

**HEALTH PROFESSIONALS' READINESS  
TO IMPLEMENT  
ELECTRONIC MEDICAL RECORD SYSTEM  
AT EAST YANGON GENERAL HOSPITAL**

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## ABSTRACT

With the advance in information communication technology (ICT), application of electronic medical record (EMR) system in hospitals is one of the solutions to improve the quality, safety and efficiency of health care practice. However, many EMR systems were failed to be utilized properly due to lack of readiness for adoption by healthcare professionals. A cross-sectional study was conducted aiming to assess the readiness of health professionals to implement EMR system at East Yangon General Hospital (EYGH) in 2017. For quantitative study, the total of 49 doctors and 70 nurses were face-to-face interviewed using pretested semi-structured questionnaires. The most common professional education level was bachelor degree 27 (55.1%) among doctors and diploma 50 (71.4%) among nurses. Mean duration of total service was  $(9.5 \pm 8.74)$  years. Only 44 (37%) of respondents were high level of English language skill. Eighty-one (68.1%) respondents had ever used a computer and among them 56 (64.4%) ever had computer training. In this study, only 55 (46.2%) had high level of computer and ICT literacy. Doctors were found to be higher computer and ICT literacy than nurses ( $p$ -value  $< 0.001$ ). Only 36 (30.3%) of respondents were good knowledge on EMR system. Doctors were found to be better knowledge on EMR system than nurses ( $p < 0.001$ ). The overall readiness for EMR system was found in only 56 (47.1%) of respondents. There was significant association between knowledge on EMR system and readiness among the nurses ( $p$ -value  $< 0.01$ ). For qualitative study the administrator of hospital, two heads of different department and head of nursing staffs were interviewed in-depth. There were difficulties of currently running paper-based medical record system and therefore EMR system was needed to be implemented. The main issues to be considered during development and implementation of EMR system were lack of skilled person, operational cost, lack of knowledge about technology, resistance to change, unique patient identification, lack of staff motivation, and sustainability and need of backup system. According to this study, it was recommended that teaching programmes related to EMR system should be incorporated into the curriculum of medical and nursing education and in-service training for ICT and EMR system should be given to improve the readiness of health professionals for EMR implementation.