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Telemedicine works with two microscopic computers connected to the Internet

Handling complicated illnesses

By Kwerida Paipi in
Chirundu

In the last decade, a number of affluent Zambians have been travelling abroad to seek medical treatment and consultations.

This is due to Zambia's lack of capacity to strategically handle complicated illnesses. The shortage of expert personnel due to mass exodus of medical doctors and nurses who seek greener pastures in wealthy nations such as the United Kingdom, Germany and United States is another reason why the country's health system continues to be poor.

As if this is not enough, there has been a decline in the provision of drugs and other facilities necessary to cater for the growing population.

Stiff to say that this moribund medical situation has led to a number of deaths in the country, it has been a challenge for the government to find a solution.

The advent of the HIV/AIDS pandemic has further posed a greater challenge, as it calls for good medical facilities and sufficient trained personnel to treat the various illnesses that manifest in people.

However, a mission hospital in Zambia is striving to help solve the many problems that have rocked the health sector.

Mwendere Mission Hospital in Chirundu is providing a service that would enable patients in Zambia to receive medical treatment from experts abroad without actually going there. This means that people

than fall ill in Zambia will not necessarily need to travel

either to South Africa, United Kingdom or any other country. This kind of technology will help medical experts abroad to diagnose a patient who is in Zambia.

This technology is called telemedicine, a facility that was facilitated by the Italian Medical Association Beyond Borders.

The service would enable those with kidney, cardiac, heart problems and other complications to be diagnosed by experts in other countries promptly.

Telemedicine will enable local medical personnel to consult the experts abroad via Internet.

This facility works with two microscopic computers with monitors connected to the Internet. It also has a microphone that is used to communicate with people from other countries.

Demonstrating how the technology operates, Mwendere Mission Hospital physician Dr Paolo Marelli says Italian Medical Association Beyond Borders donated the equipment worth US\$40,000.

Dr Marelli explains that telemedicine is the use of latest technology to provide enhanced and speedy healthcare by accessing off-site database.

He says the technology has provided a link between physicians in Chirundu and other expatriate medical doc-

tors around the world.

"The physicians in Chirundu are linked with a consortium of advanced medical institutions around the world for consultations, diagnosis and treatments," Dr Marelli says.

He says when patients are in a situation that requires specialist treatment, local doctors just take tests and send signals to experts abroad through the Internet.

"Patient history, laboratory findings, X-rays, and other components of the medical records can be transmitted in a timely fashion with the use of the Internet," Dr Marelli reveals.

"Through this advanced technology, expert opinions from leading specialists around the world can be obtained within hours or even minutes."

He says the technology is the first of its kind in Zambia and that lives will be saved, as emergency situation will be dealt with instantly.

"In emergency cases, this access can mean the difference between life and death," Dr Marelli says. "In particular, in those cases where fast medical response time and specialist care is needed, telemedicine availability can be critical."

According to Dr Marelli, telemedicine equipment is in three divisions.

"The telemedicine at Mwendere has different branches of application implemented. There is telepathology, telecardiology and tele-con-

sultation," he explains.

Dr Marelli says telepathology is where blood slides are taken and sent to experts abroad who would read and analyse the blood cells.

"This is where specialist anatomical pathologists read remotely the slides of cytology or histological preparation," Dr Marelli notes. "The slides after being prepared in our laboratory are inserted into the cool scope (A Japanese inverted Nikon computerised microscope)."

He says with telepathology, specialists examine samples wherever they are and send results in a short time.

With telecardiology, Dr Marelli says, specialists in cardiology are able to identify the problem after reading what has been sent to them.

"In telecardiology specialists are able to read remotely and give us diagnosis as well as 'therapeutical' advice in a very short time," he says. Dr Marelli adds that with teleconsultation specialists in

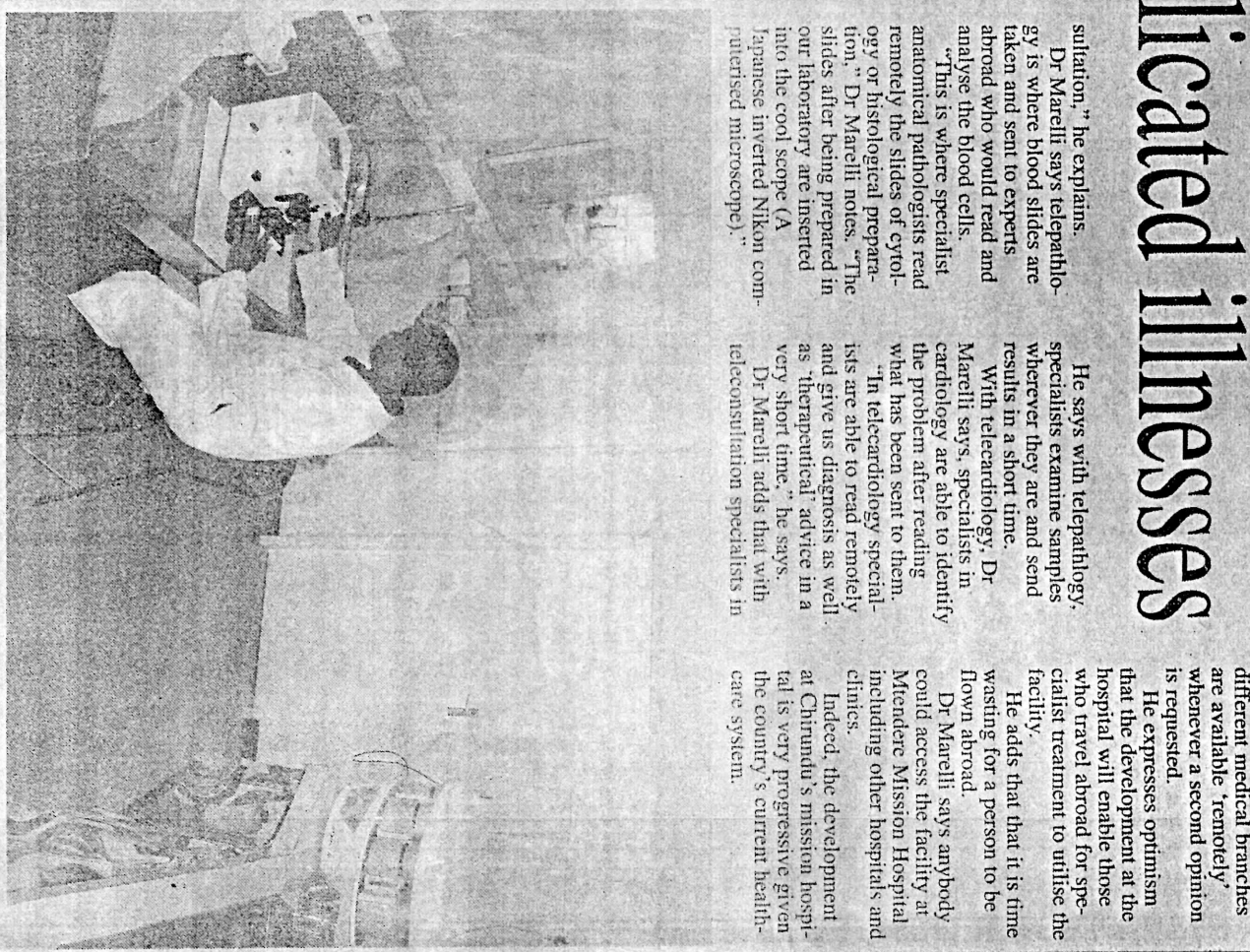
different medical branches are available 'remotely' whenever a second opinion is requested.

He expresses optimism that the development at the hospital will enable those who travel abroad for specialist treatment to utilise the facility.

He adds that that it is time waiting for a person to be flown abroad.

Dr Marelli says anybody could access the facility at Mwendere Mission Hospital including other hospitals and clinics.

Indeed, the development at Chirundu's mission hospital is very progressive given the country's current healthcare system.



Telemedicines provide speedy healthcare by accessing off-site database