

# PREDIABETES: Knowledge, Attitudes, Practices & Risk level in the UAE

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## 1 INTRODUCTION

- Prediabetes is a **reversible** state of mild hyperglycemia that **increases** the risk of developing type 2 diabetes mellitus (T2DM)<sup>1</sup> by 5 to 6 fold.<sup>2</sup>
- Early detection and management are effective in **delaying and / or avoiding** the onset of T2DM.<sup>2</sup>
- **Raising awareness** on prediabetes is associated with increased engagement in healthy habits and **decreased risk** of developing T2DM.<sup>4</sup>

### ▶ AIM

- To determine the knowledge, attitudes, practices (KAP), and risk level of prediabetes and their associated factors in the adult UAE population.

## 2 METHODS

- A cross-sectional study was conducted using non-probability convenience and snowball sampling of **414 individuals** from the UAE adult population during February and March of 2022.
- Data was collected through a self-administered online questionnaire.
- The validated Knowledge Attitude Practice-Prediabetes Assessment Questionnaire (KAP-PAQ)<sup>3</sup> and the Finnish Diabetes Risk Score (FINDRISC)<sup>6</sup> were adopted alongside other complimentary questions.
- IBM SPSS 28 was used to analyze the data. Chi-Square tests, frequencies, and percentages were reported.

## 3 RESULTS

### ▶ DEMOGRAPHICS

- 64.3% (n=266) of participants were females
- 75.6% (n=313) were 18-45 years old
- 20.8% (n=86) had 1 or more chronic illnesses.
  - n=63 of them have diabetes mellitus & /or hypertension.

### ▶ KNOWLEDGE

- Having any chronic illness was correlated with significantly better knowledge of prediabetes (p<.001).
- 71% (n=294) of participants were willing to watch an educational video to learn more about prediabetes.

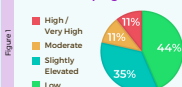
### ▶ ATTITUDE

- **Only 16.7% of participants (n=69) were aware that having prediabetes does not mean an inevitable progression to T2DM.**
- Positive attitudes (feelings, beliefs, & preconceived ideas) towards prediabetes were not associated with lower risk levels, knowledge, or practices.

### ▶ PRACTICES

- **People who were aware that controlling blood sugar can stop prediabetes from progressing into T2DM were more likely to have better lifestyle practices (p=.009).**

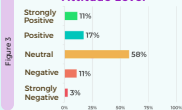
### Risk Level of developing T2DM



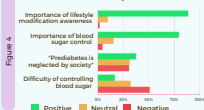
### Knowledge Level



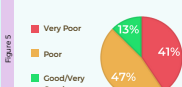
### Attitude Level



### Attitudes toward prediabetes



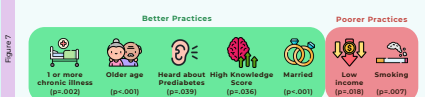
### Practices Level



### Frequency of checking blood sugar levels



### Factors associated with:



## 4 DISCUSSION

- A significant proportion of our non-diabetic population is at a high risk of developing prediabetes and T2DM, which is slightly lower than the prevalence reported in Dubai's population?<sup>7</sup>
- Other studies show that increasing knowledge leads to positive effects on attitudes and practices.<sup>5</sup> Accordingly, there lies an evident need to incentivize the development of prediabetes awareness programs.
- The significant correlation between awareness of the effect of managing prediabetes on avoiding progression to T2DM should be a key point to be considered in these programs.
- The association between having chronic illnesses and higher knowledge levels may be due to health-information-seeking behavior<sup>8</sup> in this group.

## 5 CONCLUSION

- The **knowledge** about prediabetes is generally **insufficient** and healthy lifestyle **practices** are **lacking**. Most participants showed an **interest in learning** more about prediabetes. The findings suggest a need for targeted interventions to improve KAP towards prediabetes, as well as an increased emphasis on prediabetes **awareness** programs in the UAE.

### ▶ LIMITATIONS

- The sample does not accurately represent the population of the UAE due to the use of convenience and snowball sampling.
- Self-reported data may be subject to recall bias.

### ▶ REFERENCES

