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Research Article

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Relation between Katsaridaphobia and Blood Glucose Level

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Abstract

Blood glucose refers to the amount of sugar (glucose) in your blood, also known as Serum Glucose Level. Increased blood sugar level for a long time can damage the blood vessels. Normal Fasting Glucose level in blood is 70 – 100 mg/dl, while sugar level after two hours of eating (Random) must be below 140 mg/dl. In this project, we are discussing about phobia of cockroaches named as Katsaridaphobia. Main objective behind this study was to find interrelation between katsaridaphobia and blood glucose level. This project was carried out by conducting a questionnaire in 130 students of university. A simple glucometer was used to measure sugar levels of students. . Student's t-test was performed for statistical analysis.

Keywords: Blood Sugar Level, Interrelation, Katsaridaphobia, Glucometer

Introduction

Blood Glucose Level

Blood glucose refers to the amount of sugar (glucose) in your blood, also known as Serum Glucose Level [1]. This amount of glucose can vary according to the dietary and exercise habits. Normal Fasting Glucose level in blood is 70 – 100 mg/dl, while sugar level after two hours of eating (Random) must be below 140 mg/dl. According to NICE guidelines UK, normal pre-prandial serum glucose level must be 4 – 7 mmol/l, post- prandial should below 9 mmol/l and not higher than 8 mmol/l before going to bed at night. In diabetic people, blood sugar level varies more often as compared to the normal ones. Increased blood sugar level for a long time can damage the blood vessels [2]. A1C is a type of blood test which is usually used to measure overall sugar level in blood. It helps to calculate amount of glucose present in blood for about past three months. According to American Diabetes Association (ADA), there are different ranges for different categories or people which have been categorized according to age, pregnancy, and duration of diabetes, hypoglycemia frequency or other health issues [3]. Evaluating blood glucose on daily basis maintains its level is a part of Self Blood Glucose Monitoring. Different types of glucometers or some other tests for example Hemoglobin A1C can also be used to calculate serum glucose level.

Katsaridaphobia

A number of people in this huge world have different kind of phobias. Some may have zoophobia (fear of animals), some can be afraid of heights, water or even escalators. In this project, we are discussing about phobia of cockroaches named as Katsaridaphobia [4]. Most commonly females are mostly frightened of such creepy insects. Extreme state of fear may cause harmful consequences including panic conditions with high heartbeat, screaming out loud, or high blood pressure and even some people may faint because of severe fear or cockroaches [5]. Such phobia can also be passed to children when they see their elders screaming and crying on the sight of cockroaches.

Objective

Main objective behind this study was to find interrelation between katsaridaphobia and blood glucose level. Katsaridaphobes and non-katsaridaphobes may have different calculations for blood glucose measurements.

Methodology

Project Designing

Present project was designed to find interrelation between katsaridaphobia and normal blood glucose level. This project was carried out by conducting a questionnaire in 130 students of university belonging to different departments and with age group of 20-25 years. All of the students were asked either they are katsaridaphobes or not (having fear of cockroaches or not).

Measuring Blood Glucose Level

Usually different tests and instruments can be used to measure sugar level of any person. Any simple glucometers can also be used in home on daily basis for maintenance of sugar level in blood [6]. We have also used a simple glucometers to measure sugar levels of students. Any of the fingers from their hands was pricked with a lancing device and a minute quantity of blood was placed on the test strip. This test strip was put inside the glucometer and the value was noted from the screen of respective glucometer. Results are given in less than 15 seconds by glucometers [7].

Statistical Analysis

M Stat software was used to analyze the results. Student's t-test was performed. $p<0.05$ was considered as significant.

Results & Discussions

In this study, total 130 students were accommodated and agreed to get their blood glucose level measured. Out of these 130 university students 79 of them were katsaridaphobic (14 males and 65 females) while 51 were non-katsaridaphobic (17 males and 34 females) as mentioned in Figure 1 and Figure 2 respectively.

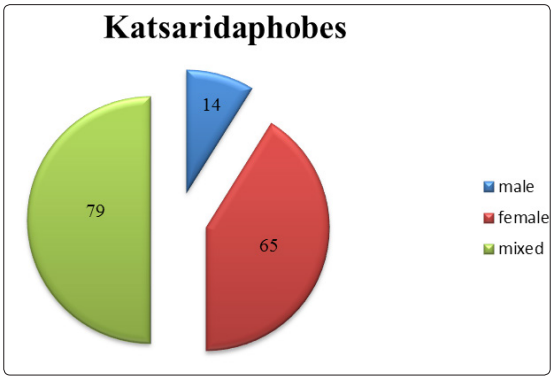


Figure 1: Division of students having Katsaridaphobia according to different categories

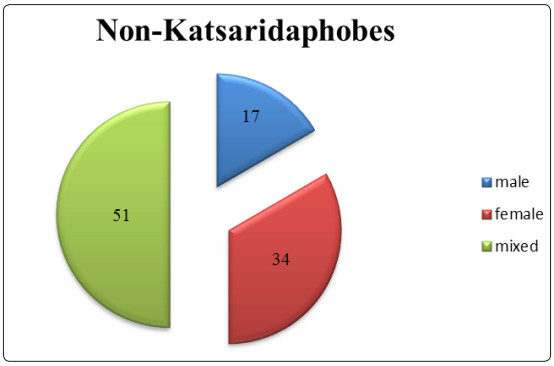
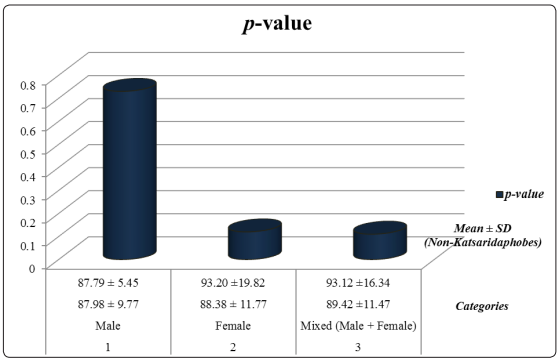


Figure 2: Division of students not having Katsaridaphobia according to different categories

Mean ± SD of katsaridaphobic and non-katsaridaphobic students including male and female separately and combined are given in Figure 3 p-values were estimated using Students t-test.



$p>0.05$ = non-significant

Figure 3: Correlation of blood sugar level (Mean ± SD) with Katsaridaphobia

Conclusion

As mentioned in Figure 3, none of the p-value was smaller than 0.05, which indicates all of the results are insignificant and there is no interrelation between katsaridaphobia and blood glucose level.

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