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How to decongest referral hospitals

Uganda's main health facilities have consistently faced congestion and occasional drug shortages.

Our public healthcare system -structured into national referral hospitals (NRHs), regional referral hospitals (RRHs), general hospitals (GHs), health centres (HCs; HC-IVs, HC-III, HC-II) and village health teams (HC-Is), works on a referral basis, with individuals progressing from level to level until their healthcare issue is resolved.

With such a structured healthcare system, telemedicine services present an alternative solution to enhancing accessibility to quality healthcare. This is especially feasible to the massive population (80%) that resides in the rural areas and hard-to-reach areas due to geographical challenges.

Similar countries in resource-poor-settings such as Tanzania, Bangladesh, Mozambique and Ethiopia have either piloted or implemented telemedicine services; point-of-care support and diagnosis mobile application to enhance work of community healthcare workers.

Telemedicine (Tele-health) is the use of information and communications technologies (ICTs) to exchange health information and provide healthcare services.

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Telemedicine services have been used mostly in developed countries for distance learning, management of patients' medical records and linking patients to medical specialists; enabling access to equitable, quality and remote monitoring of vital signs via an Internet-based portal.

However, use of telemedicine is not a replacement of conventional method of healthcare delivery! It is a tool to supplement it! In telemedicine, information moves rather than movement of the doctor or a patient.

Integrating telemedicine services for healthcare delivery requires sufficient bandwidth for a sustainable end-to-end communication. Telemedicine services have been used in sub-Saharan African (SSA) countries for tele-consultation, medical records storage and information-sharing among peers and specialists over Internet-based portals and mobile devices.

Telemedicine services have shown a positive relationship with cost effectiveness and efficiency in delivery of healthcare while improving access to healthcare using health management information systems, tele-conferencing, and mobile data processing applications. Impact evaluation of a telemedicine project on patients' outcomes revealed significant association between telemedicine, reduced intensive care and hospital mortality amongst critically ill patients.

In India, several clinics in rural areas have used telemedicine services over a hybrid network using very small aperture terminal (VSAT), cellular and cable Internet connections which improved on speed and accuracy on disease diagnosis.

Telemedicine frameworks that are cost effective, portable, and user friendly and that link patients to medical experts are feasible. Such are developed with a combination of technologically appropriate devices and can be used by a health worker in a rural setting to make audio and/or video recordings, or take still pictures.

Such patients' information can then be sent to medical expert(s) via the Internet for further investigation. In the absence of specific local medical expertise, availability of tele-consultation platform with low-cost high speed broadband connectivity will allow an expert from another part of the country - referral hospital to offer technical guidance.

The writer is a PhD (Telemedicine) candidate