

COMMENT



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## Africa needs to work together to combat pandemics

AFRICA is plagued by many epidemics – from tuberculosis and HIV/AIDS to malaria and wild polio – but the continent has also worked for decades to fight these threats.

The key to beating these deadly diseases is turning inward to existing expertise and finding locally driven solutions.

The recent Covid-19 pandemic placed public health back in the global spotlight and has also served as a reminder science is not undertaken in an ivory tower.

Science shapes humanity because it takes place among us.

Covid-19 has also shown no epidemic takes place in isolation. Through collaboration, we can build on the foundations of our knowledge to bring forward innovative ways to address health challenges that benefit all of humanity.

This is not a new idea. In fact, it is something we became all too familiar with during the Aids pandemic.

Despair, pain, and loss were rampant during the 1980s and early 1990s, at the beginning of South Africa's HIV epidemic.

Every weekend, white funeral tents in rural KwaZulu-Natal seemed to mushroom and multiply, signifying the growing toll the virus was taking on the country.

Witnessing this helped catalyse me to undertake one of the earliest population-based studies that looked closely at this emerging health issue in South Africa.

HIV prevalence was low at the time, with less than 1% of the population having been infected.

But lurking within the data was a shocking revelation: young women (15-24 years old) were six times more likely to be infected compared to their male counterparts.

We knew something had to be done. That meant understanding what had led to this striking disparity in risk. So, we began speaking to women from all parts of society to try and get a better sense of what they were experiencing.

Here's what we learned: the power dynamics of relationships and sex were disrupting disease prevention.

Women didn't have the ability to protect themselves because of the limited options available to them – options like condoms that placed the responsibility of reducing risk in the hands of men.

One way that we sought to empower women was through a gel that contained Tenofovir, an antiretroviral (ARV) medication.

This innovative approach, shown in the Centre for the AIDS Programme of Research in South Africa (Caprisa) 004 trial, enabled HIV-negative women to protect themselves from the virus.

Caprisa's research on PrEP was recently recognised by the VinFuture Prize as a life-saving innovation from the global South.

Today, Tenofovir is taken daily as a pill for HIV prevention, a solution also known as pre-exposure prophylaxis (PrEP). It has been adopted by the World Health Organization (WHO) as a key prevention option for both women and men.

And it hasn't stopped there – a range of new antiretroviral drugs and long-acting formulations, delivered as injections and implants, are being evaluated to expand prevention choices.

Aids is no longer a fatal condition. Instead, it is chronic yet manageable. But we still see too many deaths and new HIV infections, particularly in marginalised populations.

Two-thirds of all people living with HIV/AIDS are in sub-Saharan Africa, and the region accounts for 60% of all new infections.

As we turn our focus to other pandemics, such as Covid-19, we cannot afford to lose the gains made in HIV.

It is a trap we fell into before – when early HIV work overshadowed TB efforts – and it is not one we can afford to be caught in again.

The Aids pandemic has taught us that scientists, policy-makers, and civil societies cannot work in a vacuum.

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