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## Background

- Trinidad and Tobago is amongst the countries with the greatest burden of type II diabetes in the western hemisphere
- Educating type II diabetic patients in controlling their glycosylated hemoglobin (HbA1c) are recommended as measures to reduce morbidity and mortality associated with type II diabetic complications
- Measurement of HbA1c in type II diabetic patients represents their glycemic history for the former 8 – 12 weeks and should be tested every 3 months to monitor patients’ metabolic control
- This study is aimed at measuring HbA1c awareness amongst the T2D population in Trinidad and making recommendations based on the results

## Aims and Relevance to Public Health

- This study focuses on type II diabetic patients’ awareness of the HbA1c test and how this knowledge facilitates their personal management of the disease
- In T&T, the high number of type II diabetic cases can lead to an undercutting of productivity and raised outlays in healthcare
- Public health awareness on the contributing factors of diabetes can prevent a sizable percentage of the population from becoming diabetic, thereby reducing the economic drain on the nation and the individual
- This study seeks to uncover if diabetic individuals are equipped with not just the tools to manage their condition and maintain a decent quality of life, but possess the knowledge that accompanies it as well

## Objectives

RQ: Does awareness of the HbA1c test influence personal management of type II diabetes?

The objectives were to:

- Determine a suitable population and location
- Develop and administer the questionnaire
- Determine the awareness of HbA1c value amongst the type II diabetic population
- Determine if there are any relationships bet HbA1c awareness and lifestyle factors such as diet and exercise
- Determine if there are any relationships bet HbA1c awareness and other demographics such as education level

## Methodology

- A questionnaire was designed to target type II diabetic patients of the EWMSC and SFGH Adult Diabetic Outpatient Clinics
- Questionnaires were administered face-to-face and items included demographics (gender and education), medical history, diabetic status, lifestyle and self-management practices (for example exercise intensity)
- A sample size of 222 patients were used in this study, this accounted for 15 % non-responders and utilized a project precision of 40% of people who were aware of HbA1c, with a precision of 7% and a type 1 error of 5%
- Data collected were analyzed using SPSS Software version 16 for Windows (IBM, Ca, USA)
- HbA1c data was coded as patients who were aware vs patients who were not aware
- Pearson chi squared analyses were used to detect significant differences between the proportion of persons who were aware of their HbA1c values and their exercise intensity as well as their education level
- A p-value of < 0.05 was regarded as being significant

## Results

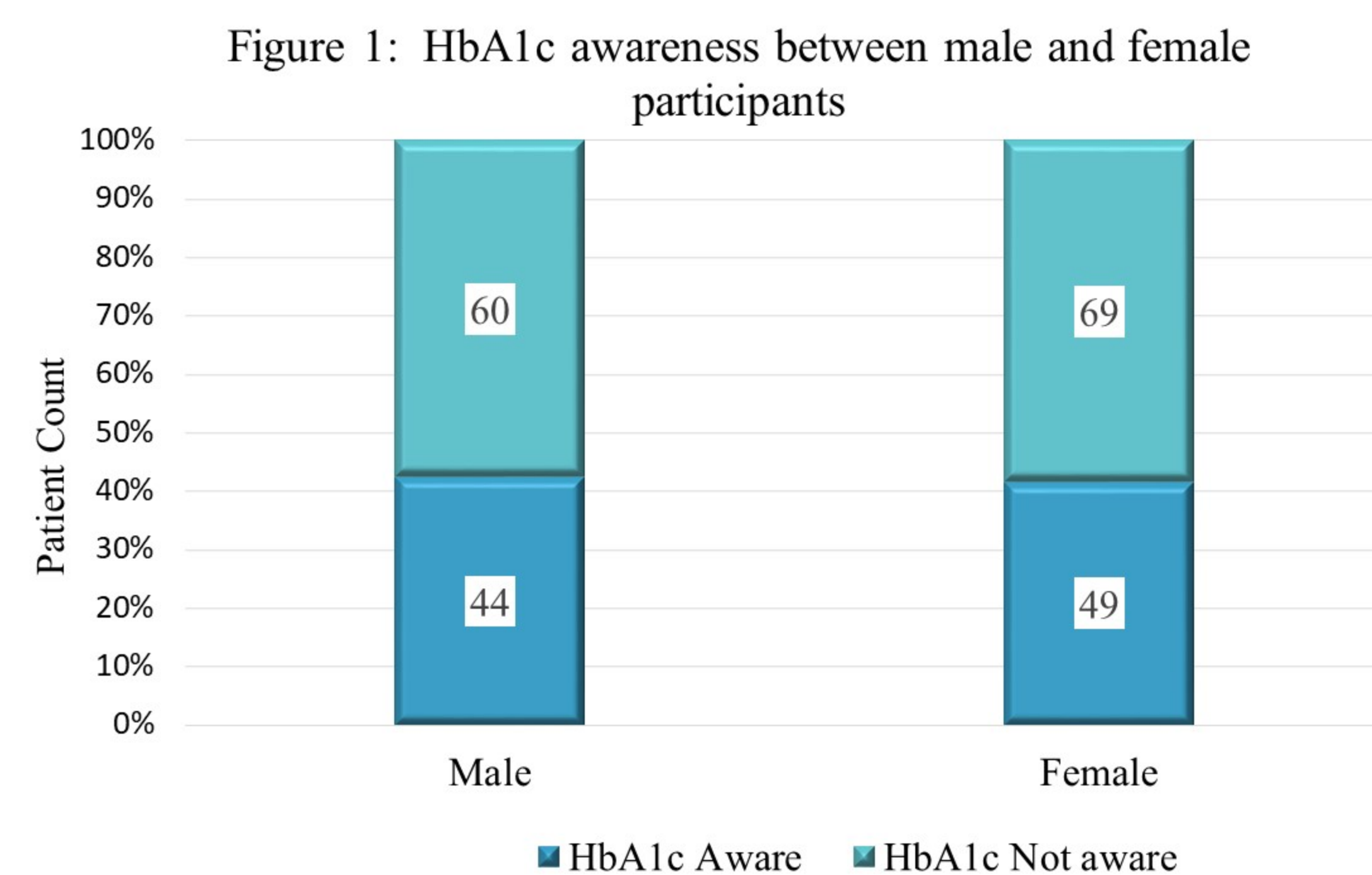
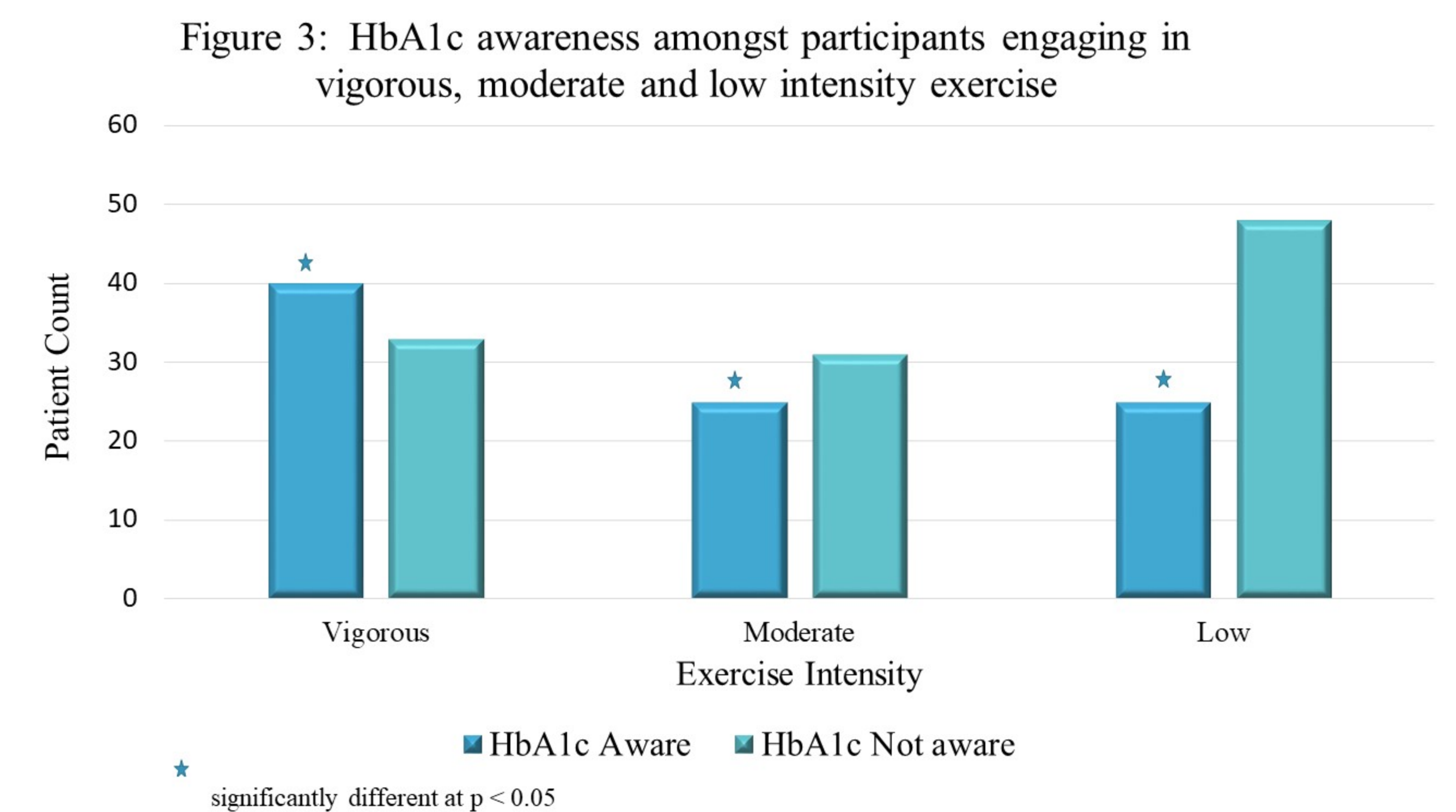
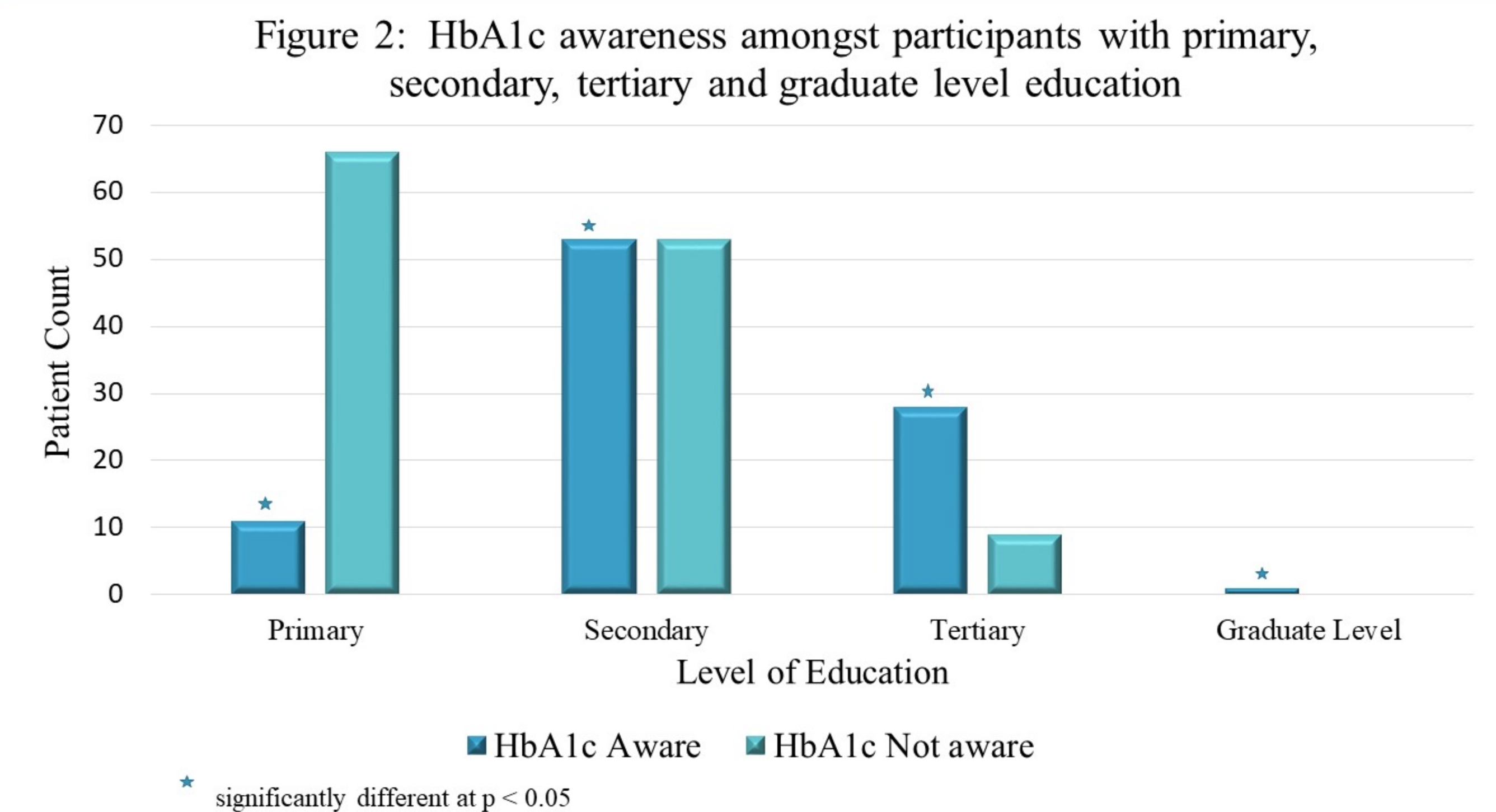


Table 1: HbA1c awareness amongst participants with high and low carbohydrate breakfast choices

	Aware of HbA1c value	Not aware of HbA1c value
High Carbohydrate Breakfast	69	111
Low Carbohydrate Breakfast	19	16

## Results



## Conclusions

- There was a significant relationship between HbA1c awareness and the education level of the type II diabetic patients
- There was a significant relationship between HbA1c awareness and the intensity of exercise performed by type II diabetic patients
- There were no significant relationship between HbA1c awareness and carbohydrate breakfast intake of type II diabetic patients
- 58.1% of type II diabetic patients were unaware of the importance of knowing and controlling their HbA1c value which denotes the need for greater public health awareness of the HbA1c value in glycemic control of type II diabetic patients