Comprehensive Diabetes Management- What Does it Means?
Maram Alshareef

ABSTRACT
Diabetes is a chronic disease that has a health and economic burden on the patient and the health care system. Diabetes control means prevention of the Complications which need patient and health care provider collaboration in addition to the health care system support. A multidisciplinary and an interdisciplinary team approach is needed to provide a comprehensive care in the early stage of the disease. Psychotherapy can play a role to improve patient cognition and acceptance of the disease which is very important step toward successful management. Biopsychosocial model approach the patient from all health aspects rather than the biological disease alone and all the health care team providers must be trained to adopt this approach.

Key words: Comprehensive Diabetes management, Psychotherapy, Bio-psychosocial model.

INTRODUCTION
Chronic diseases control is considered as one of the biggest expenditures on the economies for the countries. Diabetes is one of the chronic non-communicable diseases that has global effect on the world. Countries have estimated the economic impact of diabetes on the health care system, for example in the US $199 billion per year and one thirty-one billion dollars reduced productivity on year on average. Asian countries calculated the total loss as a result of chronic non-communicable diseases which showed the highest loss in China with about $16 trillion, followed by $ 5.7 trillion and $1.5 trillion respectively for Japan and South Korea. The cost of diabetes care in Saudi Arabia is approximately $ 4.5 billion. Diabetes had been counted with a high prevalence in the Arab world, the studies varied between 18-30 % prevalence in Saudi Arabia, followed by Oman with 29% and 25% in Kuwait, Bahrain and United Emirates. In contrast, the prevalence is 6%, 7.3% and 9.4% in Britain, Canada and the USA. Type 2 diabetes affects adults and the prevalence increases with age. It can go through a prodromal stage for 10 years before the diagnosis and is presented suddenly, often with complications.

Comprehensive Diabetes Management
Many factors affect the disease control which includes medications, diet, exercise and psychological counseling. However, many barriers affect the intensification of glycemic control which could be related to the physician, patient or the health care system. Diabetic care plan should include education about the disease, medication counseling, the role of different non-pharmacological options, self-management and complications prevention. Chronic care model is the recommended in diabetic care plan to provide an organized, arranged care through the multidisciplinary/ interdisciplinary team which include (physician, nurse, dietitian, pharmacist, health educator, psychotherapist for psychological support and the social worker).

Physicians’ perceived this approach as optimization for the diabetic care plan which can allow for more integrative discussion and communication with other health care associates professionals. On the other hand, literature reviews showed this approach improves the communication with diabetic patients which results in better control of the disease. Moreover, diabetic patient concerns have to be addressed at each visit which relatively not taken very well by health care provider. Patients expressed the need for extensive explanation about the disease and the complication as well as the management plan, this will give the patient a responsibility toward their health and to ensure the compliance to the management plan. Besides, the Comprehensive approach to diabetic patient should be initiated upon the diagnosis which means the patients should be referred to an interdisciplinary team care to plan and implement management strategy with the patient toward long term accepted, measured and realistic goal. Moreover, the management should be an anticipatory instead of reflectory to what patient needs Figure 1. Health care provider and patient relation is an important factor toward the patient compliance and disease control.

Empathy and Care for Diabetes
The good provider-patient relationship leads to better compliance and control of the disease. Empathy is the core effect of provider-patient relationship.

adherence, these items should be continuously assessed despite the chronicity or the glycemic control by each team member involved in the diabetic care plan. The patient will perceive the importance of the discussed subject and consider it important part of the management if discussed by different professions which will affect the long-term control of the disease.15,20 The team members need to adopt the biopsychosocial approach to achieve the patient care model which help to deal with patient concerns on individual basis.21 Compassion attitudes can be encouraged among team care provider and patient themselves through the whole care journey.22

**Psychotherapist as part of the team**

A special algorithm maybe be helpful in the care process if followed when the disease is initially diagnosed. Physicians alone cannot conduct the whole care plan; the multidisciplinary team role showed a better effect on patient control.11 Psychotherapist should be a vital member in the team. Diabetic patient suffers from fear, anger, anxiety at the early stage of the disease.13 Early intervention of psychotherapist can work with diabetic patients on acceptance, anxiety reduction techniques, self-soothing and self-care. If the patient learns certain techniques that can help in problem-solving and decision making and when to seek help will have a positive impact on the disease.21 The six pillars for diabetes care include diet, exercise, medication, self-care and psychological tools.20,24 Biopsychosocial model approach the patient from all health aspects rather than the biological disease alone.20 The diabetic care team members need to adopt the biopsychosocial approach to achieve the patient care model which help to deal with patient concerns on individual basis21 when health care providers adopt this model in diabetic care they can reach with the patient where is the management corner in the Figure need to be reassess, explored and negotiated or modified to ensure patient compliance and control.18

CONCLUSION

The economic burden increased on the countries because of diabetes and its complications. Patient take time until reach the acceptance stage and follow the proper management plan. Biopsychosocial and empathetic approach can empower the patient through the disease journey until reach the proper monitoring and optimum control.

---

**Figure 1:** Cycle of Chronic Care Model for Diabetic patient.

**Figure 2:** Interdisciplinary Team Functions.
ACKNOWLEDGEMENT

I acknowledged Dr. Bayan Alsharif and Mrs. Seham Alnassar, for their support and an extended acknowledgement for my patients who showed good compliance to the management plan.

CONFLICT OF INTEREST

The author declares no conflict of interest.

REFERENCES
