



**UNIVERSITY OF TRIPOLI ALAHLIA**  
**DEPARTMENT OF PHARMACEUTICAL SCIENCES**

**PROJECT TITLE**

**AGE AND GENDER-BASED UTILISATION  
PATTERN OF ANTIDIABETIC DRUGS IN  
TRIPOL, LIBYA**

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**AGE AND GENDER-BASED UTILISATION PATTERN OF  
ANTIDIABETIC DRUGS IN TRIPOL, LIBYA**

**BY**

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A project submitted in fulfilment of the requirement for the  
degree of Bachelor of Pharmaceutical Sciences

Department of Pharmaceutical Sciences  
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## APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a project for the degree of Bachelor of Pharmaceutical Sciences.

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## ABSTRACT

Diabetes is a chronic metabolic disorder that affects individuals worldwide and is associated with high morbidity, and mortality ratios. Various classes of antidiabetic drugs with different mechanism of action are currently being used as a treatment. The prescribing pattern of these various drugs may be affected by socio-demographic factors like age and gender. The objective of the study was to find out the utilization pattern of anti-diabetic drugs and to investigate any utilizations pattern differences in terms of age and gender in the endocrinology unit of Tripoli National Centre for Diabetes and Endocrinology. A cross sectional study was conducted over a period of two months (from December 2018 to January 2019), in the Tripoli National Centre for Diabetes and Endocrinology, Tripoli, Libya. The data were collected using a questionnaire. Later the data were analysed to obtain; averages, percentages, standard deviations, and expressed as descriptive statistics. A total of 150 prescriptions were included whereby 38% of patients were males and 62% were females. The mean age of patients with diabetes was  $52.03 \pm 9.12$  years. 92% prescriptions were for patients with type 2 diabetes. All patients with type 1 diabetes (n=12) received human insulin. Metformin was the commonly prescribed antidiabetic drug in both genders. For patients below 45 years and those between 45–60 years of age, metformin was the commonest prescribed, while among patients above 60 years of age sulfonylureas were the most commonly prescribed. To conclude, the utilisation pattern of antidiabetic drugs varied among different age groups and gender.

## المخلص

مرض السكري هو اضطراب أيضي مزمن يصيب الأفراد في جميع أنحاء العالم ويرتبط بارتفاع معدلات المراضة والوفيات. وتستخدم حالياً فئات مختلفة من الأدوية المضادة لمرض السكر مع آلية مختلفة للعمل. قد يتأثر نمط وصف هذه الأدوية المختلفة بالعوامل الاجتماعية والديموغرافية مثل العمر والجنس. كان الهدف من هذه الدراسة هو معرفة نمط استخدام العقاقير المضادة للسكري والتحقق في أي اختلافات نمط الاستخدامات من حيث العمر والجنس في وحدة الغدد الصماء في مركز طرابلس الوطني لمرض السكري والغدد الصماء. أجريت دراسة مقطعية على مدى شهرين (من ديسمبر 2018 إلى يناير 2019) ، في مركز طرابلس الوطني لمرض السكري والغدد الصماء ، طرابلس ، ليبيا. تم جمع البيانات باستخدام استبيان. في وقت لاحق تم تحليل البيانات للحصول على ؛ المتوسطات والنسب المئوية والانحرافات المعيارية والمعبر عنها كإحصائيات وصفية. تم تضمين ما مجموعه 150 وصفاً طبية حيث كان 38 ٪ من المرضى من الذكور و 62 ٪ من الإناث. كان متوسط عمر المرضى المصابين بداء السكري  $52.03 \pm 9.12$  سنة. وكانت 92 ٪ وصفات للمرضى الذين يعانون من مرض السكري من النوع 2. تلقى جميع مرضى السكري من النوع 1 (ن = 12) الأنسولين البشري. كان المبتغورين هو الدواء المضاد لمرض السكر الموصوف عادة في كلا الجنسين. بالنسبة للمرضى الذين تقل أعمارهم عن 45 عامًا والذين تتراوح أعمارهم بين 45 و 60 عامًا ، كان المبتغورين هو الأكثر شيوعًا ، بينما كان الموصوفين بين المرضى فوق سن 60 عامًا هو السلفونيل يوريا الأكثر شيوعًا. في الختام ، تباينت نمط استخدام الأدوية المضادة لمرض السكر بين مختلف الفئات العمرية والجنس.

## DEDICATION

*I am greatly indebted to many people who have played different roles that enabled me to bring this work to its present form.*

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