

**AWARENESS, ATTITUDE AND PERCEPTION ABOUT TYPE 2 DIABETES MELLITUS
AND ITS COMPLICATIONS AMONG MALE AND FEMALE ADULTS: A CROSS-
SECTIONAL STUDY**

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ABSTRACT

This Cross-sectional study was conducted among adult males and female population. Total number of participants were 107. Among them 47.66% were male and 52.34% were female. Urban population was 89.7% and rural 10.3%. 55.1% of the respondents knew about Diabetes mellitus. 40.68% of the participants have family history of Diabetes mellitus. 79.97% of the participants agreed about the treatment of Diabetes mellitus. Among the respondents, 81.35% do physical activities. 81.35% of the participants check their blood glucose level. 94.42% of the participants believe that Type 2 Diabetes mellitus could be prevented.

KEYWORDS: Type 2 Diabetes mellitus, Awareness, Prevention, Treatment.

INTRODUCTION

Type 2 Diabetes mellitus (T2DM) is one of the major non-communicable diseases which poses a major public health problem throughout the world.^[1] Also, Diabetes is a major cause of blindness, kidney failure, heart attacks, strokes and lower limb amputation. World Health Organization (WHO) projects that diabetes will be the seventh leading cause of death in 2030.^[2] Diabetes mellitus occurs either because of pancreas stop producing the hormone Insulin (Type 1 Diabetes), or through a combination of pancreas having reduced ability to produce Insulin alongside the body being

resistant to its action. Prevention of Type 2 Diabetes mellitus is now increasing rapidly around the globe. Type 2 Diabetes mellitus prevention interventions can be beneficial.

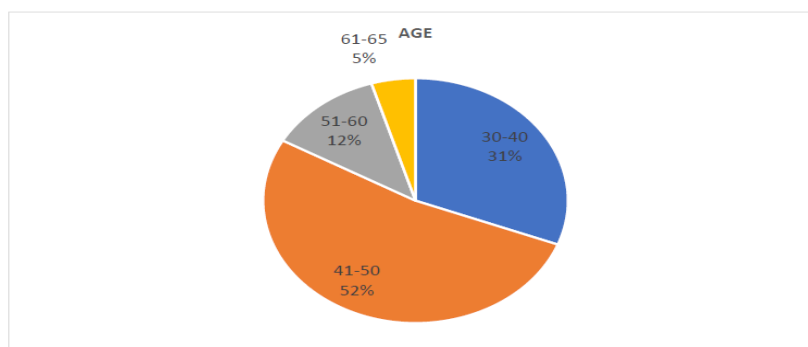
MATERIALS AND METHODS

This Cross-sectional online based study was conducted with a pre-tested and prevalidated questionnaire administered via Google forms. Those who were willing to take part only those participants were considered. The data was then statistically analysed.

RESULTS AND DISCUSSION

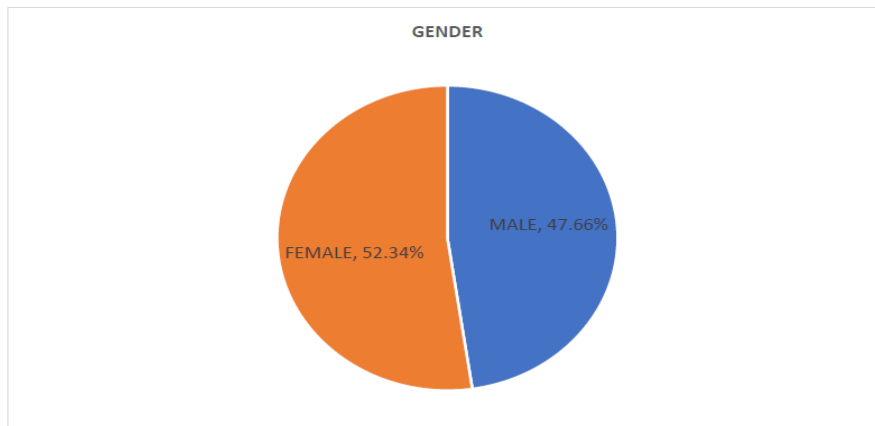
1. AGE

AGE GROUPS	30-40	41-50	51-60	61-65
NUMBER OF PARTICIPANTS	33	56	13	5
PERCENTAGE	30.84%	52.34%	12.15%	04.67%



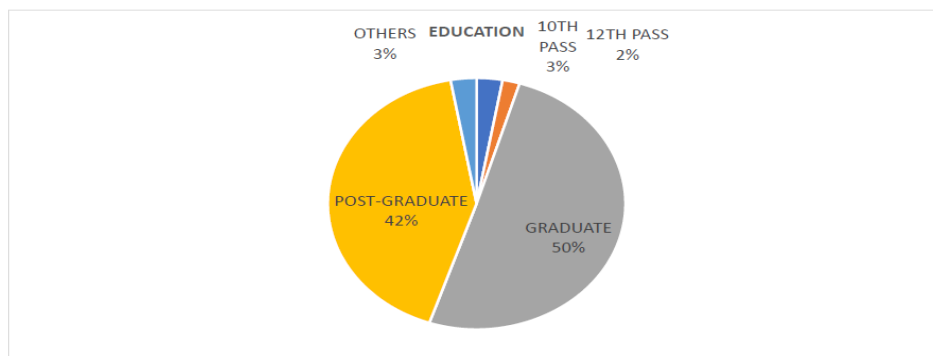
2. GENDER

GENDER	NUMBER OF PARTICIPANTS	PERCENTAGE
MALE	51	47.66%
FEMALE	56	52.34%



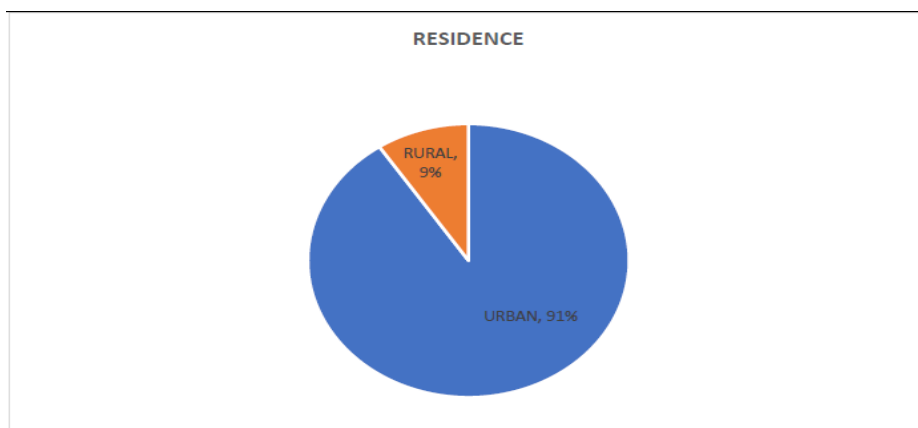
3. EDUCATION

EDUCATION	NUMBER OF PARTICIPANTS	PERCENTAGE
10TH PASS	3	02.8%
12TH PASS	2	01.87%
GRADUATE	54	50.47%
POST-GRADUATE	45	42.06%
OTHERS	3	02.8%



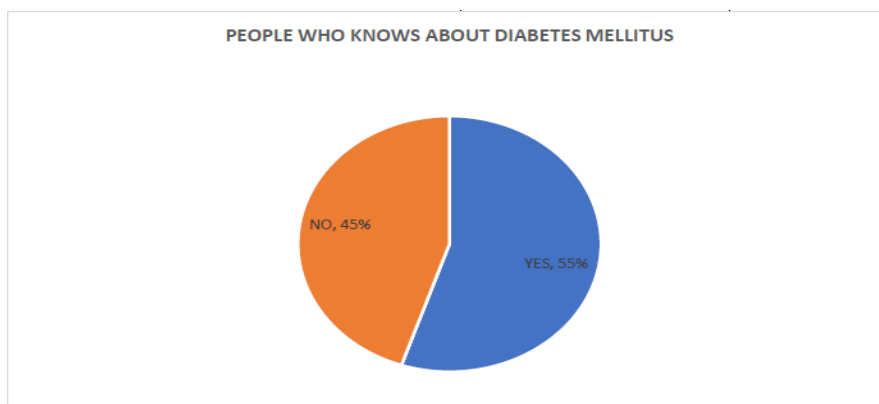
4. RESIDENCE

RESIDENCE	NUMBER OF PARTICIPANTS	PERCENTAGE
URBAN	97	89.7%
RURAL	10	10.3%



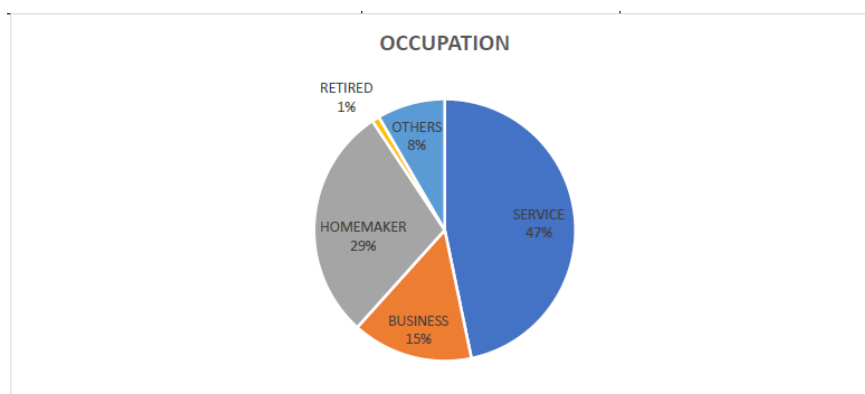
5. PEOPLE WHO KNOWS ABOUT DIABETES MELLITUS

PEOPLE WHO KNOW ABOUT DIABETES MELLITUS	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	59	55.1%
NO	48	44.9%



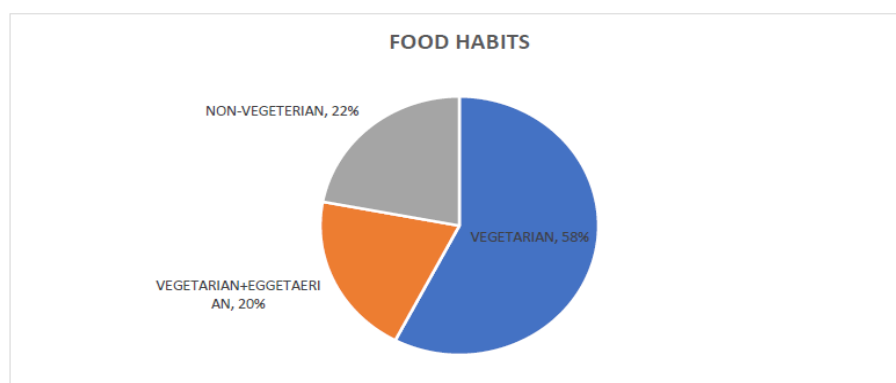
6. OCCUPATION

OCCUPATION	NUMBER OF PARTICIPANTS	PERCENTAGE
SERVICE	50	46.73%
BUSINESS	16	14.95%
HOMEMAKER	31	28.97%
RETIRED	1	0.93%



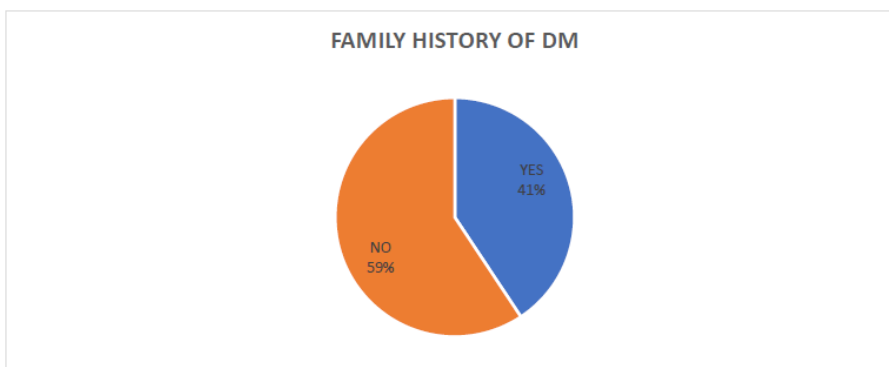
7. FOOD HABITS

FOOD HABITS	NUMBER OF PARTICIPANTS	PERCENTAGE
VEGETARIAN	34	57.6%
VEGETARIAN+EGGETAERIAN	12	20.3%
NON-VEGETERIAN	13	22.1%



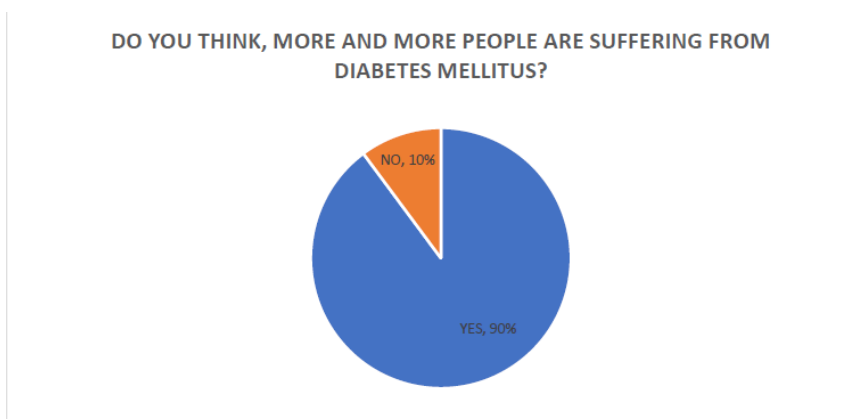
8. FAMILY HISTORY OF DM

FAMILY HISTORY OF DM	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	24	40.68%
NO	35	59.3%



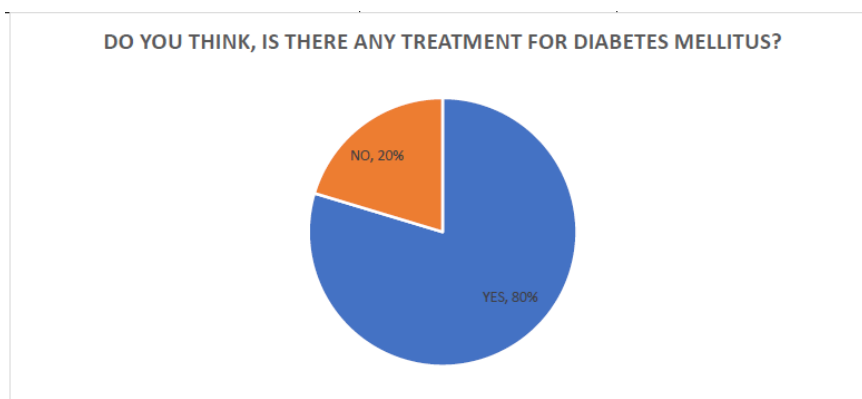
9. Do you think, more and more people are suffering from diabetes mellitus?

DO YOU THINK, MORE AND MORE PEOPLE ARE SUFFERING FROM DIABETES MELLITUS?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	53	89.83%
NO	6	10.17%



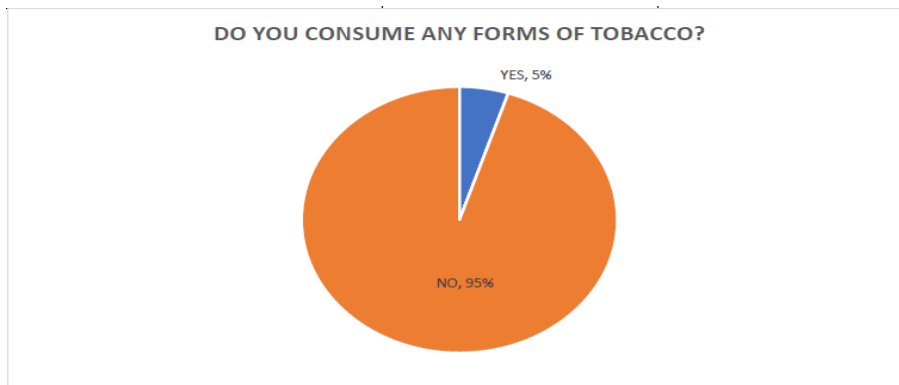
10. Do you think, is there any treatment for diabetes mellitus?

DO YOU THINK, IS THERE ANY TREATMENT FOR DIABETES MELLITUS?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	47	79.67%
NO	12	20.34%



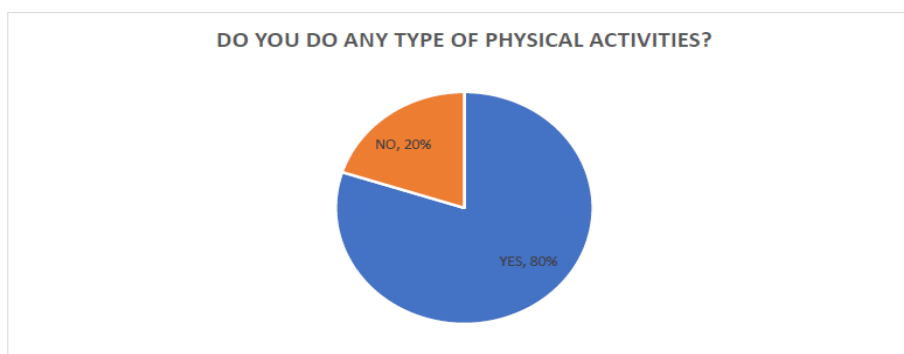
11. Do you consume any forms of tobacco?

DO YOU CONSUME ANY FORMS OF TOBACCO?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	3	5.00%
NO	57	95.00%



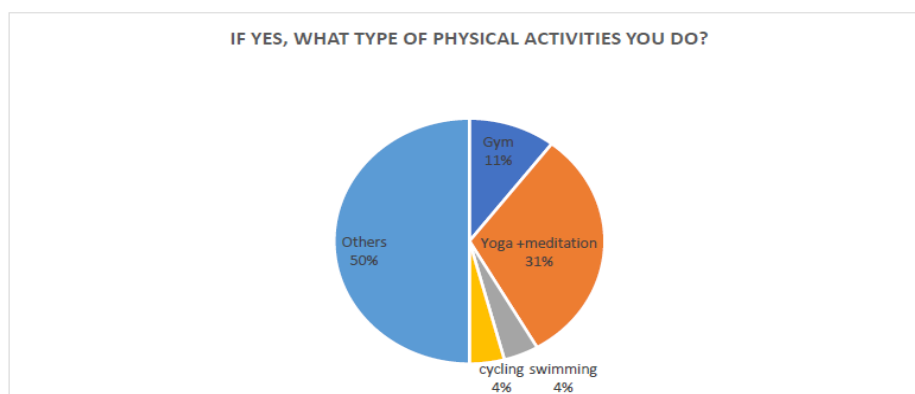
12. Do you do any type of physical activities?

DO YOU DO ANY TYPE OF PHYSICAL ACTIVITIES?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	48	81.35%
NO	12	20.34%



13. If yes, what type of physical activities you do?

IF YES, WHAT TYPE OF PHYSICAL ACTIVITIES YOU DO?	NUMBER OF PARTICIPANTS	PERCENTAGE
Gym	5	10.42%
Yoga +meditation	15	31.25%
swimming	2	04.17%
cycling	2	04.17%
Others	24	50.00%

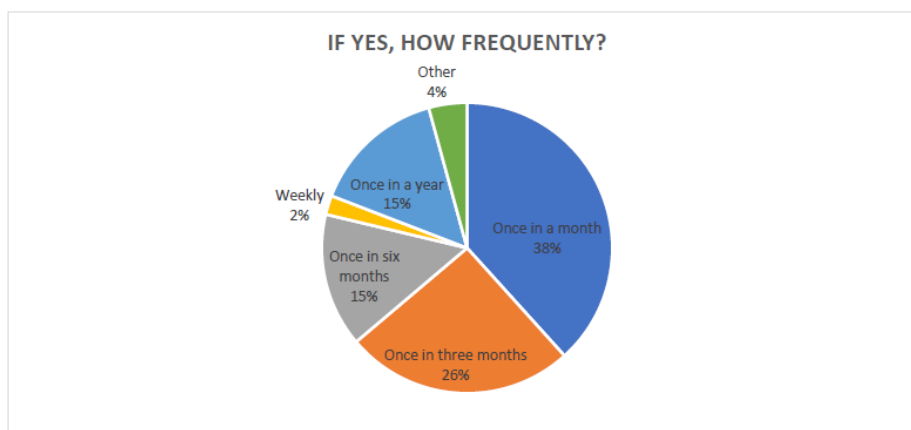


14. Do you check your BP?

DO YOU CHECK YOUR BP?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	45	76.27%
NO	14	23.73%

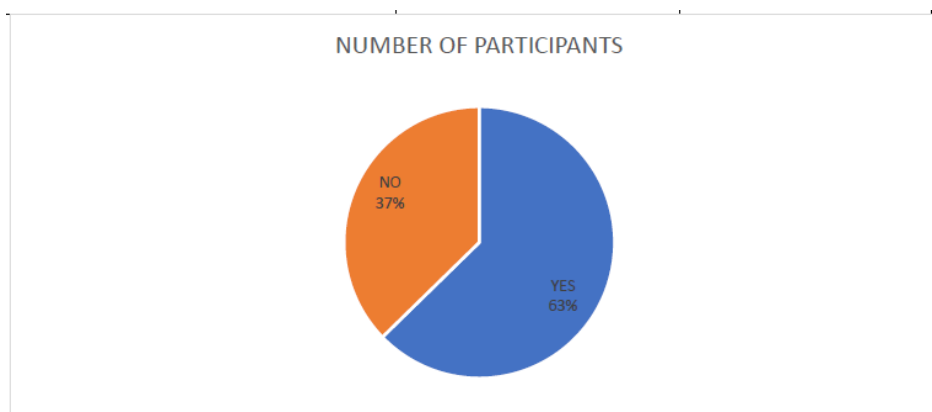
15. If yes, how frequently?

IF YES, HOW FREQUENTLY?	NUMBER OF PARTICIPANTS	PERCENTAGE
Once in a month	18	38.3%
Once in three months	12	25.53%
Once in six months	7	14.89%
Weekly	1	02.13%
Once in a year	7	14.89%
Other	2	04.26%



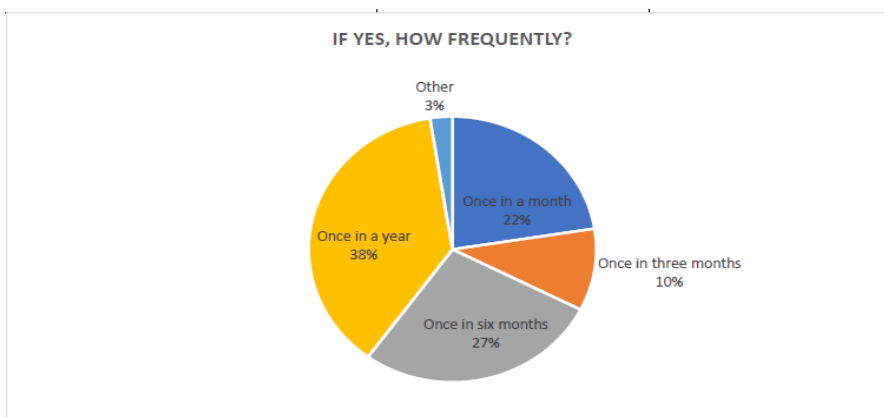
16. Do you check your blood glucose/ sugar level?

DO YOU CHECK YOUR BLOOD GLUCOSE/ SUGAR LEVEL?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	37	81.35%
NO	22	20.34%



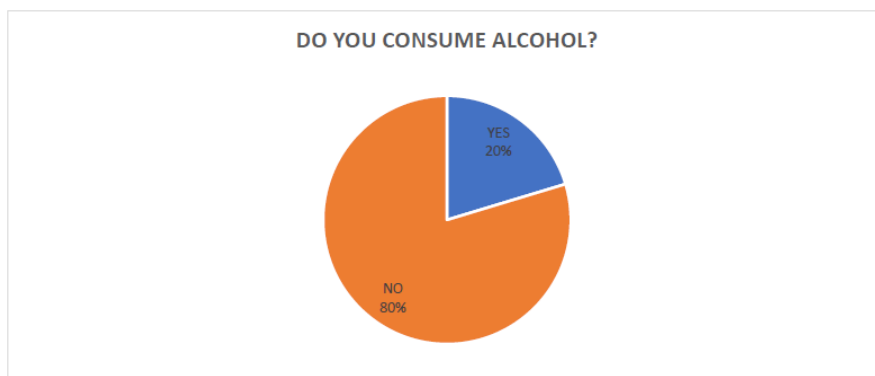
17. If yes, how frequently?

IF YES, HOW FREQUENTLY?	NUMBER OF PARTICIPANTS	PERCENTAGE
Once in a month	9	22.5%
Once in three months	4	1.00%
Once in six months	11	27.5%
Once in a year	15	37.5%
Other	1	02.5%



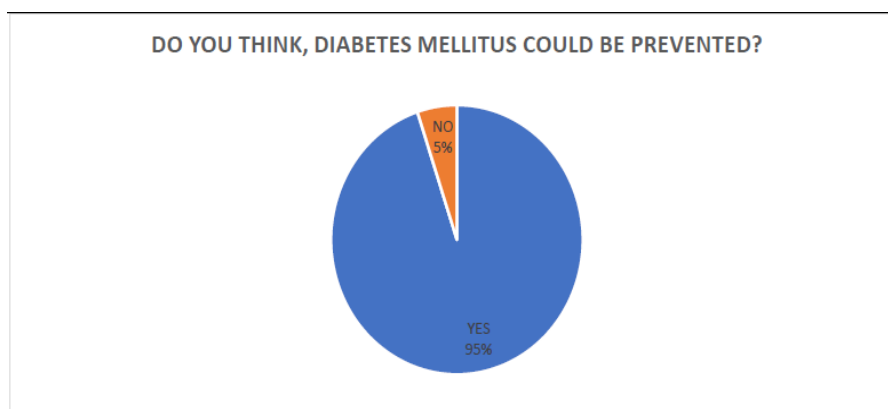
18. Do you consume alcohol?

DO YOU CONSUME ALCOHOL?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	12	20.34%
NO	47	79.66%



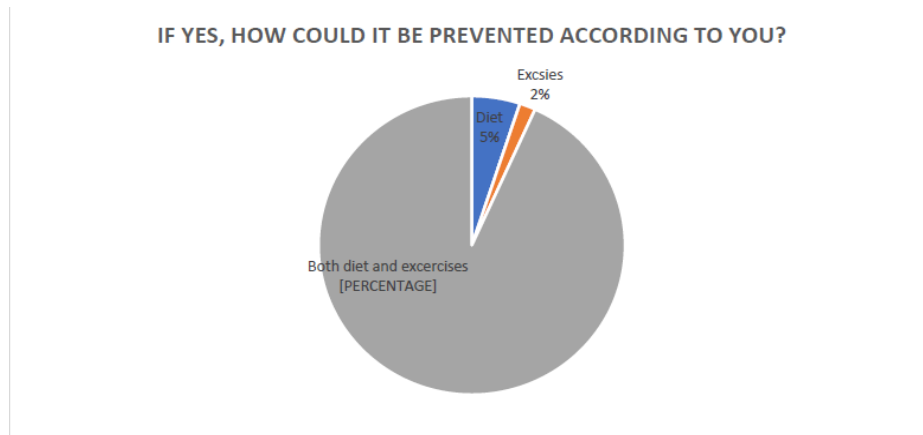
19. Do you think, diabetes mellitus could be prevented?

DO YOU THINK, DIABETES MELLITUS COULD BE PREVENTED?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	56	94.92%
NO	3	5.08%



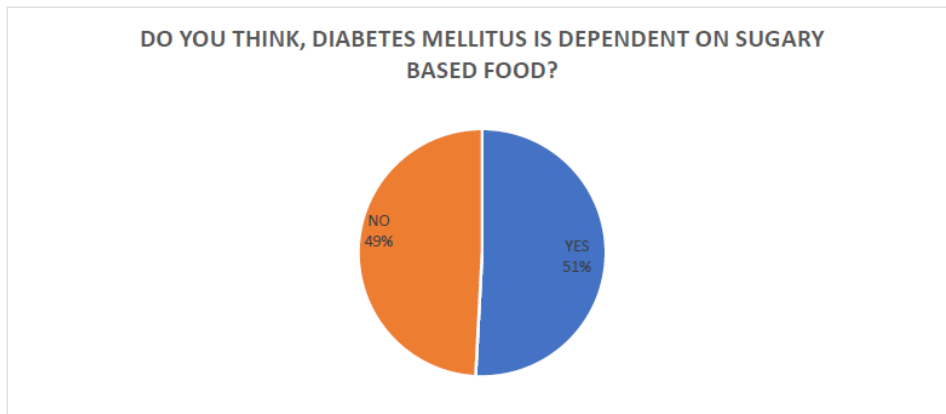
20. If yes, how could it be prevented according to you?

IF YES, HOW COULD IT BE PREVENTED ACCORDING TO YOU?	NUMBER OF PARTICIPANTS	PERCENTAGE
Diet	3	05.08%
Exercises	1	01.69%
Both diet & Exercises	55	93.23%



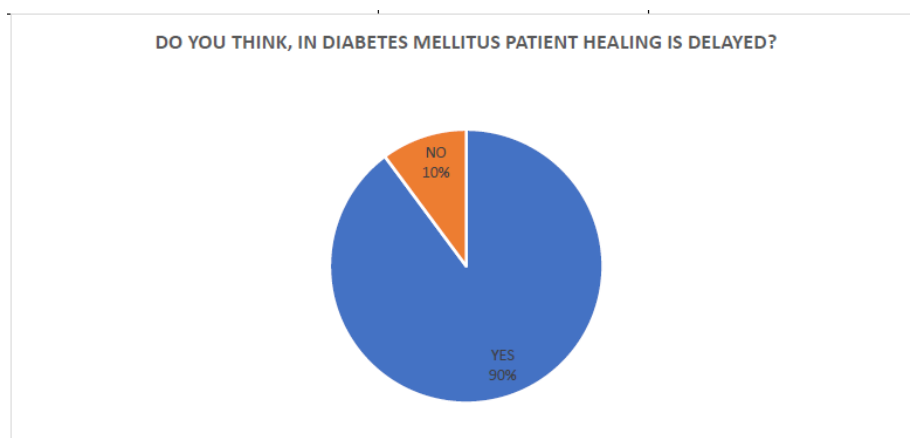
21. Do you think, diabetes mellitus is dependent on sugary based food?

DO YOU THINK, DIABETES MELLITUS IS DEPENDENT ON SUGARY BASED FOOD?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	30	50.85%
NO	29	49.15%



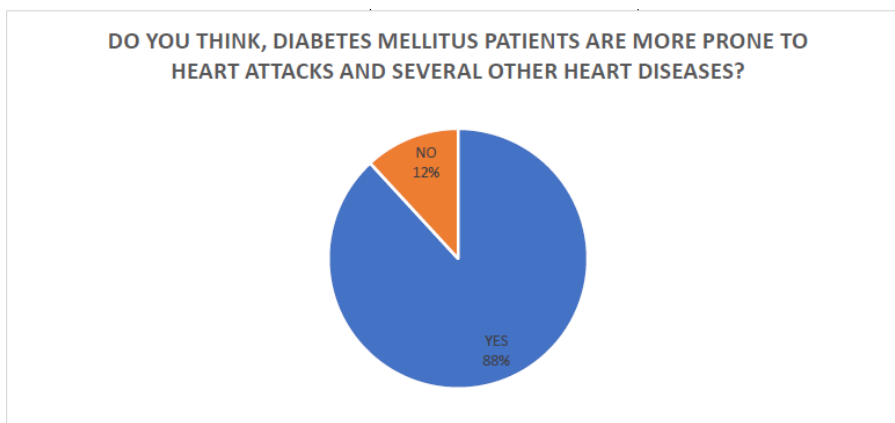
22. Do you think, in diabetes mellitus patient healing is delayed ?

DO YOU THINK, IN DIABETES MELLITUS PATIENT HEALING IS DELAYED?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	53	89.82%
NO	6	10.18%



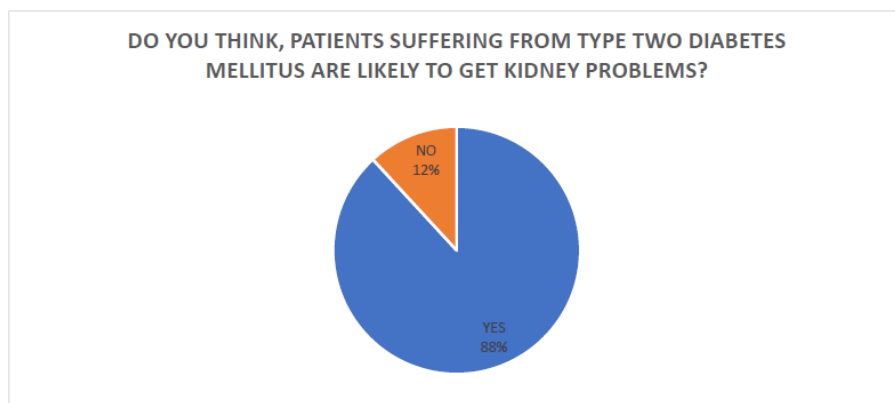
23. Do you think, diabetes mellitus patients are more prone to heart attacks and several other heart diseases?

DO YOU THINK, DIABETES MELLITUS PATIENTS ARE MORE PRONE TO HEART ATTACKS AND SEVERAL OTHER HEART DISEASES?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	52	88.14%
NO	7	11.87%



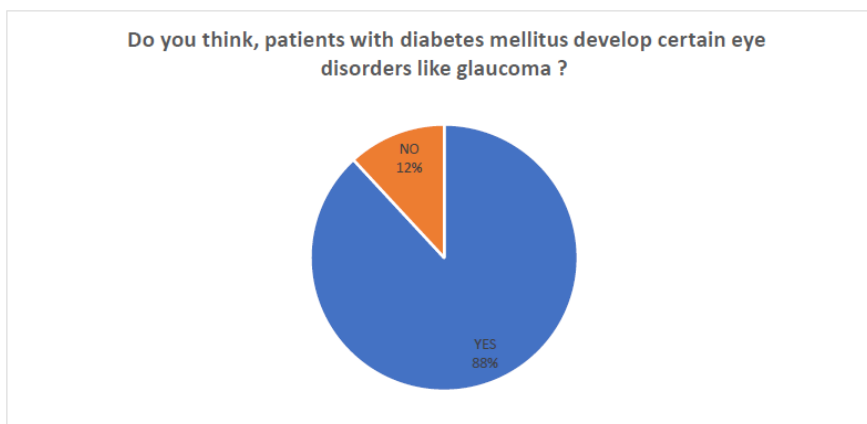
24. Do you think, patients suffering from type two diabetes mellitus are likely to get kidney problems?

DO YOU THINK, PATIENTS SUFFERING FROM TYPE TWO DIABETES MELLITUS ARE LIKELY TO GET KIDNEY PROBLEMS?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	52	88.14%
NO	7	11.87%



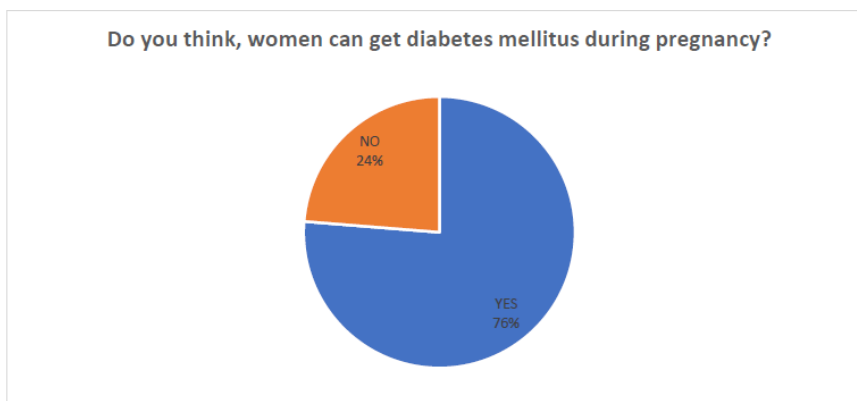
25. Do you think, patients with diabetes mellitus develop certain eyedisorders like glaucoma?

DO YOU THINK, PATIENTS WITH DIABETES MELLITUS DEVELOP CERTAIN EYE DISORDERS LIKE GLAUCOMA?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	52	88.14%
NO	7	11.87%



26. Do you think, women can get diabetes mellitus during pregnancy?

DO YOU THINK, WOMEN CAN GET DIABETES MELLITUS DURING PREGNANCY?	NUMBER OF PARTICIPANTS	PERCENTAGE
YES	45	76.27%
NO	14	23.73%



In this study, total number of participants were 107 and all were adults both males and females. Their age group was from 30 years to 65 years. Amongst them 30.84% were in age group 30-40 years, 52.34% in the age group 41-50 years, 12.15% belongs to 51-60 years and 04.67% were 61-65 age group. 57.6% were vegetarian, 20.3% were vegetarian + eggetarian, 22.1% were non-vegetarian. Among the respondents, 40.68% had family history of Diabetes mellitus. The risk of developing Type2 Diabetes mellitus increases approximately 2-4-fold when one or both parents are affected. A positive family history of Type2 Diabetes mellitus nearly doubles the risk of Diabetes in offspring.^[5,6] Among the participants 20.34% of them consume alcohol, 5% of them consume any forms of tobacco and 81.35% do physical activities.

Smoking is one of the modifiable risk factors for many chronic conditions including Diabetes.^[7] Excessive consumption of alcohol may increase the risk of Diabetes mellitus.^[8] Health lifestyle can reduce the risk of developing Diabetes mellitus.^[9] Essential hypertension and Diabetes mellitus are both extremely common conditions and therefore their co-existence is extremely

prevalent.^[10] 88.14% of the participants agreed that the patients with Diabetes mellitus may develop certain eye disorders. Reasons for loss of vision are Diabetic maculopathy and complications of proliferative Diabetic retinopathy.^[11] 88.14% of respondents believe that Diabetic patients are likely to get kidney problems. Diabetes is the most common cause of end stage renal disease.^[12]

CONCLUSION

Diabetes mellitus is a prevalent chronic disease responsible for impaired quality of life and associated with early mortality. It is important to know that the awareness levels about a condition in a population, as knowledge is a critical component in behavioural changes. Once awareness is generated, people are more likely to participate in prevention and control activities.

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