Medical Xpress

The 30 Years War: AIDS, a tale of tragedy and hope

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On June 5 1981, American epidemiologists reported a baffling event: five young gay men in Los Angeles, all previously healthy, had fallen ill with pneumonia. Two had died.

They would be the first casualties of a new virus which has now claimed more lives than a world war.

Nearly 30 million people have been killed by acquired immune deficiency syndrome (AIDS) and more than 33 million others have the virus that causes it.

A disease that began as a medical curiosity has spread across the world, its tentacles reaching into every corner of society.

Death, sickness and stigma are the hallmarks of its tale. But so are dazzling medical exploits, unexpected solidarity and smashed taboos.

"AIDS has changed the world, without any doubt," Michel Sidibe, executive director of UNAIDS, said ahead of the UN's June 8-10 high-level AIDS forum in New York.

"We have been able to break a conspiracy of silence," he said. "And a new social compact has been created between the north and the south, which has never happened before with any disease of this kind."

The early years of the AIDS war are a dark chapter of fear, ignorance

and homophobia.

But the term "gay plague" swiftly faded when it was found AIDS could also be contracted through blood transfusion and heterosexual intercourse and from an infected mother to her unborn child.

Mercifully, the fight against AIDS began almost instantly, thanks to gay groups who lobbied for research funds in the United States and campaigned against stigma and for safe sex.

As swiftly as 1983, French doctors pinpointed the cause: a pathogen which became known as the human immuno-deficiency virus (HIV).

Transmitted in semen, vaginal secretions, breast milk or blood, HIV hijacks key immune cells to reproduce itself, destroying the cell in the process.

After about half a dozen years that can be symptom-free, the immune system becomes so weak that the body becomes fatally exposed to TB, pneumonia and other opportune microbes.

Identifying HIV led to a test to help identify those infected and weed out contaminated blood samples.

It also unleashed optimism that in a couple of years a vaccine would be found, just as it had been found for smallpox and polio.

But the world is still waiting. The virus has so far eluded the vaccine engineers, for it comes with a slippery sugary coating and an astonishing ability to mutate.

With no vaccine, cure or treatment in sight, the death toll from AIDS mounted nightmarishly in the 1980s and 90s.

Newspaper headlines remembered the actors, rock stars and sporting heroes -- Rock Hudson, Freddy Mercury, Arthur Ashe -- but the millions of non-celebrity victims went unrecorded.

"I walked into the women's ward for general medicine. The women were all wasted, emaciated and dying," Peter Piot, Sidibe's predecessor, recalled of his grim experience as a doctor in Africa in 1983.

"I said to myself, 'Oh my God, this is a catastrophe!' It was a moment of realisation. It changed my life."

In 1996 came the great news: the first effective anti-HIV drugs were available at last.

The "cocktail" represses HIV to below detectable levels, although it is not a cure and can have hefty side-effects.

As their immune system miraculosly rebounded, people who had literally been under a death sentence returned to life.

But the previous drugs were so expensive that for half a dozen years, only rich countries could afford them.

The charge to help stricken poor nations was led by the Global Fund to Fight AIDS, Tuberculosis and Malaria, US President George W. Bush and Bill Gates.

Today, more than five million people in low- and middle-income have grasped the lifeline, but 10 million more await treatment, according to UNAIDS.

By 2015 -- when the UN has set a target of "zero new infections, zero discrimination and zero deaths" -- it will be 13 million.

There lies a dilemma: the more lives that are saved, the more money that is needed, for the drugs have to be taken every day for the rest of one's life.

By 2015, an additional six billion dollars will be needed, which points to the need for innovative financing and help from China and other emerging giants.

"We have got to stop the transmission of the virus, otherwise it is impossible, impossible to conceive of treating your way out of the epidemic or even treating all the people who need to be treated," said Seth Berkley, head of the International AIDS Vaccine Initiative (IAVI).

A campaign is underway in Africa to promote male circumcision, found to reduce the infection risk to men by two-thirds.

Even more dramatic is a new study, conducted among heterosexual couples, that says anti-HIV drugs, if taken early to treat an infected person, can reduce the risk of viral transmission to a non-infected partner by 96 percent.

Other exciting work -- but still experimental -- points to progress in devising HIV-thwarting vaginal and anal gels.

Even so, "unless there is a game-changer like a vaccine, there probably will still be one million new infections a year in 2031," said Piot, now director of the London School of Hygiene and Tropical Medicine.

"If there is more expansion of access to treatment, that rate will maybe slow down. But AIDS will not have disappeared."

HIV/AIDS in figures

Following is a snapshot of the HIV/AIDS pandemic ahead of the 30th anniversary on June 5 of the first detected cases of AIDS.

Source: 2010 report by UNAIDS (2009 figures)

TOLL SINCE 1981

More than 60 million people have been infected by HIV, nearly 30 million of whom have died from AIDS-related causes. In 2009, 1.8 million died, a quarter of them from tuberculosis. Around 33.3 million people were living with HIV.

PANDEMIC IN AFRICA

More than two-thirds of people with HIV live in sub-Saharan Africa. Five percent of the continent's adult population has the virus.

NEW INFECTIONS

In 2009, there were 2.6 million new HIV infections, down from 3.1 million in 1999.

AIDS DRUGS

Around 5.2 million people in low- to middle-income countries had access to antiretroviral therapy in 2009, up from 700,000 in 2004. Ten million others were in need of it, according to the World Health Organisation's benchmark for starting treatment.

CHILDREN

Around 2.5 million people aged under 15 have the virus. In 2009, 370,000 babies were born with HIV.

ORPHANS

Number of young people aged under 18 who have lost parents to AIDS: 16.6 million.

HIV INFECTION BY REGIONS

- Sub-Saharan Africa: 22.5 million

- South and Southeast Asia: 4.1 million

- East Asia: 770,000

- Central and South America: 1.4 million

- North America: 1.5 million

- Western and Central Europe: 820,000

- Eastern Europe and Central Asia: 1.4 million

- Caribbean: 240,000

- Middle East and North Africa: 460,000

- Oceania: 57,000