Smartphone based pharmacetucial database

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Introduction: Modern medicine is progressively being developed by evidence-based medicine by utilizing clinical guidelines. Clinical pharmacy is a subdivision of pharmacy, allowing clinical pharmacists to deliver direct patient's care in collaboration with physicians. This will ultimately provide medication optimization, health promotion and wellness, and disease prevention. Studies reported that such services decrease the occurrence of adverse drug reactions, hospital readmissions, medication adherence and improved clinical outcomes for patients. Many developed countries have implemented and developed well-established clinical pharmacy service, however there is a discrepancy between the different trusts in Kuwait.

The aim of the following study is forming a national-wide data base accessible to healthcare professionals, linking all pharmaceutical, medical, and surgical departments across all hospitals in Kuwait. This will provide the most recent evidence-based protocols and familiarize healthcare professionals with the available medication and guidelines. The final aim of this study is improving patients care and outcomes.

Methods and Procedure: A collaboration between all departments in Mubarak Al Kabeer Hospital, Kuwait was first initiated. Mubarak Al Kabeer Hospital is one of the largest hospitals in Kuwait, covering a population of approximately 700,000 individuals. The most common conditions and medication used was collected from the representative of each department.

Next, a database was established with all available medications in our local trust. Additionally, data regarding the most common organisms' patients present with was also collected. Next, both sets of data will utilize the development of an application available to all healthcare workers locally with clinical guidelines, medications, and evidence-based studies. This will unify the use of medication in the hospital offering a consistency of care throughout the different departments, and overall better healthcare outcomes.

Results: This is a study still in process. The aim is to complete the primary data collection by the end of 2022. Then, the development of the application will be initiated and aim to be completed by summer 2023 where it will be made available to all healthcare professionals in Mubarak Al Kabeer Hospital. The progress of our application will be audited, and we aim to utilize such application as a national wide application.

Conclusion: Our study aims to establish a unified pharmaceutical database easily accessible to healthcare workers in Kuwait. By establishing such application, we ultimately aim to improve the healthcare by less adverse drugs reactions, better adherence to medication, consistency of care and ultimately better patients' outcomes.

