

IMPACT OF FAMILY BACKGROUND AND QUALITY OF LIFE ON DIABETES CONTROL

Authors: **Ahmad S., Tavakolipour A.**

Supervisor: **Prof. MUDr. Rudolf Chlup, CSc**

PALACKY UNIVERSITY OLOMOUC



Faculty of Medicine and Dentistry

DEPARTMENT OF PHYSIOLOGY

INTRODUCTION

Diabetes mellitus is a metabolic disorder, characterised by an abnormal or prolonged high levels of glucose in the blood (while untreated). The purpose of this research is to assess the quality of life of individual with diabetes and to assess the environmental factors dependent on it.

METHODOLOGY

A cross-sectional study was conducted on 138 people with type 1, type 2 and gestational diabetes. Probandes were recruited from different hospitals through some contacts. Results were gathered from 2nd November 2022 to 5th April 2023 from different countries (figure 2). Africa (Nigeria), America, Asia (Pakistan, Iran, India, Sri-Lanka, Japan, Qatar, Lebanon) and Europe (UK, Ireland, Czechia, Slovakia, German, Ukraine, Greece, Cyprus). Data was collected using standardised DQL, FHD, DCCT questionnaires consist of 23 questions in total. ED-5Q was measured to determine the quality of life using 5 dimensions (figure 1). Blood glucose and HbA1c was measured according to the medical records. Data was analysed using descriptive statistics.

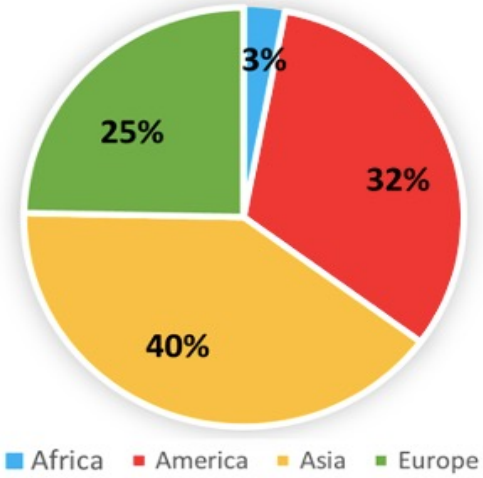


Figure 2 demonstrates PWD from different continents.

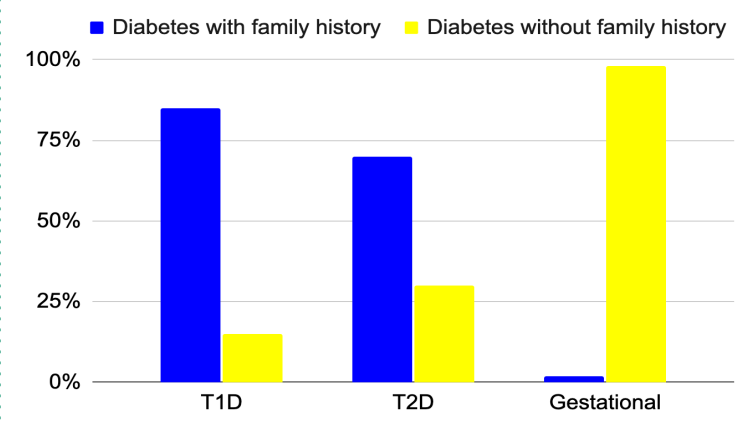


Figure 3 illustrates whether each of the three main types of diabetes (type 1, type 2, and gestational) have a family history or not.

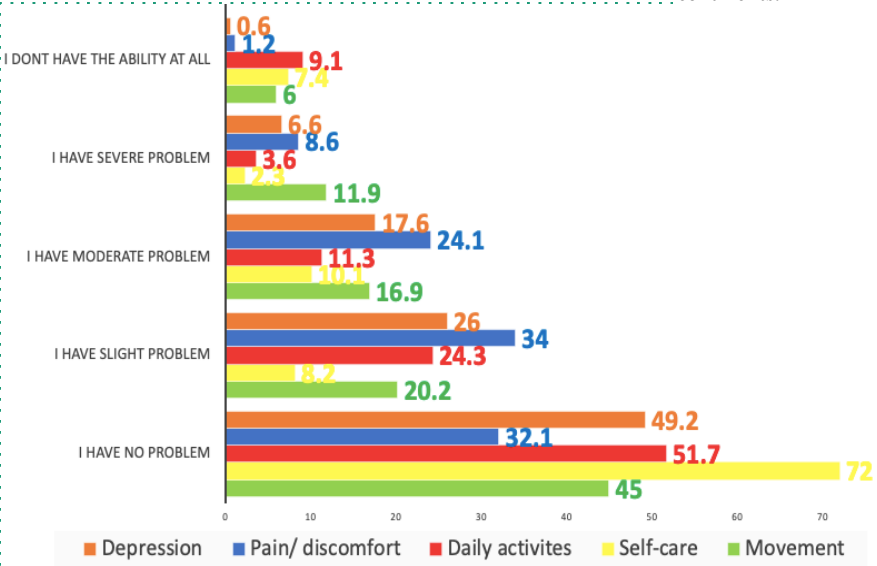


Figure 1 shows Patients quality of life classified as per EQ-5D measures

Presented at the Svoč conference, LF UP Olomouc, 23rd May 2023

Types	Hypertension	Atherosclerosis	Kidney failure	Cystic fibrosis	Asthma	CVD	Premature delivery
1	26.2%	18.8%	41.8%	6.9%	6.3%	-	-
2	19.7%	35%	-	-	27.4%	17.9%	-
Gestational	42.8%	-	-	-	-	57.2%	14.3%

Table 1 shows the percentage of complications that occurred or increased the risk due to diabetes

RESULTS

- 54% were females. .
- 11% had smoking history.
- 64% of type 2 PWD are on lifestyle modifications and oral antibiotic medications
- 41% are using antidiabetic monotherapy.
- 94% of PWD take medications regularly as prescribed by the doctor.
- 33% of the probandes were admitted to the hospital for diabetes at least once.
- When compared to those without a family history of diabetes, those with one had a higher HbA1c.
- 68% reported the main problem affecting their quality of life was pain and discomfort, followed by mobility, and depression and anxiety. Statistically, there's a significant difference between QoL of males and females. Patients from different marital statuses, education levels, employment status, and duration of the disease showed a significant difference in quality of life, except for depression.

Age	Percentage	BMI	Percentage
Under 25	19%	Under 18	6%
25-40	49%	18-27	72%
Over 40	32%	Over 27	22%

CONCLUSION

Genetics and lifestyle factors may have an impact on the individual's chance of acquiring diabetes. People with diabetes can maintain a healthy lifestyle if they engage themselves in physical exercise and eat healthy. In order for the practising physician to better understand the clinical implications of these metrics and for health care planners to utilise them in determining priorities, future research should be used to illustrate the relationships between medical treatments, clinical and physiological changes, and QoL.