The positive effect of mobile phone (m-health) intervention in diabetes self-mana...

Health & Medicine

The paper “ The Use of Cell Phones Improves Patient Self-Care, Interaction Between Patients and Providers" is a great example of a literature review on health sciences & medicine. The first source is an article on diabetes self-management published in the Journal of Diabetes Science and Technology. The study evaluated the impact of cell phone interventions for persons with diabetes and/or obesity in improving health care outcomes, and the processes of care for persons with diabetes and/or obesity.

The study was extremely personalized in the sense that it took into account individual patient history, age, family diabetic history, among several other factors. Personalized tips on diet and nutrition were also provided to the patients. Overcoming obstacles and maintaining regular exercise regimes were also addressed.

The findings revealed that the use of cell phones improved the interaction between patients and providers, and also between parent and child. It also resulted in greater satisfaction. It was also noted that outcomes are improved through automated reminders and timely treatment. (Holtz & Lauckner (2012) asserts that knowledge of self-care and self-management was also greatly enhanced using cell phones. However, there were problems with the validity of the information provided by patients.

The second source is an article published in Diabetic Medicine Journal, in the year 2010. Its objective was to study the effect of mobile phone usage on glycaemic control in diabetes management. It cites high cell phone

penetration as an opportunity to exploit this quest. (Krishna & Austin, 2008) notes there is greater interaction between patients and providers as a result. Cell phones were used to deliver test results, SMS reminders of visits were also sent.

All these interventions aimed at reinforcing lifestyle management. Self-monitoring of glucose, for example, could be conducted by the patient. Overall, a huge drop in HbA was detected (Krishna & Austin, 2008). However, it was greater in the second type of diabetes. Significantly, it was noted that the results of mobile phone intervention did not vary a lot across demographics of age, size, among others. These changes in HbA were attributed to patient motivation. Generally, telecare came out not to be suitable for all cases of diabetes because of technical problems such as cell phone breakage or internet inaccessibility interference.

The last source was the article titled, Diabetes Management via Mobile Phones. Its objective was to identify the most common uses of mobile phones in monitoring and managing diabetes, their potential role in a clinical setting, and the current state of research in the field.

Cheap mobile phones, cheaper costs of communication and accessible mobile applications were considered great aids. The majority of the studies encompassed by this study, however, involved providing cell phones to the patients.

The study faults the measurement of interaction, based on the number of text messages exchanged between the provider and the patient. This is because only a small group of highly motivated patients sent the majority of the messages (Liang et al, 2010). As a consequence, the study suggests a closer look at ways of motivating other patients. The limitation of this study is that it is generalized.

The cost of these interventions is also questioned by this study. The study suggests that it should be analyzed to prove its practicality. Lastly, the study points out that most studies give an extremely positive opinion of the patient towards such intervention, but tell nothing about the opinion of the provider (Liang et al, 2010). Generally, technology is welcome in healthcare. However, some issues have to be studied in greater depth to maximize their effects and importance in healthcare. They include; cost, impact, and practicality on integrating the diabetes management and cell phone care.