



**Knowledge, Attitudes, Pattern, and Effect of herbs use among
patients with type 2 diabetes mellitus in Basrah**

A thesis

**Submitted to the Faculty of Medicine, University of Basrah,
In Partial Fulfillment of the Requirement For The degree of
Master of Science in pharmacology**

By

Rawnak Adil Al-Adab

B.Sc. (Pharmacy)

**Supervised by
Dr. Jawad H. Ahmed
Assistant Professor,
MB.Ch.B., PhD (UK)**

**Department of
Pharmacology**

**Supervised by
Dr. Abbas Ali Mansour
Professor,
FRCP (London and
Edinburgh
Department of Medicine**

2014 A.D.

1435 A.H.

Background

The number of patients having diabetes is thought to rise from around 360 million in 2011 to 550 million by the year 2030.

Diabetic patients are found 1.6 times more likely to use complementary and alternative medicine (CAM) than non-diabetics.

Health seeking and utilization of health care services for diabetes in developing countries is often a complex issue, since people seek care from multiple sources outside the formal orthodox health care system.

Aim of the study:

This study consisted of two stages

1. The aim of stage 1 was to assess the pattern of use, knowledge and attitudes toward herbs use in type 2 diabetic patients in Basrah.
2. The aim of stage 2 was to evaluate the effectiveness of the most widely used herbs from the first part in patients with type 2 diabetes.

Patients, materials and methods:

The first stage of the study was a cross sectional survey of patients attending Al- Faiha Diabetes Endocrine and Metabolism Centre (FDEMC) in Basrah. Eight hundred and forty five diabetic patients were recruited for the study; the method was based on semi-structured questionnaire. The questionnaire form included 27 questions.

The second stage was a prospective study. Fifty four patients completed the study. The patients were enrolled from Al- Faiha Diabetes Endocrine and Metabolism Centre (FDEMC) in Basrah, after meeting a set of inclusion criteria:

after 40 days of treatment. The same changes in HbA1C and 2 hours postprandial glucose was noticed with fenugreek and even more reduction was noticed with the combination of fenugreek and cinnamon.

Conclusions:

The first stage of the study confirmed that there is an appreciable prevalence of herbal use among patients with type 2 diabetes mellitus in Basrah. The most commonly used herbs are unidentified herbal mixture (20%), combination of helba, habbat-Al barakah and kerfah (15%), Bastage gum (10.4%), helba (6.4%). Herbs are commonly used by all age groups, different educational levels, singles, married, divorced, widowed and all socioeconomic levels.

It can be concluded from the second stage of the study that daily supplementation of three grams of cinnamon, or 15 g of fenugreek or their combination with oral antidiabetic medications and diet regimen seems to lower HbA1C and 2 hours postprandial glucose in patients with type 2 diabetes mellitus who are not achieving target of HbA1C <7. Future studies should be directed at investigating the mechanism of action of herbal medication in diabetes.

after 40 days of treatment. The same changes in HbA1C and 2 hours postprandial glucose was noticed with fenugreek and even more reduction was noticed with the combination of fenugreek and cinnamon.

Conclusions:

The first stage of the study confirmed that there is an appreciable prevalence of herbal use among patients with type 2 diabetes mellitus in Basrah. The most commonly used herbs are unidentified herbal mixture (20%), combination of helba, habbat-Al barakah and kerfah (15%), Bastage gum (10.4%), helba (6.4%). Herbs are commonly used by all age groups, different educational levels, singles, married, divorced, widowed and all socioeconomic levels.

It can be concluded from the second stage of the study that daily supplementation of three grams of cinnamon, or 15 g of fenugreek or their combination with oral antidiabetic medications and diet regimen seems to lower HbA1C and 2 hours postprandial glucose in patients with type 2 diabetes mellitus who are not achieving target of HbA1C <7. Future studies should be directed at investigating the mechanism of action of herbal medication in diabetes.