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Revolutionizing healthcare; Overcoming Obstacles and Advancing the Electronic Health Record System in Pakistan

Muhammad Younas Sujra, Muhammad Hammad, Rashid Ashraf, Muhammad Imran Haider

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Electronic health record (EHR) is defined as an electronic patient record that is housed in a system created especially to assist health care staff with the availability of full and accurate patient data, clinical history, investigations, alerts and reminders and connections to repositories of medical knowledge.[1] EHR systems have demonstrated improvements in the delivery of high-quality healthcare in a number of areas, such as clinical decision support tools that assist clinicians in making decisions about patient care, computerized physician order entry that boosts the effectiveness of order administration for patient care, and health information registries that allow patient data to be shared between various healthcare facilities leading to safe, timely and economical care.[2] Any EHR system's implementation in a low-middle-income-country is still understudied and difficult because of staff inexperience and a lack of resources. Health care system in Pakistan is comprised of primary, secondary and tertiary health centers.[3] The majority of people live in rural areas, so the primary or secondary health unit is their only option to visit for various illnesses considering the fact that tertiary health care facilities are only found in a few major cities.[3,4] Lack of electronic health records is a major domestic issue within the current healthcare system. As a result, patients are not registered at primary or even secondary health unit, proper referrals cannot be made, and when a patient visits a tertiary care facility, he is not able to present any documentation of his previous medical history, medications usage, surgical procedures, co-morbidities, etc. The development of databases pertaining to diseases or treatments is also impeded by the absence of registries. Progress on implementing EHR systems in Pakistani hospitals has been slow due to challenges such as budget constraints, lack of necessary infrastructure, resistance from staff members accustomed to manual documentation methods and concerns about data privacy regulation compliance.[5] To overcome these obstacles, a multifaceted approach must be taken involving collaboration among government agencies, private sector organizations, academic institutions and healthcare professionals. This includes investment in modern IT infrastructure with secure networking capabilities, training programs designed specifically for physicians, nurses, pharmacists, lab technicians etc., raising awareness campaigns highlighting the benefits of electronic record keeping, developing localized versions of popular international software platforms tailored according to our unique requirements and introducing policies aimed at protecting patient confidentiality rights.[3,5] Ultimately, legislators and stakeholders should ensure the strict application of rules and recommendations.

Muhammad Younas Sujra *(Corresponding author)*
Final Year MBBS Student
Bahria University Health Sciences
Email: younassujra52@gmail.com

Muhammad Hammad
Final Year MBBS Student
Bahria University Health Sciences
Email: hammadrazzaq42@gmail.com

Rashid Ashraf
Final Year MBBS Student
Bahria University Health Sciences
Email: drrashidashrafdgkhan@gmail.com

Muhammad Imran Haider
Final Year MBBS Student
Bahria University Health Sciences
Email: mimranhyder744@gmail.com

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Muhammad Younas Sujra: Conception, design, analysis, literature search, writing, proof reading
Muhammad Hammad: Conception, design, analysis
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Muhammad Imran Haider: Conception, design, analysis

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