of misusing and overusing antibiotics. Our school motto is "Inspiring young people to think and care". This captures the goal of this effort, which is to empower students to become responsible citizens, who can debate and take decisions about critical public health threats, such as AMR, thus making a positive impact on our world.


MUL+IPLIERS
AMERICAN ACADEMY NICOSIA
2023 SCYENCE FAIR
31-30

DAVID ZIKA

Patient, Czechia

In 2017, I suffered a cervical spine injury and extensive burns over 50% of my body. While being treated at the burns unit, I developed a bedsore that gradually grew larger and did not heal for a long time. The doctors eventually discovered that the wound was infected by methicillin-resistant Staphylococcal aureus (MRSA). This is a strain of bacteria resistant to many types of antibiotics. Because of the MRSA, I had to take several types of antibiotics at once through intravenous infusions. I had to be in isolation to prevent the spread of the harmful bacteria, which meant that a limited number of visitors could come to see me, and only in a special suit. The infection occasionally subsided, but always returned after a few days. I could not start my planned rehabilitation because of this and spent my time waiting to see how the situation would develop. It was very challenging. It took me eight months of antibiotic treatment to recover.

It is worrying to observe the decreasing effectiveness of antibiotics, which means that treating infections is becoming increasingly more difficult. Following the accident, I have been experiencing recurrent urinary tract infections caused by bacteria. I, along with many patients like me, depend on the effectiveness of antibiotics for relief.

STINE MIKKELSEN

Farmer and former nurse, Denmark

When asked back in 2015 if we wanted to start raising pigs without the use of antibiotics, my husband and I had no doubts saying yes. We wanted to show that it is possible to limit the use of antibiotics in livestock production. Since then, we have worked every day according to the mantra: as little antibiotics as possible but as much as necessary. Of course, we always treat sick animals, and we never compromise on animal welfare, but we make a big effort to limit the need for antibiotics and to prevent rather than treat diseases. In my previous work as a nurse, I have seen how antibiotic resistance can make the treatment of ill people very difficult and how it puts a strain on our hospital system. Therefore, we use many of the same procedures on our farm when it comes to keeping our animals healthy. An extra focus on hygiene and measures to break the chains of infection between the pig units help prevent diseases and keep the use of antibiotics down. Yes, it requires extra effort, but we believe that it is the right thing to do and hope that we can inspire others with our antibiotic-free pig production.

PAUL NAABER

Medical doctor and associate professor,
University of Tartu,
Estonia

I have worked as a clinical microbiologist for more than 30 years. My special interests have been antimicrobial resistance (AMR) surveillance and AMR-related research. Although the level of AMR is low in Estonia, we are observing multidrug-resistant bacterial strains more frequently in our laboratory. Since AMR is becoming an increasingly significant medical problem worldwide, effective surveillance and containment are crucial for saving lives and reducing health-care expenditures.

JAANA SUSIMERI

Nurse,
Finland

As a nurse, I sometimes encounter people who are quick to demand antibiotics when experiencing symptoms of a common cold. I advise them to manage their symptoms using alternative methods, such as rest, paracetamol if needed, and adequate hydration. I have also educated them on the harms of excessive antibiotic use. Often, people are not aware or don't understand that antibiotics do not work for diseases caused by viruses, such as flu and COVID-19. I see many patients in my practice, therefore, it is important to me that antibiotics are taken only when absolutely necessary. I am pleased to see how receptive people are when they realize that antibiotics are not always the right medication in all situations.

JUILE GUILLET

Dental surgeon, France

Dental surgeons have long thought that we have little or no impact on the development of antimicrobial resistance (AMR). However, in our daily practice, we are confronted with oral infections that need to be treated. Working in a university hospital, I see situations of serious oral infections, which are life-threatening for patients. We have a major role to play in the fight against AMR, by prescribing appropriately and, above all, by treating the cause of the infection as soon as it is diagnosed. The prevention of these infections relies, of course, on the daily oral hygiene of the patients, but also on the rapid treatment of any infection detected during our consultations. Several studies show that dentists are attentive to the fight against AMR and are willing to do better. We must maintain our efforts for the future of our patients!

BONDO MACHAVARIANI

Restaurant owner, Georgia

My wife and I opened our restaurant in 2019. We started strong, and then came the pandemic. However, we survived as a high-quality business, and we recently became finalists for the Georgian National Tourism Award for "Best restaurant". Our guests along with the restaurant industry are increasingly demanding healthier, fresher, ethical and high-quality meals. With this in mind, we are trying to use locally produced, sustainable and antibiotic-free meat and dairy products as much as possible. Unfortunately, it is difficult to source ingredients as there are not many products available that are truly antibiotic-free. This has been a huge learning experience for us, and we are trying to do our part to raise awareness about this problem to both consumers and food producers in the industry. While we did

not initially think that our restaurant would have such a big impact, we realized that it is important to use our platform to curate high-quality ingredients, create a memorable experience for guests, and leverage change in the way that our food is produced and consumed. Let's join efforts to "reserve" antibiotics.

DR MUNA ABU SIN

Ambassador on Antimicrobial Resistance of the Federal Ministry of Health, Germany

Recently my son asked me, "What are you going to do in your new job at the Ministry of Health?" Coming from a background as a medical doctor having cared for patients who suffered from infectious diseases, and as a public health professional at the national level working with data on antimicrobial resistance (AMR) trends, I tried to explain to him the complexity of a drug-resistant infection and what it means to those affected by one. I wanted him to understand how important it is for all of us to do everything we can to prevent infections and ensure medicines remain effective to treat them. It is important to handle antibiotics with care to secure achievements in medicine, including treating cancer patients, performing surgeries and providing care to newborns. AMR does not only affect humans but also animals and the environment, underlining the need for collaborative actions. We therefore need to keep this topic on the political agenda and set priorities by acknowledging the different needs of populations. In our global response to AMR, 2024 will be a pivotal year, marked by a United Nations General Assembly High-Level Meeting on AMR. In my new role, I will do my best to support these efforts from a policy perspective for the sake of my son's generation and the generations to come.

ELENI DOUNA

Occupational physician, Greece

Preventing antimicrobial resistance is not just about avoiding the prescription of unnecessary antibiotics. Prevention begins with how we practice medicine in our daily interactions with people.

In our role as physicians, we are a source of guidance and inspiration for people to choose to live healthier lives. This has ramifications for all our behaviours, including how we choose to eat, exercise, take care of ourselves and socialize. The time we spend with patients, explaining that our health results from the balance between all the organisms that live on the planet, is an investment, so that, among other things, microorganisms are not allowed to develop characteristics that make them resistant.

In addition to my professional role, the challenge of raising a large family serving the goal of avoiding the misuse of antibiotics means participating with all family members in activities that enhance contact with all living organisms on the planet. Greece has a wide variety of aromatic and healing herbs, and several are known for their antimicrobial properties. Communication with the wealth of nature can help to improve our immune system and offer us multiple benefits in every aspect of our health, both mental and physical.

DR CECÍLIA MÜLLER

Chief medical officer, Hungary

Our efforts to prevent the spread of infectious diseases are as old as humanity itself, with significant milestones along the way. In the 19th century, the Hungarian doctor, Ignác Semmelweis, was the first to recognize that infections can be transmitted from patient to patient by the contaminated hands of doctors. By introducing mandatory handwashing with chlorinated lime solutions, he saved the lives of countless mothers from postpartum infections.

Good hand hygiene remains the cornerstone of infection prevention and control, and consequently helps to control antimicrobial resistance (AMR), not only within hospitals but also in everyday life. The COVID-19 pandemic generated unprecedented momentum for hand hygiene – even preschool children practised washing their hands properly. Although life has returned to normal, this knowledge and momentum should not be lost in any population group.

However, good hand hygiene alone cannot solve all problems. Amongst other strategies, Hungary pursues wastewater surveillance for an increasing range of public health targets – including AMR – with the conviction that this tool has the potential to become as fundamental as hand hygiene.

OLAFUR GUDLAUGSSON

Medical doctor, infectious disease, Iceland

At our National University Hospital, we are experiencing increasing problems in the care of our patients due to infections caused by antibiotic-resistant organisms, be they life-threatening blood stream infections and pneumonia or more common infections. Urinary tract infections, for example, are usually easily treatable with oral antibiotics but can be difficult to treat if they are caused by antibiotic-resistant bacteria.

We recently had a lady in her seventies who needed multiple admissions to our hospital because of repeated urinary tract infections caused by bacteria resistant to most antibiotics. Instead of being treated at home with oral antibiotics, she needed intravenous antibiotics at our hospital for five days each time she was admitted. Repeated admissions are a big burden to the individual and very costly to our hospital and our society.

We need to limit the spread of antibiotic-resistant organisms to preserve the effectiveness of antibiotics. Otherwise, we will see an increasing number of patients with simple infections who will need to be hospitalized and patients with infections for whom no antibiotics will be available.

EIMEAR BRANNIGAN

Medical doctor and infection, prevention and control leader, Ireland

I lead the national programme on antimicrobial resistance and infection control and have worked as an infectious diseases consultant for 15 years. I have seen the increasing challenges of managing and appropriately treating people affected by antibiotic-resistant infections.

I have worked to control outbreaks of resistant bacteria in hospital settings. I treat patients infected with antibiotic-resistant organisms and see the impact of specially tailored antibiotics on their health. I communicate with patients and their families about the impact of antibiotic resistance and offer advice on treatment and prevention, including the role of hand hygiene and how and when to take antibiotics appropriately. I support hospitals in the development of clinical guidelines for the management of sepsis, including guidance for the early onset of antibiotics in severe infections and sepsis. I collaborate with colleagues across our health system to understand the epidemiology of resistant infections, and bring my frontline experience to the national programme as we strive to improve antimicrobial stewardship and reduce health-care-associated infections.

NURSING TEAM

National Institute for Antibiotic Resistance and Infection Control,
Ministry of Health,
Israel

As nurses, we play a pivotal role in coordinating national efforts to prevent infectious diseases and combat antibiotic resistance in health-care settings. Our responsibilities encompass developing and providing evidence-based guidelines for infection prevention and control; monitoring infections; implementing infection control practices; conducting education and training; and managing outbreaks. Through our work, we contribute to improving patient outcomes, preserving the effectiveness of antibiotics and safeguarding public health at the national level.

LORENZA SGANZETTA

Geographer and gardener, Italy

I manage the community garden in the Giambellino district of Milan, where we promote sustainability and local agriculture. Since opening, our gardeners have understood the importance of cultivating without the use of pesticides, antibiotics or other substances used to protect plants from bacteria and diseases. Naturally, this led to some challenges and sometimes caused us to lose plants and have poor yields. However, I believe that this choice has helped to preserve the local fauna, including insects that can transmit diseases that damage plants and the ground itself. It is a choice that will pay off in the long-term, as it is well known that excessive plant protection with antibiotics creates resistance and bacterial mutations. We experienced this with our tomato plants, which have been affected for two consecutive years by a disease that has undergone a mutation.

My advice for those who deal with these issues and promote similar initiatives is to resist the temptation to excessively protect what is grown, use natural seeds from the previous year's plants as much as possible, and minimize the use of antibiotics for plants. We believe that, as a result of our sustainable approaches and conscientious choices, our community garden will thrive.

LARISSA MAKALKINA

Pharmacologist,
Astana Medical University,
Kazakhstan

As a clinical pharmacologist, lecturer at the Medical University and mother, I encounter the irrational use of antibiotics quite often. Therefore, the WHO initiative for World AMR Awareness Week has generated great enthusiasm within me and among my colleagues. We collaborate with WHO, the Ministry of Health, public health departments, medical universities and professional associations through various initiatives to educate everyone about antibiotics and their proper use.

I was very interested in the response from my

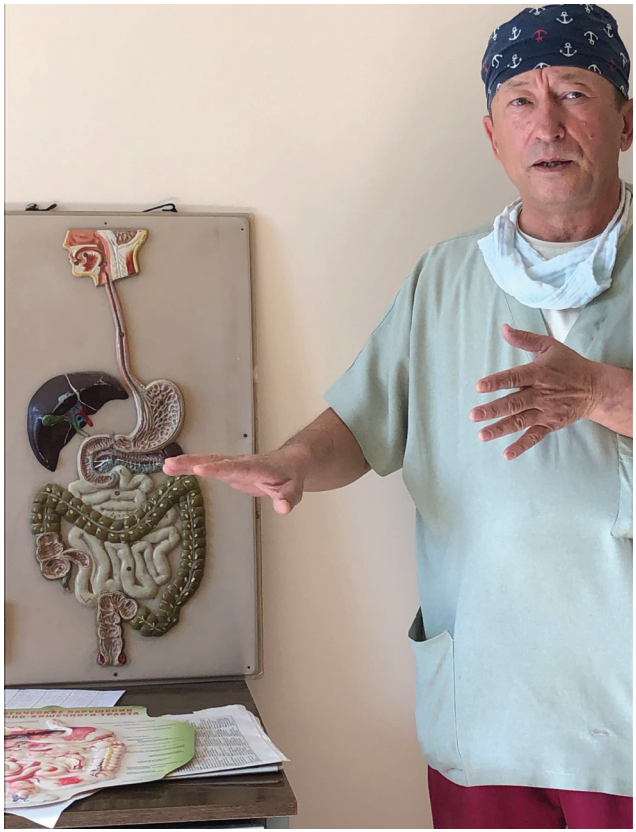
10-year-old son when I discussed with him how each individual can contribute to curb antibiotic resistance. After some time, he brought me a leaflet with touching letters he wrote, appealing to parents to stop giving their children antibiotics for a cold. He inspired us to conduct a lesson with his fourth-grade class using a mini-performance about the correct use of antibiotics, a drawing competition and assignments. The students received important knowledge and promised to take information material and their own letters to their parents and families.

By holding these kinds of educational events, we are seeing an increase in people engaged on antibiotic stewardship and a growing understanding that "One Health" depends on each of us.

MURATBEK MUHAMBETOV

Surgeon,
Kyrgyzstan

I have worked in the hospital for more than 28 years after receiving a qualification in surgery and the Excellence in health-care award from the Republic of Kyrgyzstan. Over the years, I have witnessed challenges with the inappropriate use of antibiotics and increasing trends in antimicrobial resistance (AMR), which is very worrying for me as a surgeon. In response to these challenges, I have become a champion of surgical antimicrobial



prophylaxis (SAP) and have advocated for updated SAP guidelines to be implemented in hospital settings to help decrease the risk of post-operative infections. These essential guidelines require regular monitoring and updates because wound infections change their resistance patterns over time. I also strongly advocate for having proper infection prevention and control measures, in which we all have a role to play. I am helping to make a difference and I encourage others to do the same in the fight against AMR.

SILVA GRADOVSKA

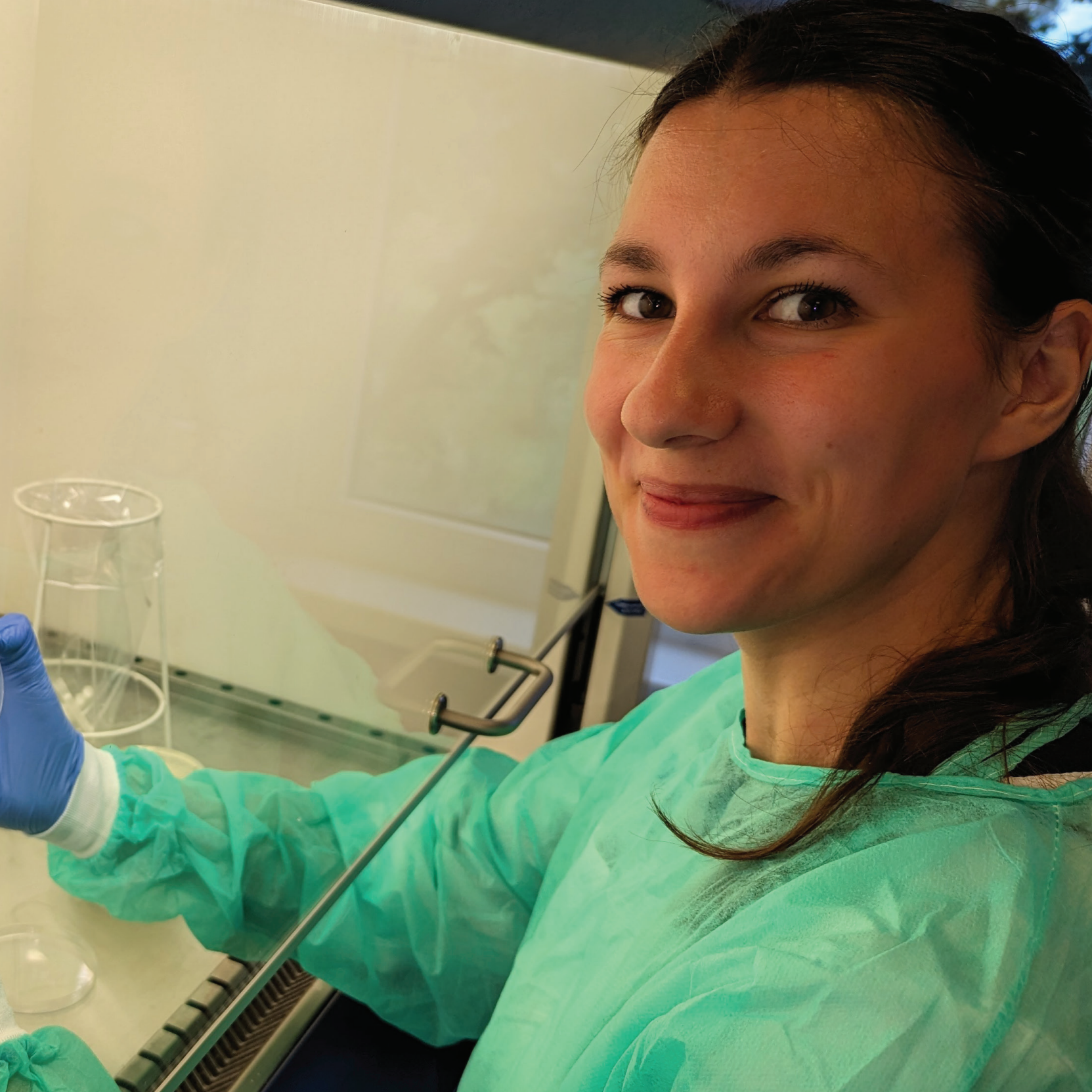
Antimicrobial resistance researcher, Latvia

I work in the microbial genome research group at the Institute of Food Safety, Animal Health and Environment (BIOR) in Latvia. Everyday, I see first-hand the challenges posed by antimicrobial resistance (AMR) within our health-care facilities.

Together with colleagues from Pauls Stradiņš University Hospital, Latvian Biomedical Research and Study Centre, and Riga Technical University, we collect and analyse wastewater samples to track resistant bacteria and AMR genes, providing crucial data for public health surveillance. Our research has identified resistant bacteria in hospital wastewater, emphasizing the urgent need for stringent infection prevention and control measures.

Monitoring wastewater in hospitals is particularly important for all of us because it serves as an early warning system for the spread of resistant bacteria. By identifying these threats promptly, we can implement targeted measures to prevent disease outbreaks. This proactive approach helps protect both patients and the broader community from the dangers of AMR.

Embracing a "One Health" approach, which encourages cross-sector collaboration, is vital to tackle this issue effectively. My advice to policy-makers is to invest in robust surveillance systems and foster collaboration across sectors. Promoting responsible antibiotic use and sustainable practices is key to reducing the impact of AMR. Together, we can make a difference.



ELIGIJA KNYSTAUTIENE

Teacher,
Lithuania

In my 34 years of pedagogical experience, I have learned it is important to teach students to believe in themselves and their capabilities so they can make a positive impact in their lifetime. For antibiotics to be used appropriately, public knowledge needs to be increased. Engaging schools and students to participate in the action is key to building awareness. Our school initiated an antimicrobial resistance (AMR) awareness campaign entitled "Cold? The flu? Get well without antibiotics!" Our students helped to encourage and change behaviour by spreading the word that simple actions can have a big impact. Students campaigned throughout the city to inform people about the negative consequences of the irrational use of antibiotics and why it is important to use antimicrobial medicines responsibly. Information was distributed not only among the public but also among family members and friends. Involving schools and students in the fight against AMR promotes public awareness, so that the effectiveness of antibiotics can be preserved for future generations.

JENNY GLAESENER

Coordinator, National Plan for Antibiotics, Directorate of Health, Ministry of Health and Social Security, Luxembourg

As the coordinator of the National Antibiotic Plan and a mother of three, I am really concerned about the challenges that the new generation will face when it comes to the treatment of infections, being mild or serious. Antimicrobial resistance (AMR) is one of the greatest threats to public health.

Luxembourg's National Antibiotic Plan (2018-2024) tracks antibiotic resistance through the study of invasive pathogens collected in hospital settings. Resistance is also monitored in food-borne and waterborne diseases. In addition to the surveillance of human and animal consumption of antibiotics, and of AMR and antibiotic residues in farms and environmental settings, the National Antibiotic Plan focuses on raising awareness of antibiotic use, vaccination, infection prevention and hygiene measures in hospital settings, farms and the community.

In 2022, AMR and antibiotics consumption in Luxembourg ranked below the European average, but till high compared to other countries. There is much work to be done across the human, animal and environment sectors. A new ambitious national action plan will be published in 2025 and will include specific result-oriented actions to respond to the global health threat of AMR.

PETER ZARB

Pharmacist, Malta

I have worked as the antimicrobial stewardship (AMS) pharmacist in my hospital for over two decades. I am engaged in national efforts and was involved in the development of the antimicrobial resistance national action plan. I am interested in quality

improvement initiatives that address antibiotic prescribing in community and hospital settings. My work in AMS has identified major concerns in antibiotic prescribing among health-care providers, including inappropriate antibiotic prescribing for viral respiratory tract infections, the excessive use of last-resort antibiotics, unnecessarily prolonged surgical prophylaxis and treatment, a lack of antibiotic documentation, and the lack of adherence to an intravenous-to-oral antibiotic switch intervention. For any AMS programme to be successful, there must be support and ownership from all stakeholders, including clinical teams as well as senior leadership.

DR NATHALIE HILMI

Researcher, environmental economics, Monaco

Antimicrobial resistance (AMR) in aquaculture poses significant threats to human health, the environment and the economy. Resistant pathogens can be transmitted to humans via contaminated fish or water, leading to infections that are difficult to treat. Environmental impacts of AMR include disruption of microbial communities and the spread of resistant bacteria to natural water bodies, which can re-enter the human food chain. From an economic perspective, resistant infections increase treatment costs and decrease productivity, potentially leading to significant losses and trade restrictions.

To address AMR, prudent use of veterinary medicines by fish farmers is essential. Improved regulatory frameworks, enforcement and health support services can facilitate responsible antibiotic use, thereby mitigating AMR. Good aquaculture practices, vaccinations and alternatives, like bacteriophages, probiotics and bioremediation, are effective in preventing infections and reducing the need for antibiotic use. Strategies to combat AMR in the environment include better management practices, biosecurity measures, regulation enforcement, and investment in research and development. Implementing these strategies requires a multifaceted "One Health" approach to ensure safety and sustainability in aquaculture.

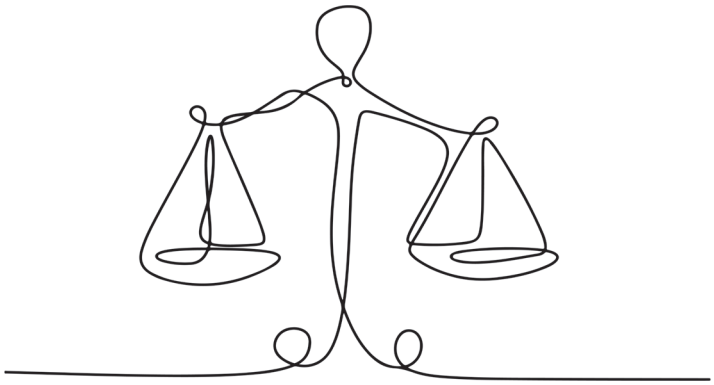
NEVENKA NIKIC

Retired person
Montenegro

I recently underwent heart surgery with three bypasses implanted. It was a very complex and difficult operation. However, I did not fear the surgery. I trusted my doctor, his team and their expertise. But another thought troubled me – whether I would contract some difficult-to-treat infection during my stay in the hospital. I know that, in many cases, patients contract infections resistant to antimicrobials, like antibiotics, during or after surgeries, which can be fatal for them. However, thanks to the professional and dedicated work of the doctors and nurses at the Cardiovascular Surgery Centre, I left the hospital without any complications. I have been given another chance to live and I am looking forward to every day spent with my family. It is very important that we all remain safe from infections during treatment in our hospitals.

JOHN LISMAN

Lawyer,
Netherlands (Kingdom of the)



One of the biggest dangers of antimicrobial resistance is that patients suffering from a serious infection cannot be treated because we will not have effective antimicrobial medicines. Unfortunately, the pharmaceutical industry is not developing new antibiotics to treat these patients because there is no good incentive. After all, pharmaceutical companies are paid for what they sell, not for what they do. Following this ethos, there is little perceived value in investing a lot of time and money in developing a new antibiotic only to sell one box per hospital, because the medicine should be used as a last resort and left on the shelf as long as possible. When it comes to antibiotics, my suggestion, as a long-time pharmaceutical lawyer, is to give incentives to companies for what they do and not for what they sell. There are examples where this has been achieved in the past with successful results.

GORDANA MIRCHEVSKA

Microbiologist,
North Macedonia

I am a medical microbiologist and associate professor of microbiology at the Institute of Microbiology and Parasitology, Faculty of Medicine, University Ss Cyril and Methodius, in Skopje. My special interests are the early diagnosis of invasive fungal infections in critically ill and organ-transplant patients, and the susceptibility of commonly used antifungal medications. I am enthusiastic about the implementation of new methods for the identification of fungal pathogens, especially because I have witnessed an alarming increase in the number of invasive fungal infections and the development of anti-fungal multi-resistance. I am constantly raising awareness among clinicians about the rising number of invasive resistant fungi, which pose a serious threat to our vulnerable patients. Two years ago, we implemented a screening programme for early diagnosis of invasive infections caused by fungus. This year, my focus is to implement the T2 Candida platform for the molecular identification of yeasts in our critically ill patients. Hopefully this project will be successful in the forthcoming years, so we can also contribute to saving more lives from these life-threatening resistant infections.

HELGE ØVRENESS

Cancer patient, Norway

In my 20s, I was diagnosed with leukaemia and needed treatment to survive. I had to go through a stem cell transplantation to treat the blood cancer. I was put in isolation, with a suppressed immune system, for two weeks, fearing and waiting to get an infection, which always happens. Without effective antibiotics, this treatment would be too dangerous to undergo. Luckily, the bacterial infection I got was treatable with antibiotics.

Due to the late effects of the cancer treatment, I also needed a lung transplantation and today I depend on medicine that supresses the immune system. This means that if I become ill from a bacterial infection, my situation could be life-threatening if I don't have access to effective antibiotics. Because of the development of resistance to antibiotics, I'm worried that, in the near future, there might not be effective antibiotics to fight off these infections.

PIEJAK EWELINA

Patient, Poland

I had a kidney transplant not long ago. The doctors and I really want this kidney to function well because the donor was my friend from work. Besides, it's my second transplant. Unfortunately, while in the hospital, I developed a urinary tract infection caused by a multidrug-resistant bacterium and I was given strong intravenous antibiotics for 10 days. After that time, another infection appeared, caused by a different resistant bacterium, which was susceptible to only a few antibiotics. If it wasn't for these infections, I would have been home a long time ago. I'm afraid that the longer I stay in the hospital, the more likely I am to get other infections caused by all sorts of drug-resistant microorganisms. My immunity is already weakened by the medications I take after receiving the transplant. I understand I must stay here to take care of my newly transplanted kidney and treat all these infections, but I wish it would be over. If only I could take more common antibiotics by mouth outside the hospital, but this is not an option. I miss my relatives. They're worried about me. I wish I could be sent home.

MARIA GORETI DE GOUVEIA MARTINS DA SILVA

Nurse and patient, Portugal

I have worked for the Infection Prevention and Control, Antimicrobial Resistant National Programme since the year 2000. I am also a sepsis survivor. After abdominal surgery, I developed a severe postoperative infection, which required me to stay in intensive care for 64 days. At first, I received antibiotics and was initially discharged only to return to the hospital 24 hours later, with little chance of survival due to the severity of the infection. Fortunately, I survived. Since then, I have become a staunch advocate for the proper use of antibiotics. It's especially important that health-care facilities, managers and clinicians implement an antimicrobial stewardship programme. I encourage health-care professionals to comply with antibiotic prescribing guidelines and for people to comply with their doctors' prescriptions, because it is everyone's duty to preserve antibiotics and prevent antimicrobial resistance.

VICTORIA PANZARI

Patient,
Republic of Moldova

I was admitted to the Institute of Emergency Medicine in the capital city of Chisinau in a very serious condition where I was dignosed with a severe form of pancreatitis. The doctors prescribed antibiotic treatment. However, the antibiotic did not have the expected result and my condition worsened.

From one day to the next, my state of health was deteriorating. If today was good, tomorrow could be bad. I felt very sick. I was in a drug-induced coma for two months and had 10 surgeries along the way. My chance of survival was slim.

After multiple investigations by the Laboratory of the National Agency for Public Health, the susceptible antibiotic was fortunately identifed and targeted therapy was initiated. My health slowly improved.

Detailed laboratory diagnosis of the causitive pathogen and the availability of effective antibiotic therapy saved my life.

AMR is everyone's responsibility. So, let's preserve antimicrobials for their correct use.

AMR survivor (anonymous as requested), Romania

I had sepsis due to biliary colic. I was admitted to a hospital where I stayed one month until I was discharged. However, after 24 hours I was re-admitted to the intensive care unit with convulsions. Slowly the infection reached my brain. I could not move and was almost unconscious. During this time, I was treated with antibiotics by a multidisciplinary team of doctors. However, the infection caused abnormal blood clotting, which is very difficult to treat in combination with sepsis, and doctors were unsure about my chances for survival. When my family was allowed to visit me, I was immobilized, I could not see, and I did not recognize them. Despite the many complications I suffered, I survived. I am very glad to be as well as I am today, thanks to the team of doctors looking after me. My message to everyone is: Let's protect the use of antibiotics because they save lives.

ELENA VORONINA

Homemaker,
mother of two children,
Russian Federation

We do not want our children to get sick. Yet, all parents know how difficult it is to protect children from infections. As a parent, I believe in modern medicines, including effective antibiotics. But there is no specific treatment against some infections, so the best we can do is reduce the harm through preventive actions. There is a difference between an infection in a mild form and fighting a serious illness.

I believe all children should be protected from serious illnesses and their complications. Childhood vaccination provides such protection. In addition, in a broad sense, vaccination reduces the need for the use of antibiotics, thereby preventing the development of antimicrobial resistance. Various side-effects of vaccination are discussed on social networks, while forgetting or turning a blind eye to the benefits of vaccination and the complications of infections. You need to think seriously before making a decision to refuse vaccination. Let's protect our children by getting them vaccinated, and in doing so, let's help to use antibiotics responsibly.

DR ANNA LADERCHI

Infectious risk specialist nurse, Institute of Social Security, San Marino

As a nurse, I witnessed an incredible story of survival and science involving a patient called Orestes, an infectious disease specialist, Dr Arlotti, and antibiotic-resistant bacteria.

It all began years ago when Orestes sustained severe burns on almost half of his body while attempting to extinguish a fire. Since then, he was hospitalized multiple times due to three episodes of septic shock, skin and sternum transplants, as well as heart surgery, exposing his body to numerous dangerous bacterial infections.

Despite these challenges, Orestes never lost hope and found an invaluable ally at the San Marino Hospital who is well-versed in antimicrobial resistance (AMR). Dr Arlotti meticulously analysed the harmful bacteria present in Orestes' body. Through his thorough examination, he was able to select the most effective antibiotic and

determine the appropriate dosage, frequency of administration and advantageous combinations of therapy.

Thanks to his expertise and unwavering dedication, Dr Arlotti managed to save Orestes' life. This remarkable achievement highlights the importance of antibiotics as a crucial resource when utilized wisely and responsibly.

Recently, Orestes celebrated his 73rd birthday, reaching a personal milestone and commemorating the triumph of science over invisible adversaries.

MARIJA STANOJEVIĆ,

Medical student, Serbia

Through my medical studies, I have learned about the importance of antibiotic stewardship and its benefits. It is highly evident that more awareness is needed about the consumption and proper prescription of antibiotics, and specifically on the issue of antimicrobial resistance (AMR). AMR is truly worrying, not only for us in the medical field, but for everyone. Therefore, I pledge to focus on this important issue as part of my future medical career. I strongly believe that by campaigning and giving the right sources of information, we can prevent the misuse of antibiotics. I intend to strengthen the relationship between my colleagues and with my patients, where trust is the priority. I will advocate for a healthier and safer environment. I hope that by increasing awareness and implementing antibiotic control measures, we can control AMR.


GROSS
ANATOMY

TATIANA IZAKOVIČ

Hospital epidemiologist, Slovakia

Antimicrobial resistance (AMR) is a daily reality in my professional life. I see many patients who are either colonized or infected with multidrug-resistant bacteria. My main goal is to create a high-quality and safe environment for both our patients and our staff through multiple infection prevention and control (IPC) measures that aim to stop the further spread of these dangerous pathogens. This includes active surveillance of resistant bacteria in certain patient populations, isolation measures, enhanced environmental services and the promotion of hand hygiene. This is the foundation of my work. Data analysis of health-care-associated infections (HAI) caused by resistant bacteria as well as antibiotic consumption helps me to see the opportunities for improvement.

In addition to these activities, the continuous education of health-care workers on important topics, such as IPC and AMR, plays a vital role in efforts to control the emergence and spread of hard-to-treat infections. Raising awareness outside of hospital walls by speaking at different forums and advocating for antimicrobial stewardship and IPC is equally important. AMR is everyone's business! Last, but not least, I find a great joy in teaching medical students and feel truly blessed to be given the opportunity to foster young, bright minds – the future generation of medical professionals who will one day become leaders against AMR.


PentaHospitals

JULIJA VITA

Youth leader, Slovenia

As a medical student, I was fascinated by the fact that we constantly encounter countless potentially pathogenic microorganisms, but it is not guaranteed that we will be affected by them. The determining factor is the resilience of our immune system. Armed with this understanding, and mindful of the challenges posed by antimicrobial resistance (AMR), as well as the lessons learnt from the global pandemic, which highlighted the vulnerability of our so-called collective immune system, I committed myself to advocating for the significance of a healthy immune system and the factors influencing it.

Teaming up with the Slovenian youth organization No Excuse, I collaborated on crafting workshop programmes for youth. Alongside fellow young health advocates, we conduct these workshops across Slovenia. The topics cover a range of health-related subjects, including alcohol, tobacco, nutrition, and more. My goal is to contribute to the creation of a society that is both healthy and resilient, where antimicrobials are reserved for situations where lives are truly at stake.

ALBERT FIGUERAS

Consultant, antimicrobial control and rational medicines use, Spain

Prescribing, dispensing, or consuming antibiotics reminds me of an amateur snooker player – you hit the first ball with the cue, expecting to strike other balls, but instead balls start rolling without hitting other balls or reaching any pocket. Similarly with the use of antibiotics, one never knows the consequences of an inappropriate treatment course that does not kill the bacteria completely or the effect of remaining antibiotics released to the environment, thus helping other organisms to develop and spread resistance. The best advice to medical professionals is to think twice about the need for an antibiotic, avoid automated and just-in-case prescriptions, select what is most appropriate, and prescribe it accurately and according to the patient's needs and for the right duration. Concerning antibiotics, let's not be amateur or naïve.

MALIN GRAPE

Ambassador on antimicrobial resistance, Sweden

I represent Sweden in the joint endeavour to secure sustainable access to the effective prevention and treatment of infections for all. On a daily basis, this means dialogue and collaborations with individual countries or local organizations, and on broader multilateral platforms all the way to the level of the United Nations. Already in university, I was caught by the many aspects of the antimicrobial resistance (AMR) challenge and how dependent we are on effective antibiotics for basic as well as advanced health services. Never could I have imagined back then that I would spend my professional life on counteracting the effects of ever-increasing AMR.

Sweden paid early attention to the AMR threat, and thanks to committed work we have seen a continuous decrease in antibiotic prescribing for more than 20 years. There is, however, large room for further improvements in preventing the spread of infections and resistance and assuring that treatment is available and effective when we need it. For this we need collective and immediate action, across sectors, regions and levels of society. Everybody can make a difference in a whole-of-society approach. We are all at risk of untreatable infections. I strongly believe that together we can mobilize to turn the trend and achieve reliable and equitable access to infection treatments, now and for future generations.

WERNER KIPFER

Cattle farmer,
Switzerland

I run a farm with 200 fattening cattle. When a group of 40 calves arrives to my farm at the age of about 40 days, they are very vulnerable. In Switzerland, the 40 calves usually come from more than 30 dairy farms. The calves need to be well looked after and too often they are treated with antibiotics. This prompted me to join the newly established calf health service and carry out housing trials. Antibiotic reduction in incoming calves is difficult. Through my work, I have come to understand that the dairy farms, livestock trade as well as the cattle fatteners can only reduce antibiotics if every player in the chain makes their contribution to animal health. In the future, I could imagine a model where the calves are kept on the dairy farms for the first four months before moving to my farm for fattening, to help reduce the use of antibiotics. This would require dairy farmers and fatteners to work more closely together.

MARYAM ABIDOVA

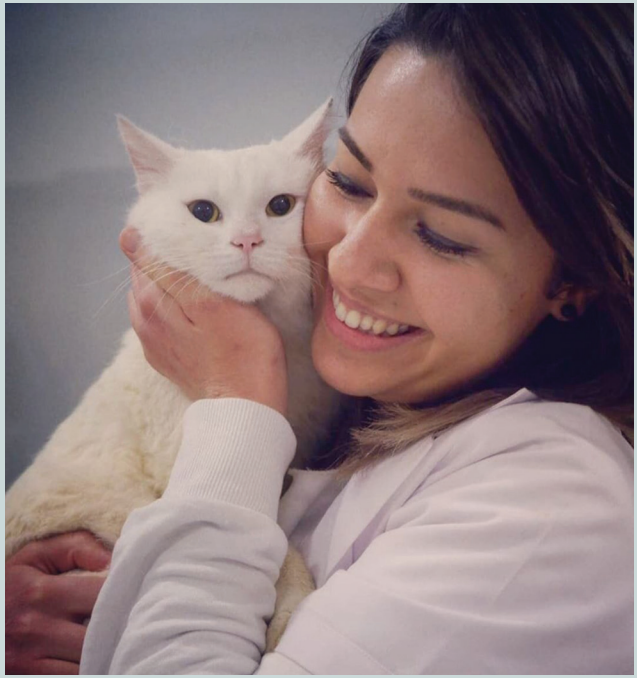
Midwife,
Tajikistan

In 1988, I started working as a cleaner at the maternity department of the National Clinical Research Institute for Reproductive Health. In parallel, I studied and graduated from a medical college in Dushanbe as a midwife in 1992. I have been actively engaged in the development and implementation of the infection prevention and control (IPC) programme in our clinic. Through IPC, I teach pregnant and postpartum patients on the preparation for safe delivery and after-birth care, including promoting the WHO hand hygiene tool. In my teaching, I focus on the five moments of hand hygiene to prevent infections among women and their newborns. Promoting hand hygiene not only prevents infections but also decreases the need for antibiotic use. Basic infection control practices can save lives and are the best way to keep us healthy.

CEREN EROGLU

Veterinarian, Türkiye

I am a veterinary clinic owner in Ankara, and I have worked in this sector for 10 years. In this time, I have witnessed first-hand the impact of antimicrobial resistance (AMR) in the treatment of cats and dogs. With a large population of street animals, the challenge is compounded by the lack of a system to address their health needs. When antibiotics are needed, we often resort to the cheapest and most readily available option, typically amoxicillin. However, if the animal needs antibiotics again, they are often seen by a different provider who may use the same active ingredient, perhaps with a lower dosage, resulting in treatment failure due to the development of AMR. Addressing AMR requires a concerted effort, including promoting responsible antibiotic use, implementing good infection prevention and control practices, and providing access to vaccination and veterinary care for street animals.



SHUKURGELDI MYRADOV

Youth leader, Turkmenistan

As a youth ambassador, I have seen first-hand the critical role that awareness and education can play in combating antimicrobial resistance (AMR).

In my work, I have engaged with young people on many diverse health issues, such as drug abuse and cancer prevention, the promotion of a healthy lifestyle, and sexual and reproductive health and rights. Through these initiatives, I have observed the detrimental effects of misinformation on health behaviours. This experience helps me understand the importance of raising awareness about AMR to ensure that antibiotics are used responsibly.

One striking example occurred during a workshop on healthy living, where several participants admitted to using antibiotics without prescriptions. This highlighted the urgent need for

education on AMR. I used this opportunity to discuss the dangers of antibiotic misuse and the global threat of resistant infections, emphasizing that everyone has a role to play in tackling AMR.

AMR is not just a medical issue; it is a societal challenge that requires a collective effort. By educating and empowering young people through storytelling and community engagement, we can foster a culture of awareness and proactive health management and build a community that supports responsible antibiotic use. Let us work together to advance efforts to control AMR and ensure that future generations inherit a world where antibiotics remain effective when needed for safeguarding health.

IRYNA MASSLIENNIKOVA

Nurse,
Ukraine

Before the war in Ukraine, I worked in the infectious diseases department of the Central City Hospital in Rubizhne. As a senior nurse, I oversaw the implementation of infection prevention and control (IPC) measures. I found it impossible to fully implement effective IPC measures without system-wide changes.

Thanks to the support and guidance from the WHO office in Ukraine, we were able to strengthen our IPC practices. We received essential equipment that enabled us to implement systems for hand hygiene and for washing and drying linen. IPC training was conducted for medical personnel, and everyone underwent a respirator fit test. With the onset of the COVID-19 pandemic, we clearly understood which respirator each employee needed. The implementation of IPC measures made it possible to prevent the spread of COVID-19 and other hospital-acquired infections. Our department became the gold standard for IPC in the Luhansk region.

When the war came, I was forced to leave my home. Today I work for Infection Control in Ukraine, a non-governmental organization. I help to implement IPC measures in other hospitals of Ukraine by sharing my knowledge and experience. By preventing infections, we prevent the need to use antibiotics.


РОЗВИТОК МЕДИЧНОЇ ОСВІТИ
USAID
ukaid
Ви медсестра або медбрат?
ВИ ЛІКАР АБО ЛІКАРКА?
ДОЛУЧАЙТЕСЯ ДО ГРУП РІВНИХ!
ЦЕ ВАШ НАЙБЛИЖЧИЙ БПР!

EMMA JONES

Equine veterinarian, United Kingdom

I believe a friendly atmosphere with a gathering of like-minded horse owners makes it easier to get key messages across about biosecurity, disease prevention and antimicrobial resistance. These sessions facilitate discussion and understanding. The relaxed environment and informal approach allow people to freely ask basic questions and swap experiences. We tend to treat individual horses so we can control and dose correctly, but the antibiotic resistance problems are better dealt with on a herd basis to stop them from getting the disease in the first place. In a group setting, we talk about biosecurity on a yard basis to get owners, whose horses share pastures and stable buildings, to have a well-thought-out programme for infectious disease control, rather than an ad hoc response once the disease has happened. The outcome is that we reduce antibiotic use and improve horse health.

Most people were very willing to think and protect their horses as a group. A coordinated programme for disease control can be achieved by bringing people together to agree on the best action plan.

GULNORA ABDUHALILOVA

Microbiologist, Uzbekistan

Since 2008, I have been the head of the bacteriological laboratory at the Republican Specialized Scientific and Practical Medical Centre for Epidemiology, Microbiology, and Infectious and Parasitic Diseases. Our centre has a clinic for patients with infectious diseases, and for more than 15 years I have been monitoring microorganisms resistant to antimicrobial drugs. Antimicrobial resistance (AMR) is increasing every year. In our region, this is due to the over-the-counter sale of antibiotics, irrational use and inappropriate prescriptions by doctors, as well as the widespread and uncontrolled use of antibiotics in farms raising livestock, birds, etc. In this regard, my laboratory team, together with WHO, conduct regular campaigns among the population, with a special focus on doctors and medical students about how to use antimicrobial medicines correctly, carefully and rationally.

"WHO has been sounding the alarm on antimicrobial resistance (AMR) for decades, but many people still don't feel it can affect them personally. We need to find other ways to communicate this message clearly. Personal stories play a pivotal role in humanizing this crisis to drive individual and collective action. Stories of AMR embraces a people-centred approach, and seeks to engage with and empower people as partners and beneficiaries in addressing AMR. These stories are intended to transform the AMR crisis from a distant concept to a relatable and urgent reality, calling for solidarity and coordinated "One Health" action across the WHO European Region."

Dr Danilo Lo Fo Wong

Regional Adviser, Control of AMR,
WHO Regional Office for Europe

“AMR is not so much knocking on the garden gate, as it is hammering on our front door. It’s everyone’s business, and therein lies a danger, that everyone’s business becomes no one’s responsibility. AMR is often referred to as the silent pandemic, but it’s only silent as long as we allow it to be silent. We need to make more noise and harness the tools we have to mitigate this global health threat.”

Robb Butler

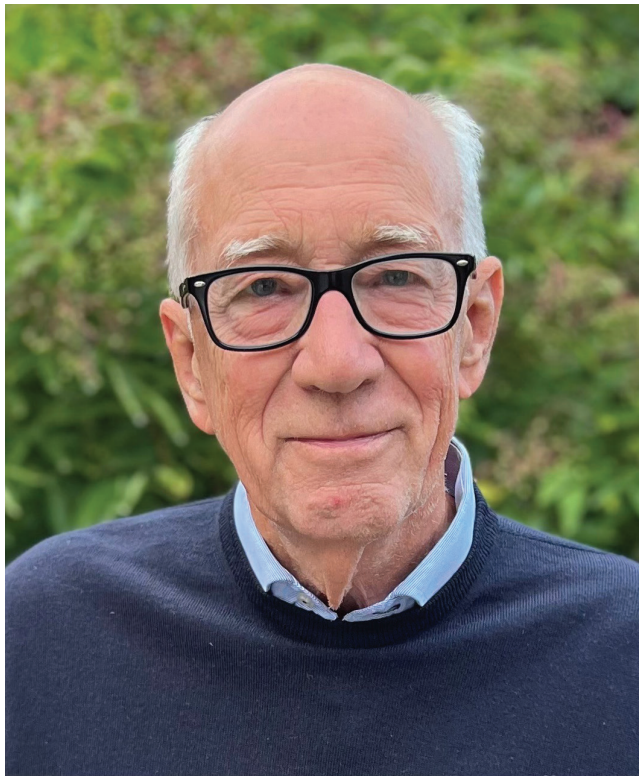
Director of the Division of Communicable Diseases, Environment and Health, WHO Regional Office for Europe

“The AMR crisis impacts everyone across the world. It is a question of intergenerational fairness and I owe it to my children and the next generations to do my best to ensure that they have access to effective antibiotics. This starts with sharing the stories of those who are experiencing AMR to raise awareness and inspire action.”

Dame Sally Claire Davies

United Kingdom Special Envoy on Antimicrobial Resistance

“Access to effective antibiotics must be seen as part of the infrastructure of any health system, and for too long we have been taking them for granted. To secure this resource for everyone, everywhere, the world´s collective response must rapidly increase and must consider the needs of the most vulnerable populations and countries. Like the climate crisis, AMR must become everyone’s business; all of us have a role to play. We can never eradicate AMR, but with increased efforts we can manage it – for a world free from untreatable infections.”



Dr Otto Cars

Professor emeritus, Infectious diseases, Uppsala University Sweden,
Founder and senior advisor, ReAct, Action on Antibiotic Resistance

EXHIBITION *STORIES OF AMR*

It is said that a picture is worth a thousand words. It can break language barriers and help to create a common understanding. In 2023, the *Stories of AMR* Exhibition was conceptualized with this perspective in mind.

This exhibition, illustrating many of the same stories in the photobook, represents the first endeavor by the AMR team at the WHO Regional Office for Europe to bring a human perspective to AMR using photography and storytelling. The aim is to show how AMR is perceived in different settings and inspire action among diverse audiences to address the issue.

In the lead-up to the 73rd session of the WHO Regional Committee for Europe, where the new AMR Roadmap (2023–2030) was being presented for endorsement, the AMR team set out with the ambitious goal of collecting photos and stories from people representing each of the 53 Member States in the Region. The team joined forces by connecting with colleagues in country offices and professional networks from across the Region. Through a snowballing process, stories were collected from people keen to talk openly about AMR.

Fifty-six of these personal stories and photos were compiled, edited, and transformed into a standing exhibition, presenting the experiences, insights, perspectives and ideas of individuals from various backgrounds and professions. This collection of stories promotes the key message that everyone has a role to play in controlling AMR and shows how AMR impacts people from all walks of life.

This exhibition is meant to create an experience whereby viewers can walk through a forest-like arrangement of standing cubic pillars showcasing the stories of AMR and relate to the vision of the Roadmap, which is, by 2030, that people and animals will be safer from hard-to-treat resistant infections and will benefit from healthier environments. The development of the photobook was spurred by the overwhelming positive response to the stories displayed in this captivating and impressive exhibition.

An incredible interdisciplinary group of people have been a part of the journey to create this exhibition, including those involved in collecting the stories, designing the layout, printing, shipping, setting up and sending off the exhibition to new destinations.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SEVENTY-THIRD SESSION OF THE WHO REGIONAL COMMITTEE FOR EUROPE, ASTANA, KAZAKHSTAN

The Roadmap on AMR for the WHO European Region 2023–2030 was endorsed by all 53 Member States at the 73rd session of the WHO Regional Committee for Europe in Kazakhstan on 26 October 2023. The Roadmap is designed to support countries to identify, prioritize, implement and monitor high-impact interventions to tackle AMR. The guiding principles of the Roadmap on AMR include:

- looking at health through the "One Health" lens
- supporting equity and a people-centred approach
- adopting a systems view.

The *Stories of AMR* Exhibition was displayed at the Regional Committee to reflect the guiding principles of the Roadmap, stir discussion among ministerial leaders and policy-makers, and commemorate this crucial endorsement.


AND KAZAKHSTAN


World Health Organization
European Region
RC 73

WORLD AMR AWARENESS WEEK (WAAW) 2023, UN CITY COPENHAGEN

WAAW is a global campaign celebrated annually (18–24 November) and builds on the success of European Antibiotic Awareness Day (EAAD), introduced by the European Centre for Disease Control (ECDC). The WHO Regional Office for Europe joined forces with ECDC in 2012 in planning and aligning AMR messages for EAAD and expanding the campaign beyond the 30 European Union/European Economic Area countries in the Region. The first WAAW was held in 2015 following the adoption of the Global Action Plan on AMR. Since then, the aim of the week, every year, is to improve awareness and understanding of AMR through effective communication, education and training and encourage best practices among everyone in reducing the further emergence and spread of AMR.

In celebration of WAAW 2023, the *Stories of AMR* exhibition was displayed at UN City in Copenhagen, to raise awareness about AMR across UN agencies and reinforce the quadripartite collaboration on AMR – a joint initiative between WHO, the Food and Agriculture Organization of the United Nations, United Nations Environment Programme, and World Organisation for Animal Health – to underscore the threat AMR presents to humans, animals, plants, ecosystems and livelihoods.


STORIES OF
AMR

SEVENTY-SEVENTH WORLD HEALTH ASSEMBLY, GENEVA, SWITZERLAND

The World Health Assembly (WHA) is the main decision-making body of WHO. It is attended annually by delegates from all 194 Member States to discuss a specific health agenda and agree on global health goals and strategies. The theme of WHA 77, held on 27 May – 1 June 2024, was "All for Health, Health for All".

The *Stories of AMR* exhibition was displayed at the United Nations Palais in Geneva, Switzerland, to underscore the broad impact of AMR through all layers of society, agriculture and the environment, and bring this global health issue to the attention of health leaders from across the world. The aim of the exhibition coincided with the theme of WHA 77 and served as a global call to action voiced by the WHO European Region. The exhibition formed the backdrop of the WHA social media corner, where live interviews were streamed on WHO's official social media channels, providing additional exposure to this exhibition.

This WHA was very opportune because AMR was a key health topic discussed. The agenda included a report by WHO's Director-General outlining WHO's strategic and operational priorities to address drug-resistant bacterial infections in the human health sector from 2025 to 2035 and the country-led resolution on AMR, "Antimicrobial resistance: accelerating national and global responses".


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THE AMR TEAM, WHO REGIONAL OFFICE FOR EUROPE

"We can speak frankly, laugh together and we truly believe in the work that we do."

The AMR programme at the WHO Regional Office for Europe began its journey in 2011 with the adoption of the Strategic Action Plan on Antibiotic Resistance by all 53 Member States at the 61st Regional Committee for Europe in Baku, Azerbaijan. Starting as a Regional Director special project led by a single staff member, the programme has continued to flourish through the years with contributions from a growing number of interdisciplinary professionals, all from different backgrounds, bringing their diverse experiences, expertise and perspectives to the work of AMR. As the programme strives to build bridges and support Member States to address AMR in a comprehensive way, a dedicated team of enthusiastic people has been foundational to this effort. The AMR Working Group, which was established in 2012 with experts from across technical programmes at the Regional Office dealing with infection prevention and control, food safety, environment surveillance, and access to medicines, became an agile extension of the team facilitating AMR activities in Member States.

Together, the team seeks to engage partners and stakeholders, learn from each other's work, and build global awareness of AMR.


HANDLE
ANTIMICROBIALS
WITH CARE

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The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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