**Quantitative and Qualitative Studies on Medication Adherence**

Diabetes Mellitus is one of the chronic diseases that have increased the death rates in the world.   The patients who get treatment for the disorder are required to adhere to the medication so that they can mitigate the risks associated with diabetes mellitus.  The qualitative and quantitative studies have been done to show how people have been able to adhere to the medications that are prescribed (Bernard, Wutich & Ryan, 2016). Medical adherence is enhanced by the patient having the health literacy that helps the diabetes mellitus patients to read, understand and comprehend the medical information. Health literacy includes the patient’s capability to understand the prescription of the diabetes mellitus medication by the health professionals.

Health literacy has a significant role in the health promotion and understanding the instructions about the diabetes mellitus treatment. The qualitative and quantitative studies show that a significant gap exists between the health literacy between the patients and the health professional (Supachaipanichpong, Vatanasomboon, Tansakul & Chumchuen, 2018). Due to this gap, there are adverse effects on the patients since they are not able to follow instructions on the medical instructions given to them hence the lives of the patients are put at risk.

Quantitative and qualitative studies were conducted to understand the level of health literacy and what should be done to reduce the gap that exists.  The quantitative studies that were conducted were categorized to be high quality if the results met eleven and above criteria and medium quality if the requirements hit ten studies while qualitative qualified after meeting the criteria of thirteen and more and medium for ten studies.  Nineteen quantitative and nine qualitative types of research were considered, and eleven of the studies were rated high quality while eight of them were rated medium quality.  Out of the nine qualitative studies, four were rated at high quality and five as medium quality. These qualitative and quantitative studies were conducted to find out the factors of health literacy knowledge, the attitude of medication, health practice and the barriers to health promotion (Rajah, Ahmad Hassali, Jou & Murugiah, 2017). From the reviews, it was clear that intervention was required to reduce the barriers to health promotion. The interventions would help the health providers to learn about health literacy so that they can be able to provide quality diabetes mellitus healthcare. Also, through the responses, the patients can have an opportunity to get access to the health information that will contribute to understanding the information about the treatment of diabetes mellitus (Rajah, et al., 2017). The patients can get information on the health promotion methods that can be used to control the effects of diabetes mellitus.

A study conducted on the educational intervention for the medication adherence in controlling Diabetes was done to show the significance of interventions to the patients in controlling Diabetes in Thailand.   Quantitative studies have shown that educational approaches as the popular and effective intervention that helps the patients to adhere to the medication meant to mitigate the risks of Diabetes Mellitus (Supachaipanichpong, et al., 2018).  The aim of this study is to determine the effectiveness of the medication education intervention improving medication knowledge, and medication adherence and understanding   the blood glucose levels that will contribute to reducing the chances of getting diabetes mellitus.

The quantitative method was applied in which the researchers used questionnaires and the laboratory records in which the surveys were given to thirty patients.  The number of participants used in the research was seventy six, a number divided into thirty nine who received the intervention and thirty seven as control group.  A significant number of participants involved females, people who received education up to primary level and patients with two types of medication and are in proper diet and exercise (Supachaipanichpong, et al., 2018).  Some of the issues addressed by the questionnaires included the dose and the time of taking the medication, the effects and side effects of the medication. Also, the subject of the forgetfulness in taking the diabetes mellitus medication and the management of the abnormal and side effects of the medication are addressed in the questionnaires. After answering the questions substantial evidence on the reasons why people fail to adhere to medication.

 For instance, if the reason for failure to adhere is forgetfulness, then the health promoters can have the ways of making people remember to take the medication. The education intervention helps people understand the risks of failing to take the diabetes medication which include death if the risks are not mitigated on time (Supachaipanichpong, et al., 2018).  Based on the medication beliefs, education intervention is introduced to the society to make people understand the advantages of taking diabetes mellitus medication to avoid the adverse impacts.  The results of the study showed that the individuals subjected to the intervention improved and adhered to the diabetes mellitus medication compared to the ones who never received the educational intervention.

The quantitative and qualitative studies used shows that the education intervention plays a significant role in ensuring that diabetes mellitus patients adhere to the medication. When the patients comply with the medication, the risks of the disorder such as limb amputation and death which is the last result if the patients do not adhere to medication are controlled.  Through quantitative results, the health providers can receive first-hand information (Bernard, et al., 2016) from the patients on the reasons why they fail to comply with the diabetes medication and hence the health providers should embrace this data collection approach.

**References**

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