



THE IMPORTANCE OF THE CUMULATIVE DISTRIBUTION OF BLOOD PREVALENCE OF DIABETES

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Abstract: The aim of this study is to clarify the importance of conducting a cumulative blood sugar analysis in order to follow up and pay attention to the health of the residents of the city of Mecca to know the direct causes of diabetes, and to know the attitudes and opinions of the residents of Mecca regarding the cumulative blood sugar test due to its importance to them and their health. The questionnaire was distributed to 550 people (men and women), and the responses of 500 people were obtained in all health centers in Mecca region.

Keywords: cumulative, blood prevalence, diabetes, Mecca city.

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1- Introduction: Diabetes mellitus (DM) is one of the five essential reasons for passing global ⁽⁵⁾. In Saudi Arabia, the main epidemiological diabetes advantages are not various. Diabetes mellitus among spread grown-up people has an extent of 23.7%, a proportion existence rising across the globe ^(6,7). Diabetes charges in the people of Saudi stay to be on the rising, the more persons personate recently with this situation, the more people are in danger improving mutilation, neural system illness, renal disease, darkness, hypertension, apoplexy, core illness, dental illness, and resections ⁽⁸⁾. realization and knowing about the diabetic case, its administration, complexity, and prohibition genes are critical moves for better goodness of life and its monitoring ⁽⁹⁾. A renowned foundation to prohibit this status is to grade combined amended danger agents that have an eventual effect on morbidity on top of developing community-based programs for its monitoring and forbidding. Normally, by the time a person is personate, they have the inclination to improve different involvements, such as ischemic heart sickness (a macroangiopathic step) or retinopathy (a microangiopathic procedure) ⁽¹⁰⁾. In this method, the truth is that some of the hazards (such as ecological, medicinal, and lifestyle agents) might hasty diabetes, particularly in individuals predisposed to embryonic. Due to this, diabetes drives sequels, such as hypertension. This is an essential illness move that reminds early interference to monitor the worry of diabetes within society ⁽¹¹⁾. Glycated hemoglobin - Hb A1c Glycated hemoglobin is an iron-binding protein (globulin) in the protein (hemoglobin) series (hemoglobin). Hemoglobin does not override 5 - 10% of hemoglobin blood glucose; this section is invitation-tied (HbA1c). The rate of glucose to hemoglobin relies on its standing in the blood. The higher the glucose level and the higher the sugar level in a cart, the higher it is with meals. It gives us a signal of the blood sugar level during the life period. It gives us red blood, which is about 120 days ⁽¹²⁾. Commonly, a diversity of techniques such as questionnaires based on risk estimate as well as analysis established on the condensation of plasma glucose mensuration was entered on the venous samples with enzymatic examination processes, for screening of prediabetes that are in training ⁽¹³⁾. Pencil and paper exams, for example, the American Diabetes Association's hazard quiz is useful for the point of teaching but does not finalize as well as a stand-alone exam. Prediabetes screening analysis includes but is not finite to, irregular plasma glucose level, 75 g oral glucose bearing quiz (OGTT), and fasting plasma glucose (FPG) ⁽¹⁴⁾. It can also be named moderate or

borderline hyperglycemia and can be embodied with an HbA1c of 5.7% to 6.4% ⁽¹⁵⁾. The American Diabetes Organization formerly equalizes prediabetes with the WHO's moderate hyperglycemia but newly append borderline levels of HbA1c as another signal ⁽¹⁶⁾. The experienced Committee on Diagnosis and Compilation of Diabetes Mellitus specified a middle association of people with glucose levels that do not face the standard for diabetes, yet have higher than natural. These persons were known as having impaired fasting glucose (IFG) [FPG levels 100 mg/dl (5.6 mmol/l) to 125 mg/dl (6.9 mmol/l)] or impaired glucose tolerance (IGT) [2 h values in the OGTT of 140 mg/dl (7.8 mmol/l) to 199 mg/dl (11.0 mmol/l)]. personages with IFG and/or IGT were indicated to as having prediabetes, showing a comparatively high danger for the future improvement of diabetes ⁽¹⁵⁾. universally, its expansion has been growing, and by 2030, it can increase to >470 million people sufferance from it. ⁽¹⁷⁾ Supplementary, several cutoff spots and thresholds at various societies, and healthcare settings, together with the roving canicular blood appreciation, are also used. Most basically, the existence of a plus prediabetic status shows a higher hazard of evolving the case of DM ^(7,12).

2-Material and Methods:

This study was started in (the city of Mecca in Saudi Arabia), begin writing the research and then recording the questionnaire in August 2022, and study finished with data collection in December 2022. The researcher used the descriptive analytical approach that uses a quantitative or qualitative description of the social phenomenon (the importance of the cumulative distribution of blood prevalence of diabetes). This type of study is characterized by analysis, reason, objectivity, and reality, as it is concerned with individuals and societies, as it studies the variables and their effects on the health of the individual, society, and consumer, the spread of diseases and their relationship to demographic variables such as age, gender, nationality, and marital status. Status, occupation ⁽²⁾, And use the Excel 2010 Office suite histogram to arrange the results using: Frequency tables Percentages ⁽³⁾.

3- Results and Discussion:

A questionnaire is a remarkable and helpful tool for collecting a huge amount of data, however, researchers were not able to personally interview participants on the online survey, due to social distancing regulations at the time to prevent infection between participants and researchers and vice versa (not coronavirus participation

completely disappearing from society). He only answered the questionnaire electronically, because the questionnaire consisted of tenth questions, all of which were closed. The online approach has also been used to generate valid samples in similar studies in Saudi Arabia and elsewhere (4). Regarding the ages of the participants in the research, their percentage was as follows: 16-25 (12.5%), 26-35 (16.1%), 36-45 (25.8%), 46-55 (41.9%), 56 -65 (3.7%). As for the gender of the participants, they were 83.3% male and 16.7% female (figure no.1). With regard to the first question, have you taken a cumulative blood test? The answer was 65.6% yes and 34.3% no, while the second question was about whether the result was positive. 29% answered yes and 71% answered no. The third question is about to do you exercise on a daily basis. 37.5% yes and 62.5% no. As for the fourth question, is laziness and inactivity part of your nature? 28.1% answered yes and 71.9% answered no. The fifth question asked: Are you accustomed to movement and activity on a semi-daily or daily basis? 90.6% answered yes and 9.4% answered no. The sixth question asked do any of your relatives have diabetes? 87.5% answered yes and 12.5% answered no. The seventh question was about whether you have a history of diabetes in your family. 46.9% answered yes and

53.1% said no. As for the eighth question, do you have any fear about conducting a cumulative blood sugar test for yourself? 24.2% answered yes, while 78.8% said no. The ninth question: Are you an obese person? 15.6% answered yes, and 84.4% answered no. As for the tenth question, do you have a premonition or have you heard from one of your friends or relatives that blood sugar analysis The cumulative blood build-up will lead to obsessive-compulsive disorder, anxiety, and fear of the outcome, and thus the lack of examination? 15.2% yes and 84.8% no. The eleventh question is about whether you regularly practice smoking. 33.3% answered yes and 66.7% said no. The twelfth question is: Do you have diabetes? If the answer is, yes? Answer the following question? 15.2% answered yes and 84.8% answered no. The thirteenth question: Do you have advice for people who are not interested in doing a cumulative analysis of blood sugar? If the answer is, yes? Write your answer. 85% answered yes and 15% said no. With regard to the last question, do you have advice for people who are interested in eating a lot without caring for their health and well-being? If the answer is, yes? please write it down 83.3% answered yes and 16.7% answered no(Table No.1).

(Figure no.1: the percentage of males and females

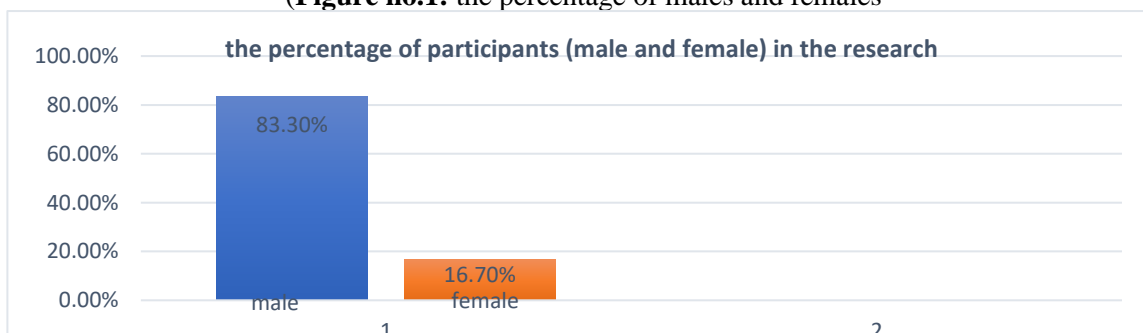


Table No.1: The importance of cumulative sugar analysis to preserve people's lives

Questions	Yes	No
have you taken a cumulative blood test?	65.6%	34.3%
whether the result was positive?	29%	71%
do you exercise on a daily basis?	37.5%	62.5%
are laziness and inactivity part of your nature?	28.1%	71.9%
Are you accustomed to movement and activity on a semi-daily or daily basis?	90.6%	9.4%
do any of your relatives have diabetes?	87.5%	12.5%
whether you have a history of diabetes in your family	46.9%	53.1%
do you have any fear about conducting a cumulative blood sugar test for yourself?	24.2%	78.8%
Are you an obese person?	15.6%	84.4%
do you have a premonition or have you heard from one of your friends or relatives that blood sugar analysis The cumulative blood build-up will lead to obsessive-compulsive disorder, anxiety, and fear of the outcome, and thus the lack of examination?	15.2%	84.8%

whether you regularly practice smoking?	33.3%	66.7%
Do you have diabetes? If the answer is, yes? Answer the following question?	15.2%	84.8%
Do you have advice for people who are not interested in doing a cumulative analysis of blood sugar? If the answer is, yes?	85%	15%
do you have advice for people who are interested in eating a lot without caring for their health and well-being? If the answer is, yes?	83.3%	16.7%

This study found that there are 33.3% of people do not exercise, while the majority of 66.7% do. The majority of them are interested in their health and exercise and do not like inactivity and laziness. With a percentage of 71.4%, and when asking the participants about whether they have a history of diabetes, it was found that 47.6% of them have the gene for diabetes from their parents or one of their relatives, with a percentage of 85.3% of which they are important for the disease genetically, and here we find that this study is compatible in terms of the incidence of the disease (genetically) with the study of Al-Dossari et al⁽¹⁾.

Conclusion:

The rational government, which is represented by the Ministry of Health, the government of tourism and hospitals, its government and those who continue, the government and the straight alike, as it builds gardens and provides them with various sports, so that the citizen and resident are interested in walking and doing exercises. This study concluded:

- 1 -Heredity plays a role in the transmission of diabetes through generations.
- 2 -Laziness is the practice of exercise and the practice of exercise is the practice of smoking.
- 3- The importance of health education with all things read or heard so that diabetes does not pass like an epidemic to society.

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