

Sohag University

Faculty of medicine

Public Health and Community Medicine Department

***Assessment of quality of life of type II diabetic patients***

***Attending Sohag University Hospital Diabetes***

***Melliteus outpatient clinic***

***Thesis***

Submitted for partial fulfillment of Master Degree of Family Medicine

***By***

***Rasha Gamal ElDein Abu El-Goud***

Demonstrator of Public Health and Community Medicine

(Family Medicine Specialty)

***Supervised by*  
*Prof. Dr. / Eman Abd EL-Baset Mohammed***professor and head of Public Health and Community Medicine Department -Sohag University

***Dr./Fouad Metry Atia Yousef***Lecturer of Public Health and Community Medicine-Sohag University

***Dr./Magda Mohamed Ali***

Lecturer of Public Health and Community Medicine-Sohag University

Egypt-Sohag (2014)

**Introduction**

Diabetes mellitus type 2 (formerly non-insulin dependent diabetes mellitus (NIDDM) or adult-onset diabetes) is a [metabolic disorder](http://en.wikipedia.org/wiki/Metabolic_disorder) that is characterized by [hyperglycemia](http://en.wikipedia.org/wiki/Hyperglycemia) (high blood sugar) in the context of [insulin resistance](http://en.wikipedia.org/wiki/Insulin_resistance) and relative lack of [insulin](http://en.wikipedia.org/wiki/Insulin). This is in contrast to [diabetes mellitus type 1](http://en.wikipedia.org/wiki/Diabetes_mellitus_type_1), in which there is an absolute lack of insulin due to breakdown of [islet cells](http://en.wikipedia.org/wiki/Islets_of_Langerhans) in the [pancreas](http://en.wikipedia.org/wiki/Pancreas). The classic symptoms are [excess thirst](http://en.wikipedia.org/wiki/Polydipsia), [frequent urination](http://en.wikipedia.org/wiki/Polyuria), and [constant hunger](http://en.wikipedia.org/wiki/Polyphagia) ***(King H; 2003).***

Type 2diabetes makes up about 90% of cases of [diabetes](http://en.wikipedia.org/wiki/Diabetes_mellitus), with the other 10% due primarily to diabetes mellitus type 1 and [gestational diabetes](http://en.wikipedia.org/wiki/Gestational_diabetes). [Obesity](http://en.wikipedia.org/wiki/Obesity) is thought to be the primary cause of type 2diabetes in people who are genetically predisposed to the disease ***(Zimmet P. 1985).***

Type 2diabetes is initially managed by increasing [exercise](http://en.wikipedia.org/wiki/Physical_exercise) and [dietary changes](http://en.wikipedia.org/wiki/Diabetic_diet). If blood sugar levels are not adequately lowered by these measures, medications such as [metformin](http://en.wikipedia.org/wiki/Metformin) or [insulin](http://en.wikipedia.org/wiki/Insulin) may be needed. In those on insulin, there is typically the requirement to routinely check blood sugar levels ***(Irvine WJ; 1977).***

Rates of type 2 diabetes have increased markedly since 1960 in parallel with obesity. As of 2010 there were approximately 285 million people diagnosed with the disease compared to around 30 million in 1985.

Long-term complications from high blood sugar can include [heart disease](http://en.wikipedia.org/wiki/Heart_disease), [strokes](http://en.wikipedia.org/wiki/Strokes), [diabetic retinopathy](http://en.wikipedia.org/wiki/Diabetic_retinopathy) where eyesight is affected, [kidney failure](http://en.wikipedia.org/wiki/Kidney_failure) which may require [dialysis](http://en.wikipedia.org/wiki/Dialysis), and poor blood flow in the limbs leading to [amputations](http://en.wikipedia.org/wiki/Amputation). The acute complication of [ketoacidosis](http://en.wikipedia.org/wiki/Diabetic_ketoacidosis), a feature of type 1 diabetes, is uncommon ***(Davies et al; 2008).***

Quality of life (QOL) is the general [well-being](http://en.wikipedia.org/wiki/Well-being) of individuals and societies. QOL has a wide range of contexts, including the fields of [international development](http://en.wikipedia.org/wiki/International_development), healthcare, and politics. Quality of life should not be confused with the concept of [standard of living](http://en.wikipedia.org/wiki/Standard_of_living), which is based primarily on income. Instead, standard indicators of the quality of life include not only wealth and employment but also the built environment, physical and mental health, education, recreation and leisure time, and social belonging ***(Deakin et al; 2006).***

**Justification:**

Worldwide, numerous studies were conducted concerning assessment quality of life of diabetic patients.

A study was conducted [Rom.](http://www.ncbi.nlm.nih.gov/pubmed/22788091) 2012 Jan-Mar to assess the quality of life of type II diabetic patients, The Romanian version of the SF-36 questionnaire was used as a health survey tool to measure the quality of life (QOL) of patients in the study, QOL scores for study group were significantly lower compared with general population. Examining the effects of insulin use and QOL, there are no significant differences between patients following insulin therapy and patients with other therapeutic protocols. Role limitations due to emotional problems correlate with disease duration.

Another study was done on Indian patients by Arvin Kumar A draft of 75 questions was prepared on the basis of expert opinion, focus group discussions, review of existing literature and detailed semi-structured interviews of patients with diabetes with the intention of including all aspects of diabetes-specific and quality of life considered relevant by patients and care providers to enable constrict validity. A Stage 2 questionnaire was then prepared with 13 domains and 54 items (questions)

After expert panel review for obvious irrelevance and duplication of issues. It was administered to 150 participants

Visiting a diabetes center at New Delhi, The questionnaire showed good co``q2ncordance (product moment correlation

0.724; p=0.001; subscale correlation – 0.457 to 0.779) with the DQL-CTQ. The overall standardized questionnaire

score showed good responsiveness to metabolic control and co-morbidities establishing discriminant validity.

A cross-sectional study design was done by Howida Abdeen Abd El-Hafeez in Alexandria University on the year 2012. Sample of 197 type 2 diabetic patients attending the diabetes and metabolism outpatient clinic pertaining to Alexandria Main University Hospital, physicians, nurses, and social workers working at the selected clinic were targeted for this study.   
Data collection was done using a structured interview questionnaire. The questionnaire was designed to collect data on personal characteristics of the study sample, assessment of SF-36 quality of life domains for type 2 diabetic patients, assessment of significant disease specific and socio-demographic predictors of QoL among type 2 diabetic patients, and assessment of patients’ and clinic health services providers’ opinions regarding the upgrading of health services to improve diabetic patients’ QoL.

The main results of this study could be summarized as follows:  
Concerning patients Personal characteristics of the study sample the

*Following main results were revealed:*

1- Patients ’ age ranged from 40-80 years old with an average of 53.3+8.2. Both males and females were more or less equally distributed (49.2% and 50.8% respectively) and 80.5%of them were married.  
2- The highest percentage of patients (33.5%) was illiterate and the majority of them (88.8%) had insufficient income.

3- The majority of the patients reported suffering from co-morbid disease (97.5%).

Concerning assessment of SF-36 quality of life domains for type 2 diabetic patients the following main results were revealed:  
1- Concerning the quality of life the highest percentage of patients shows the lowest scores (zero) for most of their physical functioning.

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2- The highest percentage of the patients (43.65) rated their health in general as poor (zero score) and reported that their physical health or emotional health problems (zero score)

**Aim of the work**

To assess quality of life of type II diabetic patients.

**SUBJECTS AND METHODS**

* **Studied population and locality:**

Total coverage study of all patients with DM type II attending Sohag University hospital Diabetes Melliteus outpatient clinic in the period from August ;1st 2014 till June;30th 2015 to collect data about their quality of life.

* **Technical design:**

Data will be collected through personal interview with the patients using a specially designed multi-item questionnaire which will include questions about:-

* Socio-demographic data
* symptoms and problems
* Cognitive functions
* work status
* sexual function
* quality of social interaction
* social support
* sleep
* Health care providers encouragement
* effect of diabetes on daily life
* **Administrative design:**
* Personal communications with responsible Administrative authorities and verbal consent will be obtained
* Personnel: field work of the study will be carried out by the researcher under continuous supervision of the supervisors
* **Operative design:**

**(A)Preparatory phase includes**

* Review of literature
* Construction of questionnaire
* Personal communication

**(B)2nd phase (collection of data )**

* Nature and aim of study will be explained to eligible persons .

**C)3rd phase Analysis of data:)**

* Data will be subjected to statistical analysis and tabulation using SPSS program, the results will be presented to fulfill the objectives of the study.

**Data revision**

Computer data entry and data cleaning will be done along the period spent on data collection.

**Statistical analysis**

Data will be subjected to statistical analysis and tabulation using SPSS program, the results will be presented to fulfill the objectives of the study.

**Ethical consideration**

Ethical consideration will be observed in each step of the study conducted including written consent of patients.

Approval of Ethical Committee of Sohag faculty of Medicine.

In addition, the objectives and steps of the study will be

Explained to the participants, before taking any information

A written consent will be obtained from the responsible administrative authorities.

**Dissemination of the results and recommendations**

Copies of the thesis will be provided to library of faculty of medicine, Sohag University, the study report will be sent to the dean of the faculty and hospital director.

**References**

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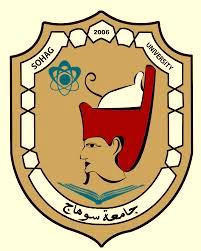
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جامعة سوهاج

كلية الطب البشري

قسم الصحة العامة وطب المجتمع

***قياس نوعية الحياة لمرضي البول السكري(النوع الثاني)***

***المترددين على عيادة مرضى السكرى بمستشفى سوهاج الجامعى***

***بروتوكول***

***توطئة للحصول علي درجة الماجستير في تخصص طب الأسرة***

***اعداد***

***الطبيبة/ رشا جمال الدين ابو الجود***

معيدة بقسم الصحة العامة وطب المجتمع(تخصص طب الأسرة)

***تحت اشراف***

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استاذ ورئيس قسم الصحة العامة وطب المجتمع-جامعة سوهاج

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مدرس الصحة العامة وطب المجتمع-جامعة سوهاج

***الدكتور/ماجدة محمد علي***

مدرس الصحة العامة وطب المجتمع-جامعة سوهاج

سوهاج-2014

**الملخص العربي**

يعتبر مرض البول السكري (النوع الثاني) من أنواع اضطراب التمثيل الغذائي.

ويتميز بزيادة نسبة الجلوكوز في الدم عن المعدلات الطبيعية وذلك ناتجا عن قلة الأنسولين أو عدم الاستجابة لوجوده.

ويعتبر بذلك مختلفا عن النوع الأول في أنه لا يوجد انسولين بالمرة وذلك لتدمير خلايا البنكرياس المسئولة عن افرازه.

وتتمثل الأعراض الرئيسية في:

فرط الشعور بالعطش, وزيادة التبول, وفرط الاحساس بالجوع.

ويمثل النوع الثاني حوالي 90% من الحالات المصابة بالبول السكري, بينما النسبة المتبقية(10%) بسبب االنوع الألنوع الأول أو السكر المصاحب للحمل.

وتعتبر السمنة سببا رئيسيا في حدوث الاصابة للمرضي الذين لديهم استعدادا وراثيا.

ويتلخص علاج النوع الثاني في الأتي:

* زيادة التمارين الرياضية
* تغيير العادات الغذائية
* استخدام العلاج الدوائي اذا فشلت الوسائل الغير دوائية

ومن المضاعفات الناجمة عن ارتفاع مستوي السكر في الدم الاصابة بامراض القلب والجلطات والفشل الكلوي والاعتلال الشبكي السكري.

نوعية الحياة هي, الحالة الصحية العامة للافراد والمجتمعات

وتشمل العديد من الجوانب مثل الرعاية الصحية والتطورات الاجتماعية.

**الهدف من الدراسة**

قياس مدي نوعية الحياة لدي مرضي البول السكري النوع الثاني.

أدوات الدراسة:

دراسة العينة والمكان؛

وتشمل تغطية كاملة للمرضي المترددين علي عيادة مرضى السكرى بمستشفى سوهاج الجامعى في الفترة من أول يوليو 2014 وحتي اخر يونيو 2015 وذلك لجمع المعلومات عن نوعية الحياة الخاصة بهم.

منهجية الدراسة:

سيتم ملئ استبيان يشمل أسئلة حول

* البيانات الاجتماعية والديموغرافية
* الأعراض والمشاكل المصاحبة
* الوظائف الادراكية
* الحالة الوظيفية ونوعية العمل
* الكفائة الجنسية
* نوعية العلاقات الاجتماعية
* تشجيع مقدمي الخدمة الصحبة