Taking nursing high tech

Healthcare is getting increasingly high tech, and nurses in Africa are at the forefront of using innovative solutions to improve patient care.

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It starts at training level, where nursing schools are including information technology and health informatics (acquiring, storing, retrieving and using of healthcare information to foster better collaboration among a patient's various healthcare providers) in their curricula.

Integration of technology

According to Professor Sharon Brownie, dean of the School of Nursing & Midwifery, East Africa at the Aga Khan University, nursing students are being taught to work with electronic patient record and management systems including electronic patient booking systems; notification of lab results; health information messaging platforms; population health databases such as those for breast screening, vaccination, notifiable diseases; and, use of everyday platforms, like WhatsApp, for patient communication and patient education.

The integration of technology within the sector has become a priority for most governments. In South Africa, for example, the Department of Health has created a policy document outlining an eHealth Strategy focused on improving patient information and technology systems.

Medical professionals are also learning from other regions where new technology has been implemented successfully. In the UAE, for example, the implementation of a fully integrated electronic medical record (EMR) system has put the region firmly at the forefront of technological innovations which save lives and prevent disease.

Implemented in all government health facilities in 2017, the EMR has cut patient waiting times and allows patients to consult with their doctors even when they are not in the same location.

Associate Professor Jane Leanne Griffiths, the chief nursing information officer at the Dubai Health Authority, explains that the implementation of EMR has assisted nursing staff in executing their daily functions.

Big data

Within the healthcare sector in general, big data is the buzzword when it comes to analytics. It allows healthcare workers to identify important health trends and make decisions based on these findings.

Griffiths says these analysis techniques are used to identify potentially infectious diseases by examining outbreaks in other parts of the world. These findings are then used to identify potential cases in their own patients, aiding early detection.

"One of the key positive spin-offs of implementing an EMR is the big data and analytics that can be used to make ongoing strategic health decisions. This potential for this data to be used as a platform to leverage other technologies such as home care, artificial intelligence and blockchain is almost unlimited," says Griffiths.

"Big data also plays a key role in nursing education. She says informatics skills are being taught in light of the importance of big data and analytics which in the nursing context is mainly focused on epidemiology, statistics and population health research," says Brownie.

She stresses the importance for educators to stay current and to keep up with trends. "Educators need to be active in continuous review and update of curricula and all teaching learning materials to ensure they are contemporary and forward thinking on technological matters."