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Family Physician Corner

Empowerment: An approach for Diabetes Education

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The value of education and the role of educators in diabetes management had become invaluable over the last 10 years[1]. Diabetes education was shown to be cost-effective[2]. Self-management skills and knowledge have become a central part of the diabetes education process. Many strategies for diabetes education have been developed. Empowerment, as an example of diabetes education model, will be discussed in this paper, together with supporting evidence.

Due to diabetes chronicity and its systemic involvement, there is exponential growing need for diabetes education[2]. Despite the development of standards for diabetes education, many diabetic people are frustrated and dissatisfied. On the other hand, diabetes educators are also frustrated with their inability to motivate their patients to comply through their educational programs. This growing sense of dissatisfaction among patients and professionals has increased the awareness of the need to develop other educational programs that are adequately effective in dealing with the complexities of living with a chronic condition like diabetes[1].

Cost-constraint studies showed that educating patients results in significant savings. Patient education was found to result in maintaining better health by reducing complications of a chronic illness. This finding had led to an increasing attention to lower health care cost through primary prevention efforts. These efforts include early identification of the disease before it progresses to more serious and expensive complications. Frenz et al demonstrated a cost benefit ratio of 56.26$ per percent change in glycosylated haemoglobin (HbA1c) for results achieved at 6-months follow-up. Unfortunately, education is still not viewed as a long-term investment[2,6].

Diabetes is a self-managed disease with the patient usually providing >90% of the daily care[3]. Results from trials, such as the United Kingdom Prospective Diabetes Study, confirmed that the complications of diabetes can be arrested, if not avoided, by effective self management. This has promoted a new argument amongst health care professional as to who that manager should be[4]. Patients are making choices every day, which affect their diabetes control and they are managers of their own care. This has led to a rejection of paternalism associated with the traditional medical approach, in favour of patient-centered, self-managed approach[5,6]. Professionals are challenged to develop new ways of working with patients to embrace the concept of self-management, which should include a review of educational strategies and other support mechanisms[7].

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There are many educational models for diabetes education, such as the traditional/medical model, the health belief model, and the trans-theoretical model. However, for the above-mentioned reasons, Anderson et al had proposed that diabetes care and patient education require a new approach or mode[8]. This approach recognizes the role and responsibilities of the patient in the daily treatment of diabetes. This approach was labeled as "patient empowerment model" and was contrasted with the "traditional medical model". The main difference between the two models is based on one's view of who is in-charge of the patients' diabetes care. While the latter views the physician as the final authority in the treatment of the illness, the empowerment model argues that patients are in-charge of their own daily care. The diabetes care plan should be a result of a process of education and discussion between the patient and members of the health team. In the empowerment model, the education process should maximize the self-care knowledge, skills, self-awareness, and sense of personal autonomy of patients to enable them to take charge of their own diabetes care.

In a review article on the empowerment approach, the literature revealed that there are five key features to an empowering consultation: acceptance, affect, autonomy, alliance and active participation[9].

Acceptance refers to the respect by health care professional (HCP) for the diabetic patient. Regardless of the degree of the metabolic control, lifestyle, appearance or attitude of the patient, the HCP must accept and value the goals the individual wants to set. This is because no matter what objectives the HCP wants to set, if they do not meet the patients' agenda, patients will not change.

Affect refers to the emotional aspect of the empowering consultation. Emotional aspect of the problems and barriers the patient has in the management of diabetes has many effects. Exploring the emotional aspects and barriers enhance the patient's motivation to address the problem and methods of behavioral change. In addition, it gives the HCP an opportunity to support the patients to improve their lifestyle and help their emotional well-being.

Autonomy relates to the involvement and participation of the patient in the decision-making during consultation. The patient should be responsible for choosing the subject of the consultation and making all non-diagnostic decisions. The HCP should ensure that these decisions are accurate and evidence-based.

During the consultation, the HCP should work in **alliance**, but independently, with patients to help them make informed choices about their diabetes, lifestyle changes and treatment. The HCP should provide patients with the equipments and resources that they cannot obtain for themselves such as glucometers, planning group educational programs, campaigns, etc.

The last key feature in an empowering consultation is the **active participation** of everyone in the consultation. Despite the fact that the patient should be the main decision maker, this doesn't mean that the HCP should be a passive participant. The consultation has different phases to help the patients identify the issues they want to address and changes, how they feel about it, find the different options of change, and

find out with the help of the HCP the barriers of change. The role of the HCP is to actively guide the patient throughout the process by listening to the patient actively, and gently guiding the patient from one stage to another.

Is there any evidence that the empowerment approach will achieve anything? Skinner reviewed the literature and found that evidence support this approach is emerging from both the descriptive and intervention research[9].

Kyngas et al interviewed diabetic adolescents about their perceptions of the HCP responsible for their care. Their description categorized the HCPs into two groups, "motivating" and "routine". After following up these patients, it was found that adolescents whose HCPs were described as motivating, were closely related to the description of the empowerment model, and were more likely to have "good compliance" and better metabolic control.

In another descriptive study, Street et al recorded the consultations of nurses with patients attending diabetic educational course. They found poor metabolic control of patients who were strictly controlled and directed by nurses.

William et al, concluded that patients showed improved physiological outcome, manifested by improved HbA1c levels if the consultation gives a wide provision of choices for the patients, information about the problems, consideration of the patients affect and emotions, and minimal pressure to behave in a particular way. They found that patients, who experienced a more autonomous supportive health care environment, reported more autonomous motivation. This sense of autonomous motivation mediated the association between an autonomous health care environment and blood glucose regulation.

Another prospective study by Golin et al, found a direct link between patient participation and expression of their views and subsequent self-care.

In addition to the above-mentioned evidence from the descriptive studies, there are at least three intervention studies that provide some support for the principles or aspects of the empowerment model, but not based on the whole model itself.

Greenfield et al conducted an intervention to increase patients' participation in their diabetes care. After a follow-up period, the participants in the intervention group showed significant improvements in glycosylated haemoglobin. Kinmonth et al conducted a randomized controlled-trial where the primary care physicians were trained to give a "patient-centred" care. The patients in the intervention group were given a booklet encouraging them to ask more questions. They found that these patients reported better communication with the HCPs and better well-being without adversely affecting their metabolic control. The author concluded that the "study shows the power of the consultation to affect patients' health and well-being".

The third evidence came from Anderson et al, who conducted a randomised wait-list control group trial of a patient empowerment education programme. The programme was for six weeks, designed to provide patients with the necessary knowledge, attitudes and skills to enable them to be `self-empowering'. Six weeks after the

programme, the intervention group showed significantly greater improvements in glycaemic control than the wait-list control group.

The data from these studies showed that if patients were given more choice, were actively listened to, and had all their questions answered to empower them to take care of their diabetes; it would result in improved physical and emotional health. However, these data are only empirical data, which tested only certain aspects of the empowerment model. Skinner et al were not aware of any study that tested fully the empowerment model at the time of their review. A full test of the empowerment model is needed before adopting it as an approach or model of diabetes education[9]

In conclusion, the various models of education assist in understanding of how to establish effective and efficient educational programmes. The choice of which model to use is difficult, and any preference should ensure that it is the patient's needs, which are actually being addressed. In practice, there is no ideal model of education, rather; many features of these models can be adopted, and together they form a comprehensive guide as to how to deliver the concepts of self-management.

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