

Science journalists, experts and communicators converge in annual conference



**MESHA Chairman Bozo Jenje,
who delivered the opening speech.**

By Joyce Chimbi | j.chimbi@gmail.com and
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The Fifth African Conference of Science Journalists started today on a high note, with at least 90 participants from across Africa and globally attending.

At least 300 delegates from 30 African countries have registered for the annual four-day conference that is being held virtually under the theme 'Letting Science Live'.

Those in attendance include science, health, environment and agriculture journalists as well as experts in scientific communication, advocacy and research.

Organised in partnership with the Media for Environment, Science, Health and Agriculture (MESHA), InfoNile, JRS Biodiversity Foundation,

African Agricultural Technology Foundation (AATF) Africa, Drugs for Neglected Diseases initiative (DNDi), National Research Foundation (NRF), Hivos, Africa Uncensored, Youths for SDGs Kenya and Water Journalists Africa (WJA), the conference promotes knowledge sharing and network building across borders.

Day One of the conference had presentations on decolonizing global health; ending HIV; antimicrobial resistance; reproductive health in Africa; and leishmaniasis.

During the opening session moderated by MESHA Treasurer John Riaga, MESHA Chairman Bozo Jenje said attending science journalists can look forward to an array of diverse topical issues and updates on trends and latest research, available in both English and French languages.

Jenje said the conference provides a platform for new insights and development in science research, networking opportunities through interactions that promote exchange and sharing of ideas among participating journalists, scientists, farmers and traders.

"It is an opportunity for the development of new story ideas and new areas of research in critical issues of water, biodiversity, climate change and health, and particularly in the area of HIV/AIDS," he said.



A trainer at a past MESHA event: Freedom of the press is key to telling stories about issues that affect and impact communities.

He assured the attendees that the conference will feature unique areas that have for the last few years been ignored or neglected by science journalists.

Jenje said MESHA is on track to be the Pan-African professional association targeting to bring on board journalists from at least 30 countries on the continent, including Zambia, Ethiopia and Zimbabwe by 2027.

Alis Okonji, communication lead at InfoNile reiterated the importance of partnerships in delivering resources for journalists to help them tell stories in the most impactful ways.

"I would like to introduce to you to the Nilewell.org, a rich resource base, online platform to connect water and environmental scientists and journalists with much needed resources. Presentations from the ongoing conference will be made available on this platform," she said.

Lena Johansson, President of the International Federation of Agricultural Journalists (IFAJ) and the Chief Guest, hailed the conference as timely against a backdrop of pressing issues in the world today.

Having practised journalism for more than 40 years, she said the profession has never been as exciting as it is today.

Johansson said events such as the war in Ukraine have impacted agriculture, food production and food security, and triggered worsening food situations that could continue for years to come.

"Well educated agriculture journalists are very important today as is professional development. We need journalists to tell agricultural stories making connections to ongoing events such as the Ukraine war, the energy crises and political decisions that impact on food production and sustainable agriculture," she said.

"There is a need to communicate about stresses to global agriculture to people who have little or no knowledge of how their food is produced."

Johansson reiterated that freedom of the press is key to telling stories about issues that affect and impact communities. She hailed the conference for placing agriculture at the very heart of discussions over the next four days.

Modelled on the philosophy of the World Conference of Science Journalists, ongoing science conference is a platform for presentations and discussions centered on topical issues on such critical areas as decolonising global health, ending HIV, antimicrobial resistance and reproductive health in Africa.

Others topical issues include biodiversity, water, climate change, sustainable mobility solutions, the seed industry, geojournalism among others.

The opening session opened the door for the keynote address: Decolonising global health: where are the Southern voices?

Samuel Oti, a medical doctor from the Network of Impact Evaluation Research in Africa, Nairobi, defined decolonisation within the context of global health, and why it is important to address "asymmetries between the global north and the global south.

Dr Oti said international media and scientific journals should stop looking down on Africa on health issues.

"One of the manifestations of the coloniality is that a lot of these international media houses publish global health headlines that are disrespectful," he said.

He however said the continent should acknowledge that global health organisations have made significant efforts in bettering health issues and infrastructure in Africa.

MESHA to become a pan-African association, net more members

By Clifford Akumu

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The Media for Environment, Science, Health and Agriculture (MESHA) has embarked on an ambitious strategy to net more members outside Kenya.

Bozo Jenje Bozo, MESHA Chairman, said the organisation will, from next year, accept subscriptions from journalists based in Uganda, Tanzania, Ethiopia, Ghana, Zimbabwe, and Zambia.

"I wish to inform you that from next year, MESHA shall accept subscriptions from journalists based in the larger continent who wish to become members," said Mr Bozo during the ongoing Fifth African Conference of Science Journalists.

In his opening remarks, the chairman said the association also aims to transform into a pan-African journalists association by having membership in 30 countries in the continent.

His sentiments come against the backdrop of successful and illustrious partnerships with journalists' organisations spread across the six African countries.

The 2022 conference organised by MESHA in conjunction with InfoNile/ Water Journalists Association based in Uganda, has sessions that conform to the year's theme 'Letting Science Live'.

It is a forum that brings together stakeholders to share research knowledge and ideas on health, environment and agriculture issues in Africa.



MESHA members in a recent training. The association has announced expansion plans additional African countries.

Mr Bozo also urged African journalists to evolve with new technologies of telling the science story. He stressed the need to embrace new approaches such as mobile and solution journalism techniques for the benefit of the community.

"I look forward to engaging with all of you as we share the Africa, which continues to evolve and respond to new ways and techniques of telling the science story through mobile journalism technologies and approaches such as solution-based journalism for the benefit of the community that we serve," he said.

Mr Bozo urged journalists to make good use of the four days to produce fact-based stories without misinformation.

"This unique conference has been enriched with topics that will give new insights. Interestingly, the

conference will feature unique areas that have for the last few years been ignored or neglected by science journalists," he added.

"It is my hope that all the participants will find stimulating topics for story development and further research." Mr Bozo further thanked the conference partners for their unwavering support.

"We congratulate you so much for your support year in year out. Special thanks to Africa Uncensored, Drugs for Neglected Disease initiative (DNDi), JRS Biodiversity Foundation, AATF, InfoNile, Water Journalists Africa, National Research Foundation, HiVos, and Youth for SDGs Kenya, among others," he said.

The virtual conference brings together about 300 participants from 30 countries who include journalists, communicators, policymakers, and scientists who specialise in health, water, climate change, biodiversity and HIV/AIDS.

Four African countries approve use of vaginal ring to protect women against HIV



According to the World Aids Day report, 2020, about 1.5 million people were living with HIV in Kenya.

Ms Jeckonia said in Kenya and Africa, women and young girls contributed more than twice the number of new HIV infections due to their biological make-up among other socio-cultural factors.

She described the dapivirine vaginal ring as a flexible, silicone ring that a woman can insert in the vagina for monthly protection against HIV.

"The ring is designed to provide women with a discreet and long-acting option for HIV prevention.

"It contains the anti-retroviral drug, dapivirine, which is released slowly to reduce the risk of HIV infection locally in the vagina, with few effects in the blood stream or elsewhere in the body," she said.

Ms Jeckonia added that in a number of studies initially conducted in Belgium and in the US, and then in Kenya, Malawi, South Africa and Tanzania, the ring was found to be safe, while other studies elsewhere also showed it was efficacious.

"The initial research included women aged 18-45 years, with additional safety studies among post-menopausal women and adolescent girls aged 15-17 in the USA," she said.

The ring was developed by the International Partnership for Microbicides (IPM), a non-profit organisation formed to develop HIV products and other sexual and reproductive health technologies for women.

By **Mike Mwaniki** | mikemwaniki2016@gmail.com

Kenya is among four African countries that have approved the use of vaginal ring for prevention of HIV.

The ring contains the antiretroviral drug known as dapivirine and targets women at high risk of contracting the virus.

Speaking during the ongoing Fifth African Conference of Science Journalists, LVCT Senior Technical Adviser Patricia Jeckonia named South Africa, Uganda and Zimbabwe as the other countries that have approved the use of dapivirine ring.

"The vaginal silicone ring once inserted releases dapivirine slowly over a period of one month after which it is replaced with a new one," said Ms Jeckonia.

"However, none of the four countries has rolled out the use of the ring, as some modalities are still being worked on before it's made available in the market."

According to experts, in Kenya, for example, about 275 girls get infected with HIV infection weekly, with infections highest among adolescent girls aged 10 to 19 years. Various structural, social-cultural and legal barriers have been identified as some of the factors fuelling the spread of HIV among young girls.

These include gender inequality, discrimination, violence, limited access to education, lack of tailored services, multiple sex partners and poverty, which inhibit women's and girls' access to healthcare.

Fielding questions from journalists, Ms Jeckonia described the ring as “effective and acceptable to young women”, since a sex partner would not know that the ring was in place during sex.

According to experts, existing prevention methods have not done enough to stop the spread of HIV among women, who bear a disproportionate burden of the epidemic, particularly in sub-Saharan Africa.

Pending regulatory approval, the monthly dapivirine ring would provide women with the first discreet, long-acting prevention option.

At the same time, there are an estimated 5,000 new HIV transmissions every day globally, with around 70 per cent of the 37 million people living with HIV globally being in sub-Saharan Africa.

For example, of the 1.8 million new infections, which occurred in 2017, over 800,000 occurred in Eastern and Southern Africa.

The World Health Organisation (WHO) says young girls and women (aged 15-24)—who are particularly at high risk—account for one in four HIV infections in sub-Saharan Africa, despite being 10 per cent of the population.

Ms Jeckonia said her organisation was carrying out a study on how much those willing to utilise the vaginal ring would pay for the product, while also generating uptake by tailoring appropriate messages to the target population.

“However, we are working on modalities for the product to be provided free of charge in public health facilities,” she added

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Fifth African Conference of Science Journalists

Virtual Conference, May 24-27, 2022

Organised in partnership with



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Decolonisation: Global South must rise up and raise its voice on global health

By Joseph Ouma | joothoth@gmail.com

African governments should allocate more resources to the health sector in line with the Abuja Declaration if they hope to effectively cope with the rising number of global pandemics such as HIV/AIDS and monkeypox.

The call for African countries to contribute 15 per cent of their GDP to health comes amid accusations of global vaccine apartheid by some stakeholders who took issue with such pandemics being depicted as only affecting black people and by extension Africans.

This is what pushed Samuel Oji Oti of the Network of Impact Evaluation Research in Africa to join forces with likeminded advocates to spearhead the push for decolonisation of global health.

Dr Oti, in a keynote address to the Fifth African Conference of Science Journalists today, took issue with those who portrayed pandemics and epidemics as domiciled in Africa and have a direct correlation with its people.

He described himself as a medical doctor and global health expert who believes in an Africa without borders, driven by the urge to contribute towards democratising healthcare so that the most vulnerable among us can stay healthy and live longer.

The medic has published 50 peer-reviewed articles, written several blogs and policy briefs and spoken widely at international events.

Asked whether he was operating as a lone ranger and on a revenge mission, Dr Oti said that for the last two years there have been growing calls for the decolonisation of global health.



MESHA members, led by Secretary Aghan Daniel, during a recent training in Mombasa. For the last two years there have been growing calls for the decolonisation of global health.

“These calls recognise the fundamental need for global health institutions and practitioners to dismantle the persistent structural inequities perpetuated by global health’s colonial heritage,” he said. He said these calls have largely been led by global health practitioners based in institutions in the Global North. “At face value, it appears that global health institutions and practitioners in the Global South have not been visible or vocal amidst the calls,” he said.

Dr Oti said his presentation was intended to address the misconception by highlighting recent efforts of global health practitioners in Africa, which emphasise pragmatic approaches aimed at decolonising global health.

He said that evidenced by a plethora of publications, webinars, and social media platforms, the last two years have seen an amplification of calls for decolonisation of global health. However, these have largely

been echoed in the hallways of academic institutions in the Global North, including London School of Hygiene and Tropical Medicine, Duke University and Harvard.

“The reasons we can only speculate about fear of retaliation or feelings of powerlessness, the voices of global health institutions and practitioners based in the Global South have largely been absent amidst the calls for decolonization,” he said.

He singled out an instance where there was a US\$30 million grant (Ksh3.5 billion) for a malaria programme in Africa, which was ironically won by seven bidders, all from the Global North, yet Africa is domiciled in the southern hemisphere.

Dr Oti said while there are a lot of highly respected African experts in malaria research, they were overlooked, thus, the urgent need to re-examine funding practices and review panels or boards coming from one region as pure impunity and bias.

Africa is an afterthought in global health, expert says

By Bozo Jenje | bozojenje@yahoo.com

Actions to debunk the colonisation of global health and hold institutions to account for harmful practices and racism will bridge the disquiet in medicare.

This is according to Secretary-General of the Network of Impact Evaluation Researchers in Africa, Dr Samuel Oji Oti, who addressed the Media for Environment, Science, Health and Agriculture's fifth virtual Africa conference.

Dr Oti said a wave of discontent was rising, with power imbalances that have plagued the global health practice.

Dr Oti stated that the Covid-19 pandemic was a clear testimony that there are global health inequalities amongst people from different parts of the globe.

"During the pandemic, Africa was treated with lots of inequalities, even to an extent of giving them vaccines that were about to expire. We became a second thought," he said.

Explaining the inequalities, Dr Oti said unless the global health institutions and practitioners dismantle the



Secretary General of the Network of Impact Evaluation Researchers in Africa, Dr Samuel Oji Oti.

structural inequalities, Africa will remain under the global health colonial heritage.

He observed that there was consistent bias in the visibility of African global health practitioners at work and in research.

In his presentation titled "Decolonising global health: Where are the southerner voices", Dr Oti said it is through pragmatic approaches that global health will be decolonised.

It is through such efforts made by the global Health Decolonisation Movement-Africa that holistic review methods on employment can be enacted during

recruitment. This will impact in reducing hiring bias against Africans," he said.

Dr Oti said academic institutions were affected by the bias and that there was need to embark on a curriculum renewal drive that incorporates transformative learning and cognitive justice approaches.

He said the bias extends to funding and research, adding that in most instances, African efforts are less appreciated.

"In global health, African experts need to be appreciated as equal partners and not left at the footnotes of academic journals," he said.

Further, Dr Oti explained that international funders had the habit to parachute researchers to Africa, who still worked with local experts that understand the African context and surroundings.

"We understand that they have power and control through their funding, but we possess the expertise in our own environment. What is required is to be recognised as partners and not ignored," he said.

Dr Oti called for international global health institutions to debunk the fixed mind-set about Africa and work as a team.

"Africans have technical superiority and knowledge of local content, and this should not be rubbished at any cost," he said.

To overcome the historical bias, Dr Oti said, the unconscious bias and change of the narrative can be achieved through training programmes and policy changes. He said it was high time the international media reported on Africa with respect.

"Any outbreak in the world is associated with Africa, even diseases that are not in the

continent," he stated, citing the case of the monkeypox virus that has been illustrated using images of black people.

Dr Oti said his organisation had embarked on strategic communication and advocacy to achieve the goal of transformation.

To decolonise, Dr Oti urged governments in Africa to contribute their share to enhance global health through institutions.

The Media for Environment, Science, Health and Agriculture

The Media for Environment, Science, Health and Agriculture (MESHA) was founded in November 2005 in Nairobi, Kenya and is an organisation that provides support to science journalists covering health, development, technology, agriculture and the environment. It does so by offering training workshops, consultancies and encouraging networking through meetings and conferences among journalists, scientists and other stakeholders in Kenya.

The association emphasises on rural journalism and communication.

The idea for the formation of this association sprang up from the fact that there were many organisations and communicators in the fields of agriculture, environment, health and development.

However, few organisations in the region bring journalists covering these issues together, for better reporting in the media.

MESHA believes that in a democratic society where science must be answerable to the public, there is need to find new and innovative ways of effective mass communication about the benefits of science, and other areas of concern to the general public.

MESHA aims to ensure continuity, sustainability and consistent coverage of science and development issues as they arise.

www.meshascience.org

We must protect young people against threats to sexual health, says expert

By **Asha Bekidusa** | abekidusa@gmail.com and **Carol Otieno Miyawa** | lolwecarol@gmail.com

Adolescents and young adults in Kenya are the biggest casualties of the triple threat of HIV, teenage pregnancies and sexual and gender-based violence.

National Coordinator for Communication at Deutsche Stiftung Weltbevölkerung (DSW) Nduta Waweru said this is due to lack of knowledge on various sexual and reproductive health and rights (SRHR) issues, including menstruation, contraception, and sexual and gender-based.

Speaking during day one of the Fifth African Conference of Science Journalists Ms Waweru said the consequences of this include low uptake of contraceptives, unintended pregnancies, unsafe abortions, HIV and STI infections, and sexual and gender-based violence.

"Myths and misconceptions about SRHR issues also drive poor demand for services. Stock-outs – unavailability of contraception products at public facilities – contribute to unmet need for contraceptives," she said.

Ms Waweru said every individual has a right to make their own informed choices about their sexual and reproductive health.



Young people must be protected from sexual aggression.

However, these choices can only be informed and helpful if adolescents and young adults have unfettered access to accurate information, and safe, effective, affordable and acceptable contraception method of his/her choice.

She said women's sexual and reproductive health is related to several human rights, including right to life, right to education and the prohibition of discrimination.

"States have the obligation to protect, respect and fulfill rights that are related to women's sexual and reproductive health," she said.

Kenya has a high burden of teenage pregnancy and motherhood, and one in every Kenyan girl aged between 10 and 19 years is either pregnant

or has given birth to her first child. The prevalence has not changed much since 2008.

Between January and February 2022, Kenya recorded 45,724 cases of pregnancies among teens aged 10-19 years. This was alongside 2,196 cases of sexual and gender-based violence (SGBV) among those aged 12 to 17 years, with 98 girls aged between 10 and 19 years having been infected with HIV due to SGBV.

Data from Kenya Data and Health Survey KDHS 2014 shows that one in every five girls aged 15-19 years is either pregnant or is already a mother. As of 2019, according to the latest statistics from the Global Childhood, Kenya had the third-highest teen pregnancy rates, with 82 per 1,000 births.

Concurrently, over 13,000 teenage girls drop out of school annually because of pregnancy.

A report released by the National Council for Population and Development (NCPD) and the National Aids Control Council (NACC) last year showed nine counties contributed over half of the pregnancies recorded among girls in the 10-14 age bracket between January 2020 and September 2021.

The report titled, Adolescent Pregnancy in Kenya, indicated the nine counties collectively recorded 20,803 pregnancies among girls in that age bracket, making up 56 per cent of the national tally. The counties were Nairobi, Kajiado, Homa Bay, Meru, Kericho, Narok, Kisii, Mandera and Bomet.

Ms Waweru said lack of trained personnel on SRHR service provision means many young Kenyans do not access the services they need.

The Global Childhood report ranks Kenya highest in East African Community in other social protection aspects.

However, this might be a faded glory because of teenage pregnancy, new HIV/AIDS infections and sexual abuse among others.

Pregnancy and childbirth complications are the leading causes of death among girls aged 15-19 years globally, according to the World Health Organisation.

A 2017 Kenyan study into maternal deaths revealed that nine per cent of women who died in the hospital were teenagers.

Lack of access to sex education and reproductive health services has been identified as a significant cause of the rise in teen pregnancy in Kenya.

Most public hospitals and clinics also lack youth-friendly services. As a result, young people do not visit healthcare centres because they are met with stigma and judgment from service providers.

However, Ms Waweru says initiatives have been put in place to encourage more youth to come out. Among these are citizen-led actions

to sensitise public officials and service providers on the use of public resources and delivery of services.

"Also assessing community satisfaction with SRHR services provided, support community to identify gaps in budget allocation and service quality and increase demand for and accountability on SRHR budget, expenditure and quality services," she said.

Ms Waweru said DSW is working to ensure women, especially the youth aged 18-24 years are protected.

She said the major threats include early marriage, FGM, poor quality services, denial of access to services that only women require, subjecting women's access to services to third party authorization, forced sterilisation, forced abortion and forced virginity examinations.

Ms Waweru urged the media to highlight the challenges affecting young people and their sexual and reproductive health.

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Most public hospitals and clinics also lack youth-friendly services. As a result, young people do not visit healthcare centres because they are met with stigma and judgment from service providers.

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Expert: Let's fight HIV by increasing prevention options for women



Health advocates vouch for introduction and access for new biomedical HIV prevention products for women in the sub-Saharan Africa.

By Joyce Chimbi I j.chimbi@gmail.com

Adolescent girls and women in Kenya and across the sub-Saharan Africa are disproportionately affected by HIV. People have shown high affinity to HIV prevention methods that are long acting, discreet, a product that can easily be provided and with mild to no side effects.

Bearing the greatest burden of the global HIV/Aids epidemic is women across the sub-Saharan Africa, with nearly two-thirds of new adult infections occurring among them. As such,

expanding options for women to protect themselves from HIV through the most effective method is central to controlling the HIV epidemic, and at the same time promoting women's sexual and reproductive health and rights.

Speaking during the Fifth African Conference of Science Journalists, Patricia Jeckonia, the Senior Technical Advisor, Policy and Partnerships, LVCT and project manager of the Mosaic (Maximising Options to Advance Informed Choice for HIV Prevention) project said: "Available products or methods have not slowed the epidemic among women. Women need discreet options which they can use on their own terms. Equally

important, no single product will solve the HIV epidemic. Women need multiple prevention options."

Mosaic is a five-year global project funded by PEPFAR through USAID (2021-2026), with core partners being FH360, LVCT Health, WITS RHI, PZT, AVAC and JHPIEGO.

The project focuses on research and research translation to support introduction and access for new biomedical HIV prevention products for women in the sub-Saharan Africa.

Kenya had a target of reducing new HIV infections to 22,000 by 2020, but recorded 33,000. Those aged 15 to 24 years contributed 41 per cent of all new infections among the adult population.

A lot of the African countries have approved the oral PrEP and there are ongoing developments to embrace dapivirine ring.

"It is discreet and does not interfere with sex, which is important because women are not taking on oral PrEP for fear of being found out by their sexual partners. Women have to negotiate for consent to use a condom with their partners.

The ring has shown mild side effects such as itching, which usually clears within a very short period of using it," Ms Jeckonia said.

“Studies on efficacy in Malawi, South Africa, Uganda and Zimbabwe among 4,588 participants aged 18 to 45 have shown that the ring reduced the likelihood of HIV acquisition by approximately 30 per cent overall and was well tolerated,” she explained.

Overall, Ms Jeckoniah said, HIV risk reduced by 40 per cent among participants aged over 21. “No reduction among participants under 21, who were more likely to show non-use of the ring,” she said.

The World Health Organisation (WHO) has already prequalified and recommended the ring, indicating that it is safe and effective. Countries that have approved the use of the Ring include Zimbabwe, Kenya and South Africa. On average, the Ring costs \$12 and will be offered in the public sector for free through donor support.

“The Ring is not available in Kenya or any of the aforementioned countries at the moment, but it has to be approved first before it can be introduced in the respective countries. Plans are on to introduce the product in countries that have approved them,” she explained.

She emphasized that the ring is an acceptable PrEP method for HIV prevention and that used correctly, it reduces the likelihood of HIV acquisition during receptive vaginal sex by about 50 per cent.



“Use of the ring in the settings with a high incidence among girls and women creates choice for people who do not, cannot or are unable to use oral PrEP,” she said.

National Aids and STI programme (NASCO) statistics indicates: “The national HIV prevalence among males and females aged 15-24 years was estimated at 1.34 per cent and 2.61 per cent in 2017 respectively, and overall HIV prevalence was 1.98 per cent, which means 184,718 young adults living with HIV in 2017.”

Within this context, Ms Jeckoniah stressed the need to promote other effective options, including the long acting injectable Cabotegravir, an antiretroviral drug formulated to be administered once every two months.

As an alternative, this injectable PrEP option has shown promise. Efficacy data from phase III clinical studies show it is safe, well tolerated and effective. For instance, efficacy among men who have sex with men and transgender women is 66 per cent.

As of December 2021, Cabotegravir was additionally approved by the US FDA for use as a prevention option.

Invest in sanitation economy and avert deaths, urges WASH expert

By Agatha Ngotho | angotho@gmail.com

Sanitation is big business across the globe, an expert has said.

Sanitation economy in Kenya is worth Ksh373.2 billion (US\$3.2 billion) and this is projected to increase to Ksh723.2 billion (US\$6.2 billion) by 2030.

Kariuki Mugo, a sanitation expert from the WASH Sector, explained that sanitation is the collection, transportation, treatment and disposal or reuse of human excreta, domestic wastewater, solid waste and associated hygiene promotion.

Speaking during the ongoing Fifth African Conference of Science Journalists, Mr Mugo said by last year, sanitation economy's market opportunity was at \$3.2 billion. This is projected to increase to \$6.2 billion by 2030.

He said 3.6 billion people lack safely managed sanitation globally. Of this, 673 million people practice open defecation.

Statistics indicate that there are 1.7 billion cases of diarrhoea among children younger than five years old annually. Out of this 446,000 die.

This is in addition to three million cases of cholera and an estimated 95,000 cholera deaths, and 11 million cases of typhoid fever and 129,000 typhoid fever deaths.

According to UNICEF, 59 per cent of people in Kenya have access to safe drinking water, and 29 per cent to improved sanitation facilities.

In 2020, UNICEF certified 1,765 villages as open defecation free.

"Since 2000, access to safe drinking water has increased by 12 per cent, while access to basic sanitation has fallen by five per cent. In Kenya, 9.9 million people drink directly from contaminated surface water sources and an estimated five million people practice open defecation. Only 25 per cent have hand-washing facilities with soap and water at home," said UNICEF.

According to a study carried out by the Water and Sanitation Program on economic impacts of poor sanitation in Africa, Kenya loses Sh27 billion annually due to poor sanitation. This is equivalent to US\$8 per person in Kenya per year or 0.9 per cent of the GDP.

The study further showed that open defecation costs Kenya US\$88 million per year – yet eliminating the practice would require less than 1.2 million latrines to be built and used.

Mugo said despite the economic potential in sanitation, there is little investment in improving the same, and the World Bank shows that it will take Kenya over 200 years to achieve universal access.

"There is a need to understand financial and WASH markets, build multi-disciplinary mindsets, eliminate barriers and bias, as well as develop win-win value and financial products," he said.

3.6 billion people lack safely managed sanitation globally. Of this, 673 million people practice open defecation.



The reality is that AMR is now a leading cause of death; higher than even HIV and malaria.

The burden of antimicrobial resistance in Africa

Ruth Keah | rkeahkadide@gmail.com

When Amina Kombo was advised by her friends to take antibiotics and painkillers during her monthly periods to reduce the pain, she never knew that she was slowly poisoning herself.

Amina from Mombasa, Kenya, started getting her monthly periods at the age of 15.

Unlike other girls who had it easy, her experience was not something any girl her age would like to go through.

She had cramps, which at some point would make her miss classes. When that time of the month came, Amina was advised by her friend to take antibiotics and painkillers, with no prescription from a doctor. She just wanted the pain to go away, and it usually did.

Fifteen years later, Amina now says some antibiotics do not work in her body. Now, whenever she feels a little pain, she has to dig deeper into her pocket and look for a doctor.

"I was used to taking painkillers every month during my monthly periods. I bought the drugs over the counter. Now the drugs do not respond. It has now dawned on me that instead of healing myself, I was poisoning myself," she said.

Amina represents the high percentage of people who medicate themselves with or without knowing the danger they expose themselves to.

Ribe dispensary in Rabai Constituency, Kilifi County for instance, receive patients with symptoms of regular

headaches, which they attribute to the routine of self-medication. It got to a point that the drugs no longer helped them.

This has seen Community Health Volunteers (CHVs) educated the public on the correct medication. Nyamoki Mshanga is among the CHVs who come from Mango Village and attend to around 230 villagers. She says many people do not know the right spacing for the drugs, "so we are normally there for them to direct them after they have been given the medicines," she says.

Many people think when they are told to take two tablets three times a day, they just take it without observing the correct time.

"When you are told to take the drugs three times in a day, you must take after every eight hours. Many people don't observe that, making their bodies to slowly become resistant to the drugs," she said.

Chimwaga Mwamuye, a public health officer in Rabai sub-County, agrees that many people do not really know how to take drugs correctly, posing great danger to their health.

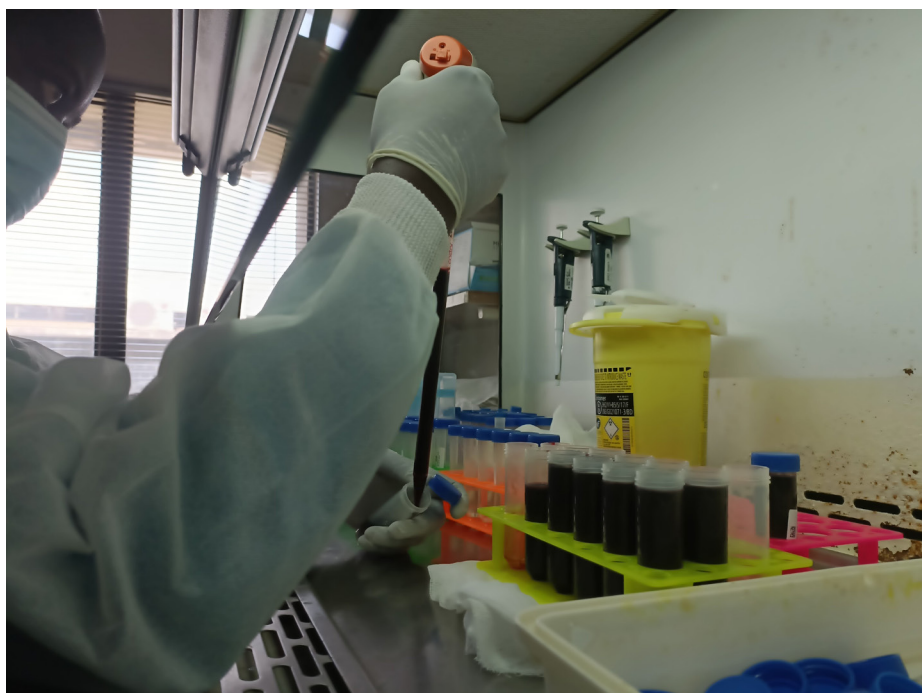
"If drugs are not taken properly, they can cause a lot of damage in one's body, especially the liver or kidney.

They can even get renal failure," said Mwamuye.

To reduce the danger, Mwamuye says they are working closing with the CHVs to educate the public on correct uptake of medicines. This, he says, has started yielding fruit since they started a year ago.

Speaking on the first day of the Fifth African Conference of Science Journalists, Dr Evelyn Wesangula, the coordinator of Anti- Microbial Resistance (AMR) in the Ministry of Health, said the issue had become a global burden, not only because of the increased number of deaths but also in terms of cost of care.

Dr Wesangula says a case study they did showed that a patient has to spend up to \$10,000 per week for treatment of last effects of antibiotics. This, she says, is beyond the reach of most of the African population.



Diagnostics capacity including limited microbiology labs add to the challenges faced in tackling anti-microbial resistance in Africa.

She said the sub-Saharan Africa has the highest burden of AMR globally, adding that in 2019, at least 255,000 people in the region died because of AMR. More than half of these were children under the age of five years.

"The reality is that now AMR is a leading cause of death; higher than even HIV and malaria," she said.

Dr Wesangula added that challenges faced in tackling AMR in African countries included those at national/ institutional level, such as lack of policies and framework, lack of professional, institutional commitments, weak AMR governance structures and lack of treatment guidelines for common infections and syndromes.

Others were access to quality assured antimicrobials, including high cost of

antibiotics, lack of reliable supply chain systems, weak regulatory structures and perverse financial incentives for prescribers.

Diagnostics capacity, including limited microbiology labs, infrastructure challenges, and lack of human resource, were also mentioned.

Dr Wesangula said already the AMR is putting pressure on frontline healthcare workers. "It is becoming hard for them to treat infections. That means it is going to be very hard to save lives in future," she said.

The specialist said the situation is preventable, and called on stakeholders to work together. "We are not doing enough; much needs to be done, not only by the government but everyone in society. The public, journalists, healthcare workers ... anyone that uses antibiotics, needs to act," she said.

This is why people with fully suppressed HIV do not transmit virus

By **Tebby Otieno** |tebbyotieno62@gmail.com

Did you know that your partner living with HIV may not transmit HIV to you through sex?

The scientific concept known as Undetectable=Untransmittable (U=U) means that people with suppressed viral load do not transmit HIV through sex.

Dr Lazarus Momanyi, from National Aids and STI Control Programme (Nascop), says the U=U statement aims to diminish the stigma associated with having HIV, while at the same time reducing barriers to HIV testing and treatment.

Scientists also hope that U=U will improve self-esteem by removing the fear of being contagious, support healthy sexuality regardless of HIV status, reduce sex partner's concerns and also increase interest in starting and staying on HIV treatment known as antiretroviral therapy (ART).

"This is the global destination that if you have a durable viral load that is below 200 copies/ml then you do not transmit HIV through sex to your sexual partner," said Dr Momanyi during the Fifth African Conference of Science journalists held virtually on Tuesday.



Dr Lazarus Momanyi: The U=U campaign has been associated with improved health outcomes among people living with HIV as well as minimising missed opportunities.

Dr Momanyi, however, warned that U=U does not protect an individual from sexually transmitted infections and pregnancies. In this regard, he said that even after achieving the U=U, individuals should continue using combination prevention strategies like a condom.

Last year on 14th September, Kenya launched the U=U campaign, which has been associated with improved health outcomes among people living with HIV as well as minimising missed opportunities.

U=U is supported by scientific evidence in a study known as HPTN 052, which enrolled 1,763 HIV serodiscordant couples, where one person is HIV-infected and the other is not at 13 sites in nine countries. The majority of the couples were heterosexual (97 per cent).

During the study, HIV-infected partners were assigned to start ART at the beginning of the study, called the "early" arm (CD4 count at ART initiation 350-550 cells/mm³), or later in the study, called the "delayed" arm (CD4 count at ART initiation 350-550 cells/mm³). Those on the delayed arm started ART when their bodies' immune systems were declining.



Members of a community attend to a seminar on health matters in western Kenya. Scientists warn that HIV has no cure and that the suppressed viral load will rebound if people stop taking drugs.

Most leading HIV research scientists and health care workers support the U=U statement. They include the British HIV Association (BHIVA), the International AIDS Society (IAS), UNAIDS, and the Centre for Disease Control (CDC). More than 900 organisations have joined from over 90 countries.

The HPTN 052 study proved that early ART can prevent HIV transmission. As a result of the study, World Health Organization in 2013 recommended that antiretroviral treatment be offered to all people living with HIV who have uninfected partners to reduce HIV transmission.

However, scientists warn HIV has no cure and that the suppressed viral load will rebound if people stop taking drugs.

There are only two cases of people who have ever been cured of HIV. The first is Timothy Ray Brown, popularly known as the Berlin Patient. He was diagnosed with Acute Myeloid Leukemia in 2006, after living with the virus for 11 years on ARVs. Chemotherapy failed, and he received the first of two bone marrow transplants. Researchers later only found traces of the viral genetic material of HIV, none of which can replicate and hence declared cured. He died in 2020 of cancer.

The second case is a middle-aged woman of mixed-race ancestry who had developed acute myeloid leukemia while on ART, four years after HIV diagnosis. In 2017, she received a transplant of umbilical cord blood stem cells.

Three years post-transplant, the patient stopped ART. No HIV was detected in the patient for 14 months except for a short transient detection of trace levels of HIV DNA in the patient's blood cells at 14 weeks after stopping ART. Her case was reported at a conference for Retroviruses and Opportunistic Infections 22 (CRO1 22).

Scientists are going on with vaccinations and treatment research for HIV positive individuals. In the meantime, effective suppression of the virus, and boosting the immune system is the only available treatment even as research on how to permanently suppress or eradicate HIV continues.

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