

# Novel Health Mobile Technology as an emerging strategy in diabetes management



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## Abstract

Diabetes is a chronic disease that needs patient awareness, education, and self-management of the disease by patients. Mobile revolution and the availability of IT technologies can serve as a connecting bridge in healthcare system to facilitate the treatment of lifestyles diseases such as diabetes. However, the effectiveness of these techniques needs to be assessed rigorously. Therefore, the authors have systematically reviewed the recent clinical studies using Mobile Health applications for diabetes management.

Original articles that were published in ISI indexed journals from PubMed database from 2007 to 2014 were collected using search specific key phrases. Selected papers were classified into 'mobile applications for diabetes management' which included applications related to diabetes management, 'mobile applications for patient education' which included all the articles where smart phone was used as a tool for health education and 'mobile applications for patient behavior modifications' which included studies that looked into mobile applications which would affect and contribute to behavior changes.

Mobile health interventions resulted in significant clinical improvement in most of the studies. Educational SMS produced significant results but was inferior to the apps or teleconsultations which are more engaging with patients. It seems phone calls are less preferred, as there were only two studies where phone calls were used as intervention. Most of Smartphone apps were evaluated for patient management and education. Implementing reliable mobile health platform in real-life setups may be a challenging task and would require adequate infrastructure. Cost benefit and cost-effectiveness analysis are essential before implementation of such systems.

## Publications

Classification Techniques and Data Mining Tools Used in Medical Bioinformatics. In S. Strydom, & M. Strydom (Eds.), Big Data Governance and Perspectives in Knowledge Management

Health apps usage and preferences among Saudi patients with diabetes: A survey. Int J Clin Pract

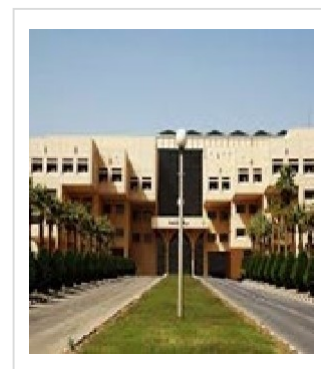
Novel Health Mobile Technology as an Emerging Strategy in Diabetes Management,

Innovative health informatics as an effective modern strategy in diabetes management: a critical review

Comparative Estimation of Genetic Diversity in Population Studies using Molecular Sampling and Traditional Sampling Methods

## Biography

Satish Kumar David working as Researcher & Head of the Information Technology Department in the Strategic Center for Diabetes Research, College of Medicine, King Saud University, Riyadh, Saudi Arabia. Over 23 years of professional experience as a department head, assistant professor, researcher, IT specialist. Research interests include data mining, mHealth, computer networks, AI. Several publications in reputed international journals and has been a reviewer for few journals. Also, co-author with Mohamed Rafiullah, of Novel Health Mobile Technology as an Emerging Strategy in Diabetes Management (IntechOpen, 2017) and co-author with Saeb, A. T., Rafiullah, M., & Rubeean, K. of Classification Techniques and Data Mining Tools Used in Medical Bioinformatics (IGI-Global, 2019). Take up higher responsibilities to grow with the organization.



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