Guest editorial

DIGITAL HEALTH AND EDUCATION FOR HEALTH PROFESSIONALS

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The use of digital technologies for health has evolved into an inescapable form of intervention at all levels of health care practice. Digital Health, in all its complex interdisciplinary forms, has become both routine and innovative as it develops rapidly to meet the needs of the public, using technology from a growing number of fields, while inherently becoming a driving force for cutting edge technology. It offers promising interventions in health promotion, disease prevention and care in any given population. I would go further to suggest that the literal explosion of digital media and the welcomed global invasion of social media, has created an urgent demand for health professionals who are able to use and leverage new and emerging technologies to enhance personalised health care.

Today's university students are digital natives. They have practically continual access to the internet and adopt technologies that they feel immediately are of use to them. Taking Malta's case, how can we marry this phenomenon with the tidal wave of digital health interventions at our disposal, yet to be explored let alone used? Educators worldwide have recognised and embraced this phenomenon by designing course programmes that target general or specific issues or populations. Universities are sensitive to the needs of their surroundings, their country. They understand the responsibility of preparing the workforce of tomorrow today, melding art and science to create exciting futures. As the demands of the general public change, as people live functionally longer with co-morbidities, as advanced technology becomes available to the person at home or in hospital, the Maltese health workforce needs to evolve as fast as the changing technology they themselves use as private citizens. Since recognising the importance of digital health as far back as 2005, the WHO has published various guidelines and recommendations that attempt to steer governments, policymakers and individuals to adopt digital health concepts and increase the effectiveness of health interventions in this now mature digital age.

The use of wearables, artificial intelligence, big data, genomics would probably reduce or even remove the need for mass health screening of populations, for example. They may assist the physiotherapist, podiatrist, occupational therapist or community nurse select optimum intervention strategies with high expected outcome prediction levels, and all that data used in the intervention is fed back for possible algorithm modification. The radiographer may use Artificial Intelligence to assist in image quality. Virtual and augmented reality could be used as intervention platforms and advise (treat) the patient or client at home. The patient or client might want control of that intervention or might want to select the outcome desired. Hospital and clinic patient characteristics would change. The technology is here and is getting exponentially more accessible. The systems are relatively easy to build. Plainly, the raison d'etre of digital health is increased effectiveness of health interventions, to improve the quality of life of every person on this planet. In Malta, this will not happen if our medical, nursing and allied health students are not infused with all the facets that digital health involves, never losing sight of the goal, i.e., personalised health care and health for all; the vocation of the health professional to care for the person in need, care enhanced with digital technology. That is where health care is hurtling to.

The Faculty of Health Sciences (FHS) within the University of Malta would do well to ensure that artificial intelligence, data analytics and genomics become embedded in the undergraduate curricula of all its students. They are the guarantee that Maltese health systems remain successful in a fluid national and global environment. An FHS student would be the catalyst to increasing digital health literacy to the general public in all age groups, including those persons later in life. The University of Malta is rich in talent and research. We need to tap into those to educate and train health students to increase the effectiveness of their interventions, help make systems more efficient and relevant, and enable the Maltese citizen to take more responsibility for one's own health. Artificial intelligence has been with us for a while now and Artificial General Intelligence is around the corner. What are we waiting for?