Mental health problems in adults with diabetes: prevalence and potential determinants

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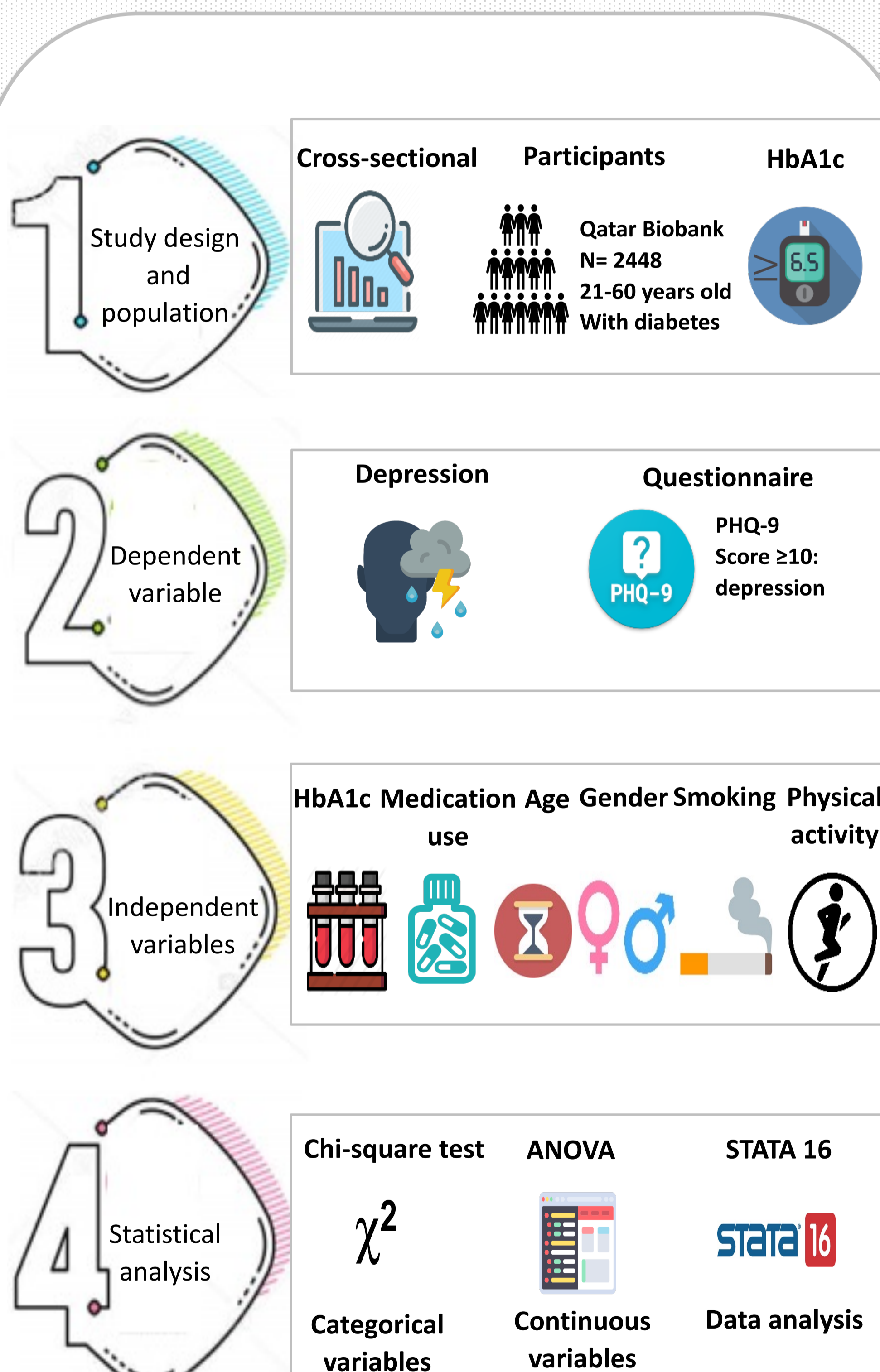
Abstract

Depression is associated with several chronic diseases such as diabetes. Diabetes is a long-term health disorder that have many health complications such as mental health problems, if left untreated. Our study aimed to determine the prevalence of depression among Qatari patients with diabetes, and to investigate the potential determinants of depression. Our results revealed that the prevalence of depression among the target population was **15.4%**. Females, younger adults, smokers and patients with higher education had more depressive symptoms.

Keywords: diabetes, depression, Qatar Biobank, adults.

Introduction

- The prevalence of diabetes in Qatar was **17%** in 2019.
- Depression is one of the critical factors that worsen the management and complications of diabetes.
- Depression is associated with several chronic diseases such as diabetes and could increase its complications.
- This study is considered the first of its type in Qatar.

What we did

What we found in the Qatari population

- Prevalence of depression:

Graph 1. Prevelance of depression in the Qatari diabetic patients.

- Odds ratio (95% confidence interval) for depression:

Determanint	Odd ratio	Confedence intrval
Female[2]	2.458***	[1.73 – 3.49]
Age[2]	0.948***	[0.94 – 0.96]
Smoking[2]	2.030***	[1.33 – 3.09]
High education[1]	1.351*	[1.00 – 1.82]
Diabetes medication other than insulin[2]	0.575***	[0.44 – 0.75]

[1]Model 2; adjusted for poor glycemic control, age, gender, smoking status, physical activity, education level, BMI.
[2]Model 3; further adjusted for insulin use, use of diabetes medications other than insulin, and use of hypertension medications.
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 1. Odds ratio (95% confidence interval) for depression.

Conclusion

- This study indicated a dialectical relationship between diabetes and depression regardless of different confounding factors I.e., the improvement in one variable, leads to the improvement in the other and vice versa.
- As per the Health Belief Model, patients who perceive the risks and their susceptibility, are motivated for better health management.
- We recommend organizing future awareness campaigns on diabetes and its management to increase education.
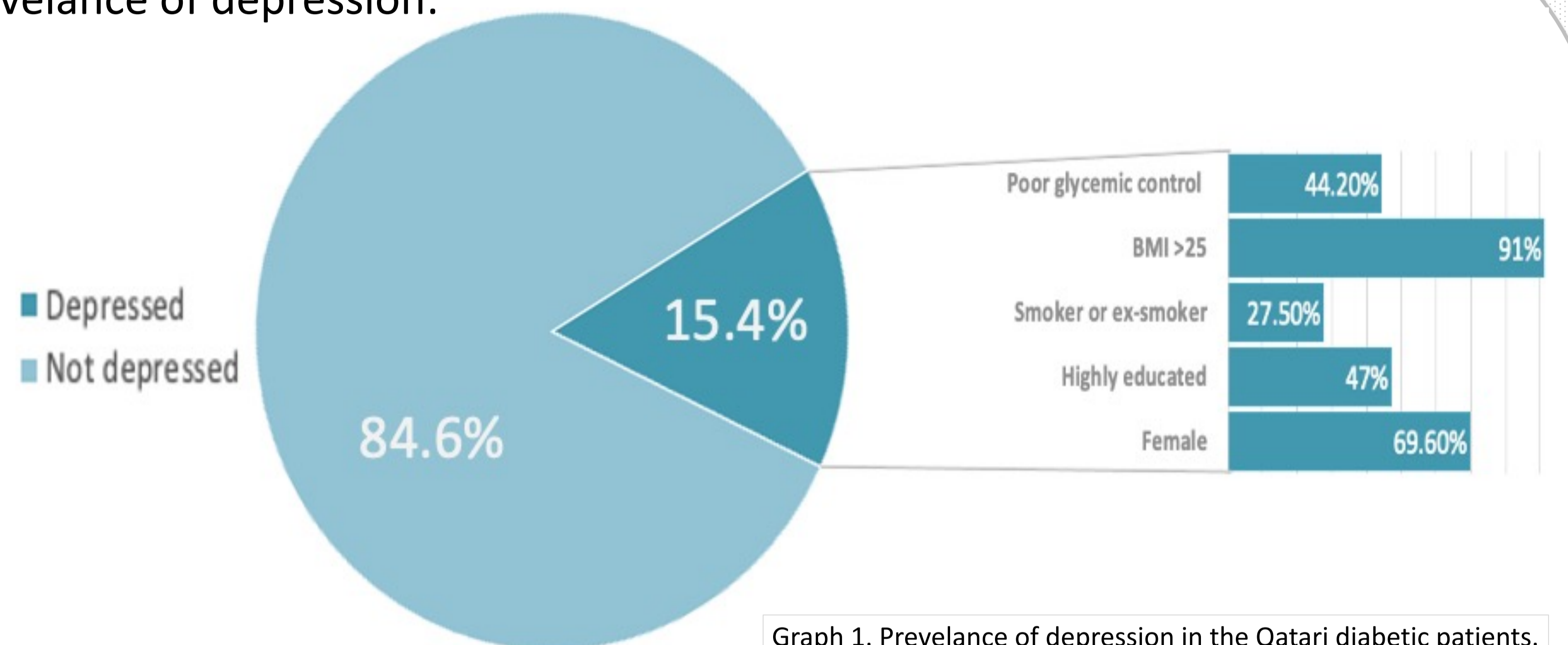
Acknowledgments

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