

Towards a Digital Health Curriculum for Health Workforce for the African Region

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Abstract

Background Digital technologies are fast gaining space in health. A skilled workforce is required to use existing and emerging technologies that support healthcare. However, existing medical informatics curriculum from the USA, UK, and African regions reveal gaps in the required competencies for a digital health worker, especially for the African region. Therefore, the aim of this study was to identify the need for and suggest a structure of the digital health curriculum for the African region.

Methods The study retrieved articles published in English between 2000 and march of 2019 from PubMed Central, Google Scholar, and Biomedical Central. Only 39 that addressed any form of pre-service and or in-service training of the digital health workers were included in the review. In addition, 8 national ehealth strategies and 13 medical informatics curricula from the USA, UK, and African regions were reviewed to determine the gaps and suggest a structure of the Digital Health curriculum suitable for the African region. **Results** Many countries in the African region have developed ehealth strategies that clearly highlight the need to train the DH workforce.

Results showed knowledge gaps of a communicator, a collaborator, a professional technologist, an advocate, and a manager required of digital health workers in the African region. However, existing digital/health informatics programmes in the region lack balanced course programmes to develop these core competencies. Besides, the corresponding online training is modeled after the traditional face-to-face training, thus limiting the opportunity for in-service health workers. Validation of the Lesotho curriculum confirmed only 10 modules are suitable to develop a rounded digital health worker (particularly health leaders) for the African region.

Conclusions Since it is important to develop the competencies consistent with the local health systems to realize the full benefits of ehealth technologies, the African region needs to bridge their human resource gaps. Thus, African countries need to first develop or adopt a digital health worker competency framework and then re-organize their national health training curriculum to ensure a standardized/universal ehealth curriculum for training the digital health workforce. Future works will assess the DH worker competencies and expected outcomes for the African region.