



An investigation into the ethnic distribution of diabetes and awareness of diabetic retinopathy among members of the Diabetes Association of Trinidad and Tobago (DATT) for the period 2020 – 2021 and determination of how COVID-19 impacted their treatment.

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Introduction

- Diabetic retinopathy (DR) is a condition whereby persons who suffer from diabetes have retinal damage resulting from consistently high blood glucose levels
- DR is the leading cause of blindness in Trinidad and Tobago, accounting for 11.4% cases of blindness
- Screening is the best way to prevent the development of DR as early medical intervention reduces the chances of blindness occurring
- Limited awareness of DR among the population hinders the ability for earlier intervention

Objective

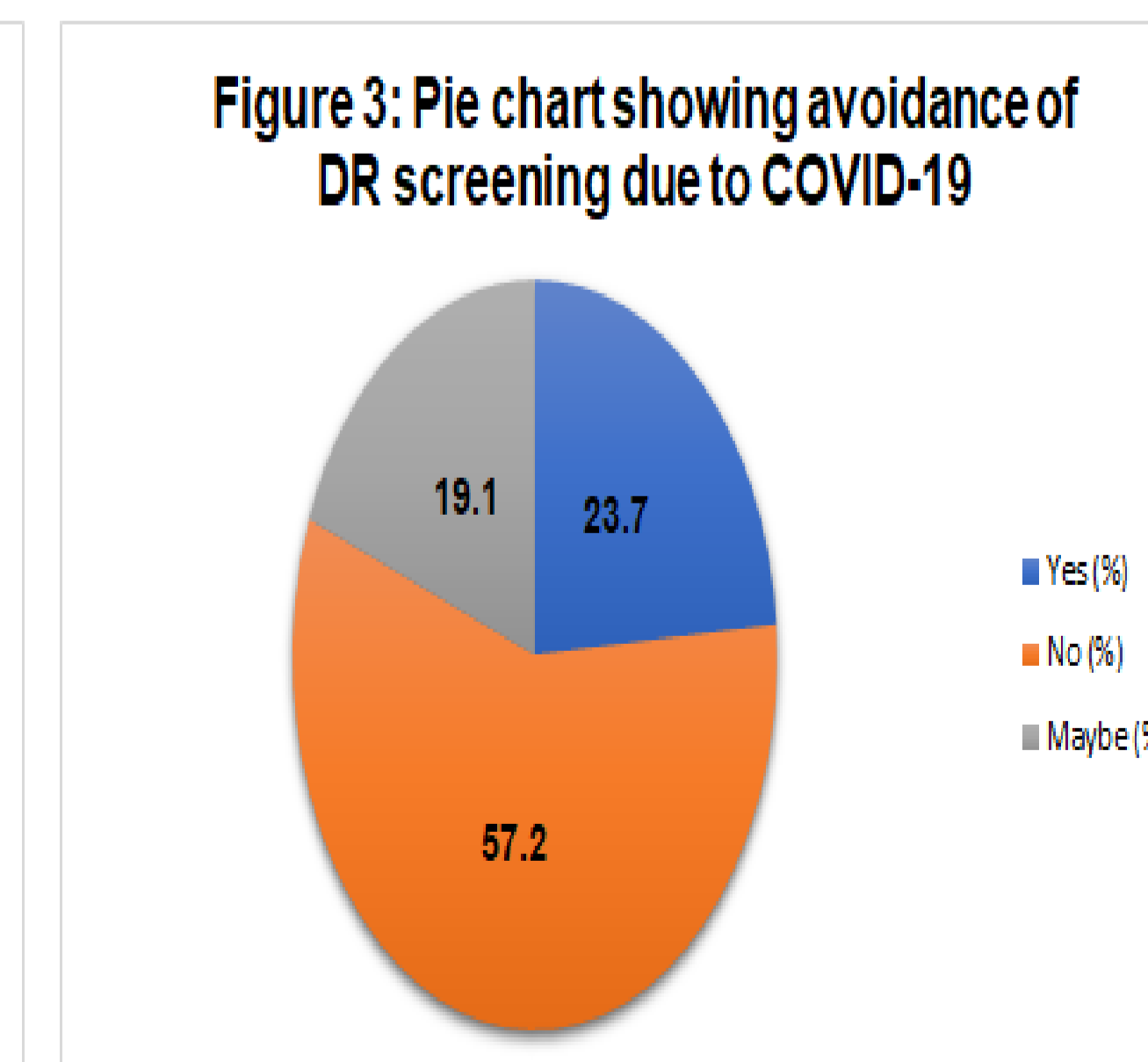
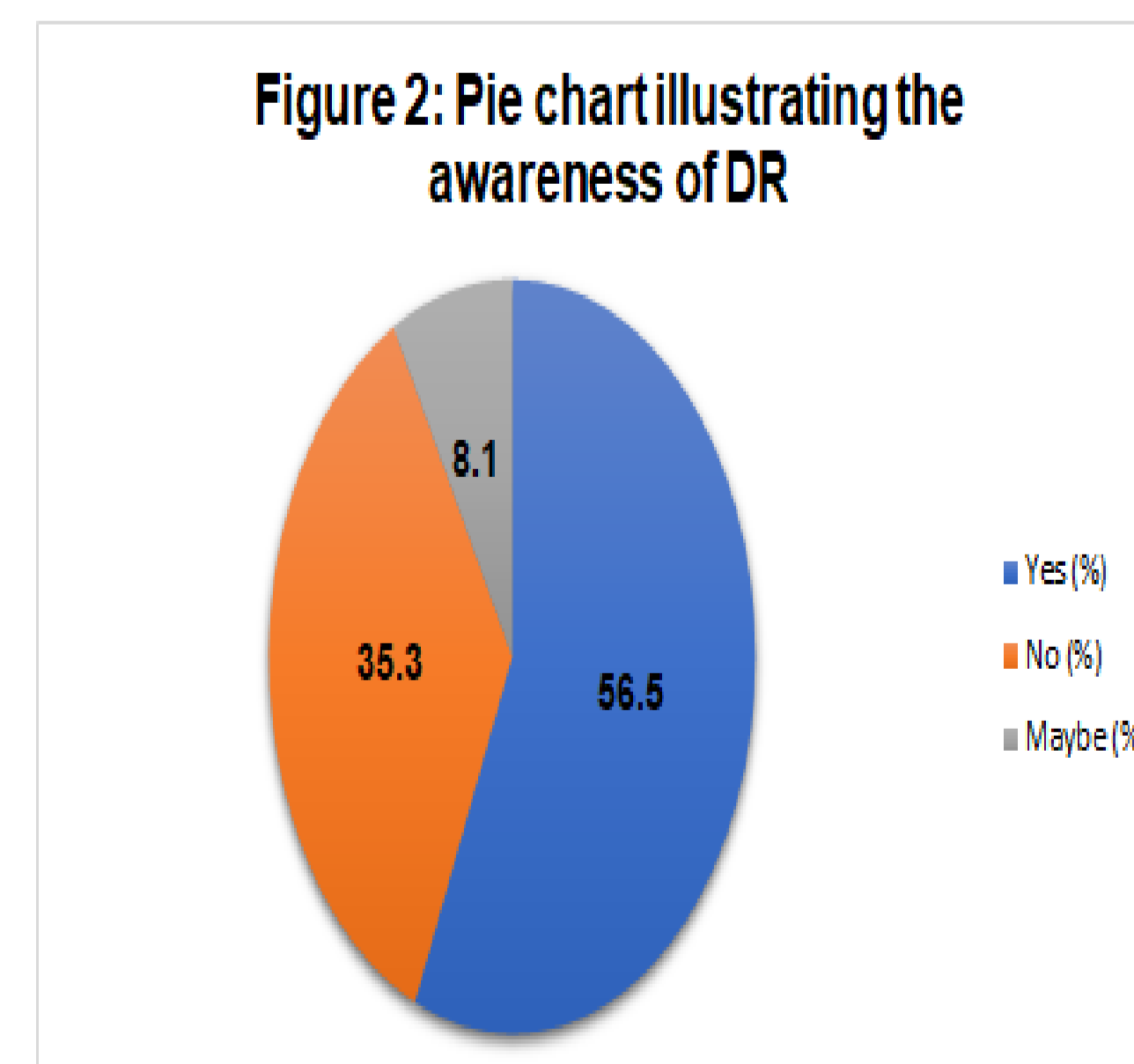
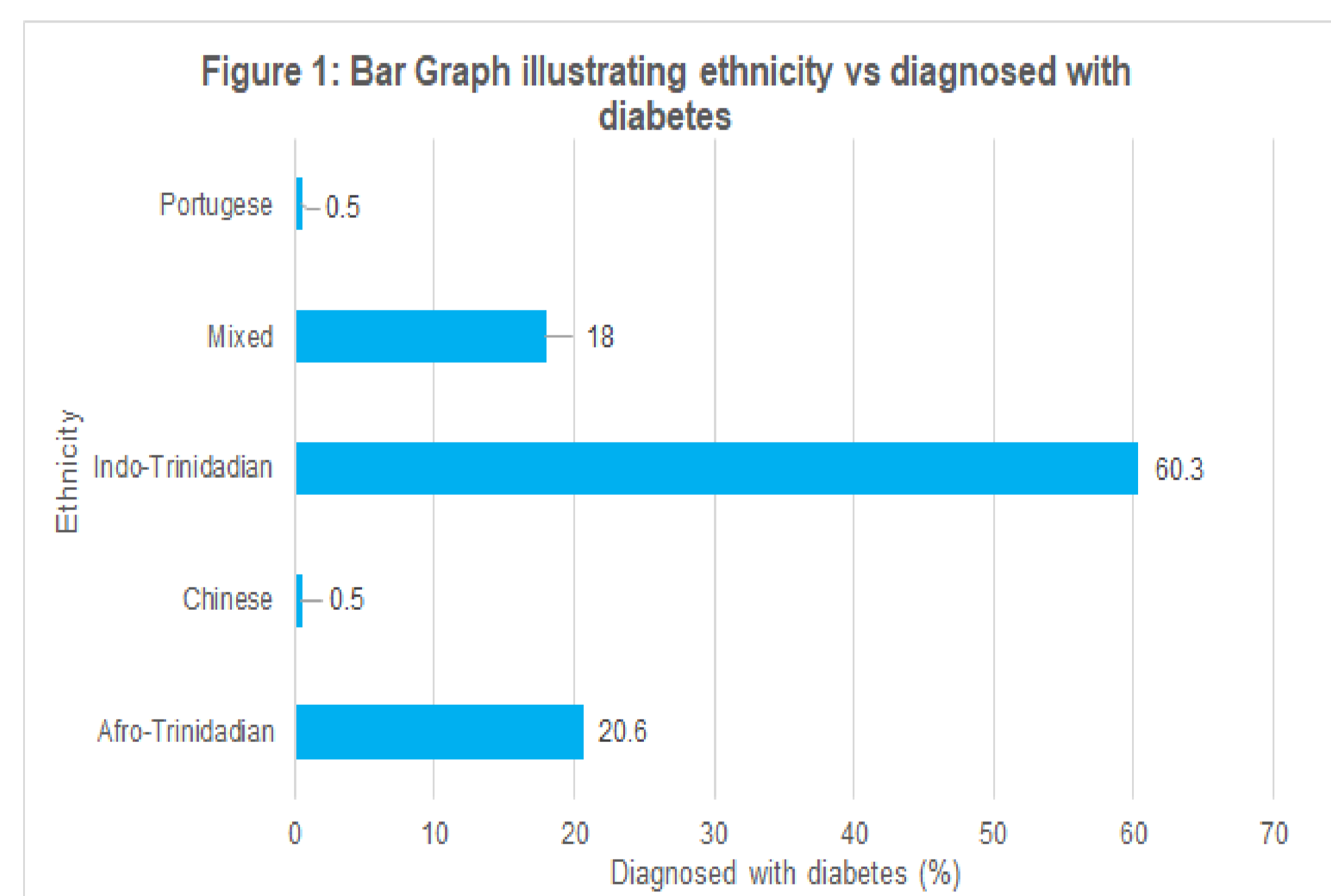
- To determine the ethnic distribution of Diabetes Mellitus among the affiliates of the Diabetes Association of Trinidad and Tobago (DATT)
- To evaluate the awareness of Diabetic Retinopathy among the affiliates of the DATT
- To assess the impact of the COVID-19 pandemic on those who are diagnosed with diabetes and their ability to receive treatment

Methodology

- A cross sectional study was done using an online survey questionnaire which was distributed to the affiliates of DATT
- Sampling method - Non-Probability Sampling-Self Selection
- Data collection occurred between 19th March 2021- 26th April 2021
- Targeted sample size - 189 participants
- Data collected:
 - Demographics
 - Members' knowledge of DR
 - COVID-19 impact on members' health seeking behaviour

Results

- Of 310 persons who viewed the questionnaire, 283 were completed (survey completion rate of 91.3%)
- 60.3% of the Indo-Trinidadians were diagnosed with diabetes and 20.6% of the Afro-Trinidadians were diagnosed with diabetes (Figure 1)
- More than half of the participants, 56.5%, were aware of Diabetic Retinopathy (DR) whereas 35.3% were not aware (Figure 2)
- 57.2% of participants did not avoid screening due to COVID-19 while 23.7% did (Figure 3)



Discussion

- Of 194 participants diagnosed with DM, the majority were Indo-Trinidadians (60.3%). In both instances, more Indo-Trinidadians (51.3%, 62.6%) than Afro-Trinidadians (20.5%, 20.6%) were diagnosed with type I and type II DM, respectively.
- This study found that 56.5% of participants were aware of DR. It was also noted specifically that 62.5% of diabetics and 60.6% of non-diabetics were aware of DR.
- More than half of the participants, 52,5% who were aware of DR had been screened. It was also found that of those unaware of DR, 92% were not screened. Therefore, an association was identified between awareness and screening (P<0.001).
- Fifty-two percent of the respondents reported that they avoided doctor visits during the COVID-19 pandemic. However, the pandemic did not greatly influence the respondents' decision to screen for DR as only 23.7% reported avoiding screening.

Conclusion

- DM was more prevalent among Indo-Trinidadians in comparison to other ethnicities within the examined populace
- This study also highlighted a substantial fraction of the populace was still either uncertain or uninformed about DR. This information should prompt increased efforts at educating Trinidadians about DR to increase screening and achieve better patient outcomes for diabetics
- COVID-19 did not contribute significantly to persons refusing to be screened for DR

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