

**AWARENESS PERCEPTION AND ATTITUDE OF ADULTS OF EITHER GENDER
ABOUT NON ALCOHOLIC FATTY LIVER DISEASE**Krutika Sonare*¹, Riddhi Gaikwad² and Srabani B.³^{1,2}Medical Student RGMC & CSMH, ³Professor***Corresponding Author: Krutika Sonare**

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ABSTRACT

It is a cross sectional study. Total number of participants were 104. Among them male 28.85% and female 71.15%. 87.50% residing in urban area, 7.69% semi urban and rural 4.81%. 60.58% of the participants were aware about non alcoholic fatty liver. Among the participants 47.12% were doing daily exercise and 14.42% weekly. 53.85% of the respondents were non vegetarian, 29.81% vegetarian and 16.35% were vegetarian and egg together. 14% of them consume alcohol. The number of smokers were 2.8%. 75.96% of the participants knew about liver cirrhosis. Regarding their knowledge about the risk factors of non alcoholic fatty liver disease 76% answered about obesity, 54.8% about diabetes, 49% hyperlipidemia. Regarding the genetic factor of non alcoholic fatty liver 71.15% of the participants answered no.

KEYWORDS: Awareness, Perception, Cirrhosis of liver, Non alcoholic fatty liver.**INTRODUCTION**

Non alcoholic fatty liver disease (NAFLD) Is considered as one of the commonest causes of cirrhosis worldwide.^[1]

In adults with obesity and concomitant diseases such as type 2 diabetes, NAFLD incidents may increase.^[2] NAFLD Is an umbrella term and encompasses the simple deposition of adipose tissue in liver to more progressive steatosis with associated hepatitis, fibrosis, cirrhosis and in some cases hepatocellular carcinoma.^[3] Compared to general population, patients with NAFLD had lower health related quality of life (HRQL).^[4] NAFLD is associated with metabolic disorders, such as type 2

diabetes mellitus, hypertension dyslipidemia and obesity.^[5]

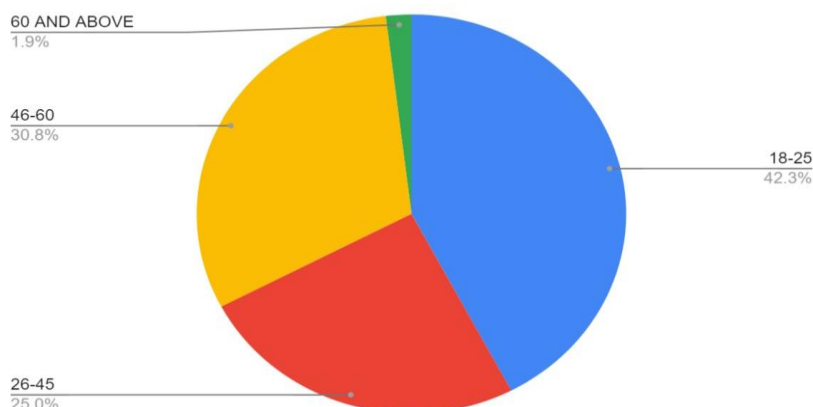
MATERIALS AND METHODS

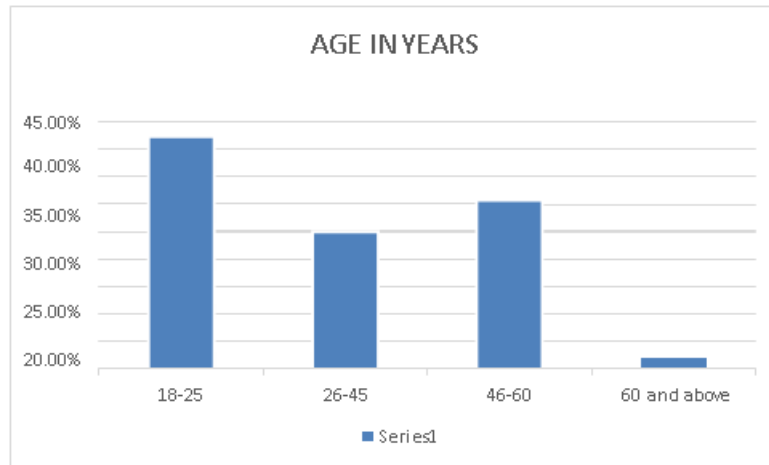
This cross sectional online based study was conducted with a pre-tested and pre-validated questionnaire administered via Google forms to the adult participants. These who were willing to take part only those participants were considered. The data was statistically analyzed.

RESULTS AND DISCUSSION

Age

PERCENTAGE vs AGE IN YEARS



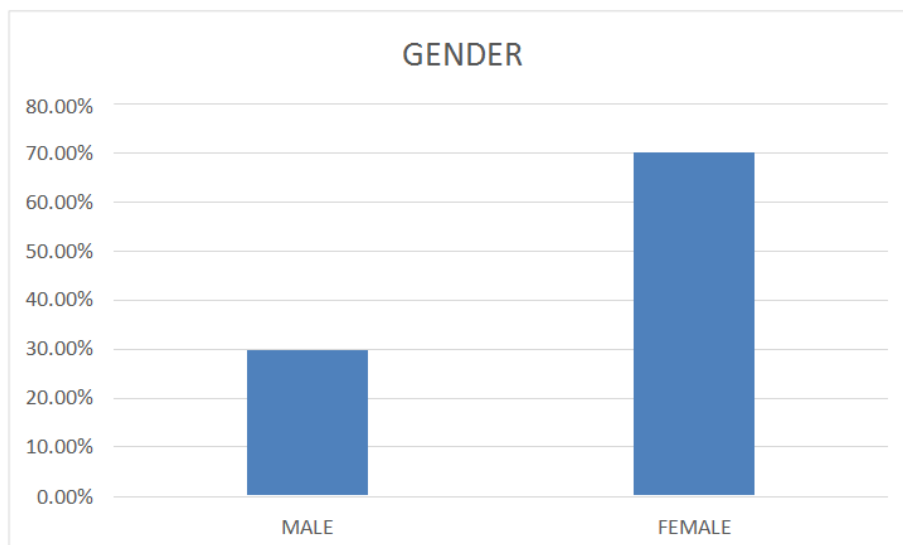
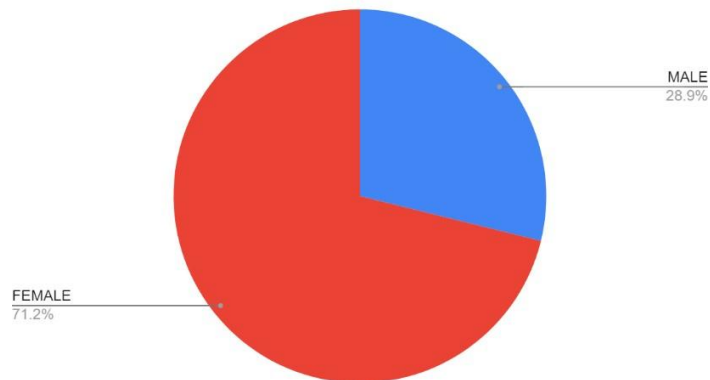


AGE IN YEARS	NUMBER OF PARTICIPANTS	PERCENTAGE
18-25	44	42.31%
26-45	26	25.00%
46-60	32	30.77%
60 AND ABOVE	2	1.92%

Gender

	PERCENTAGE	NO. OF PARTICIPANTS
MALE	28.85%	30
FEMALE	71.15%	74

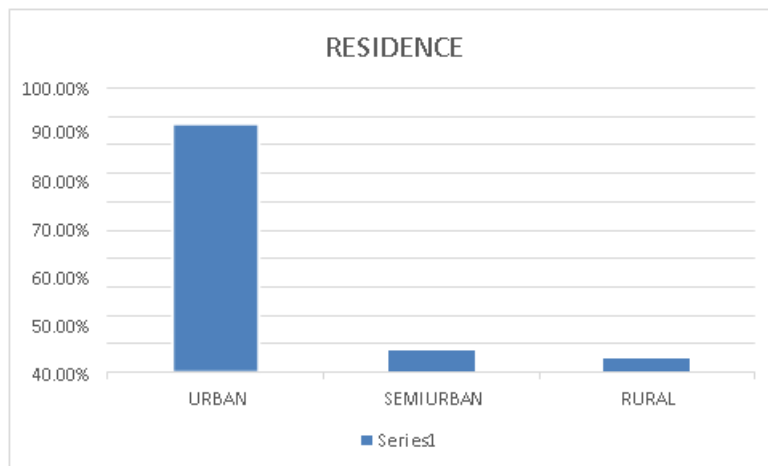
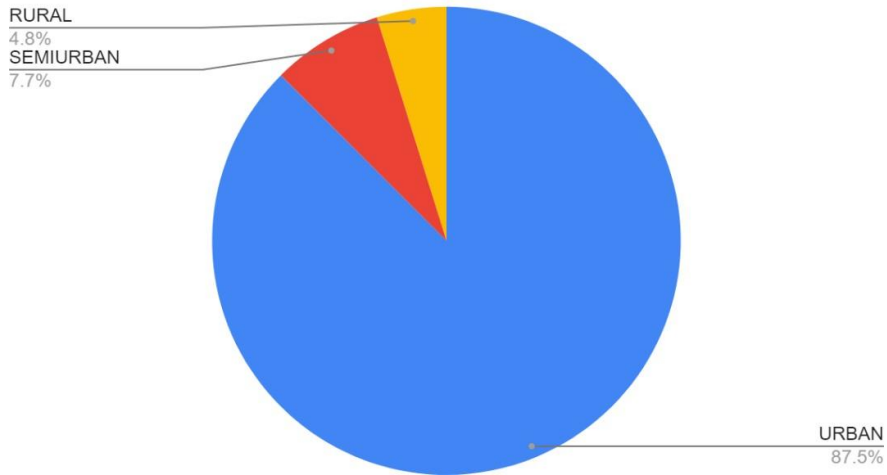
GENDER



Residence

	PERCENTAGE	NO.OF PARTICIPANTS
URBAN	87.50%	91
SEMIURBAN	7.69%	8
RURAL	4.81%	5

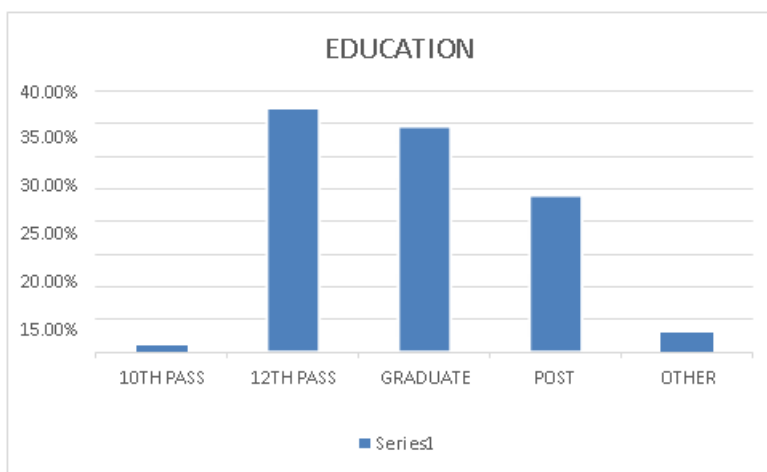
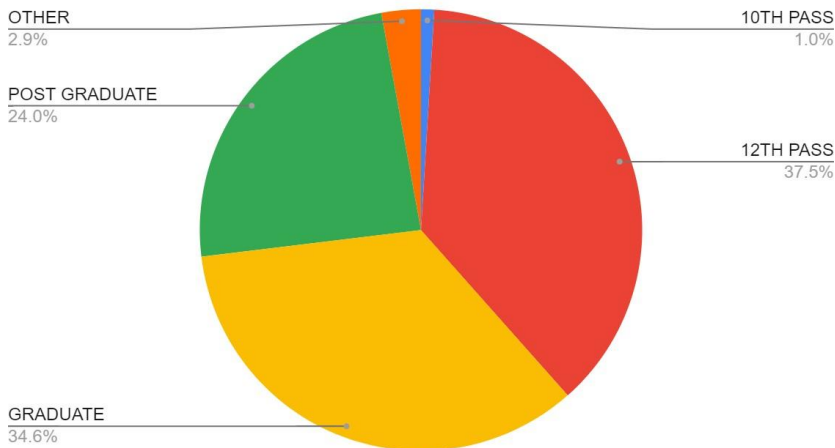
RESIDENCE



Education

	PERCENTAGE	NO.OF PARTICIPANTS
10TH PASS	0.96%	1
12TH PASS	37.50%	39
GRADUATE	34.62%	36
POST GRADUATE	24.04%	25
OTHER	2.88%	3

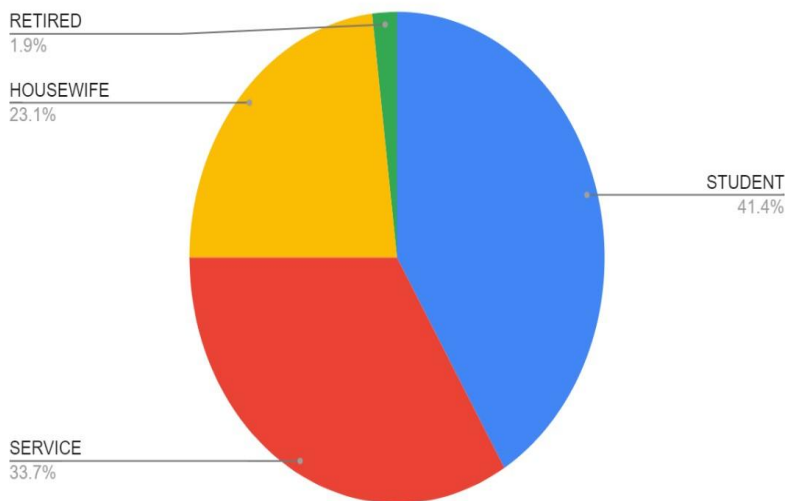
EDUCATION

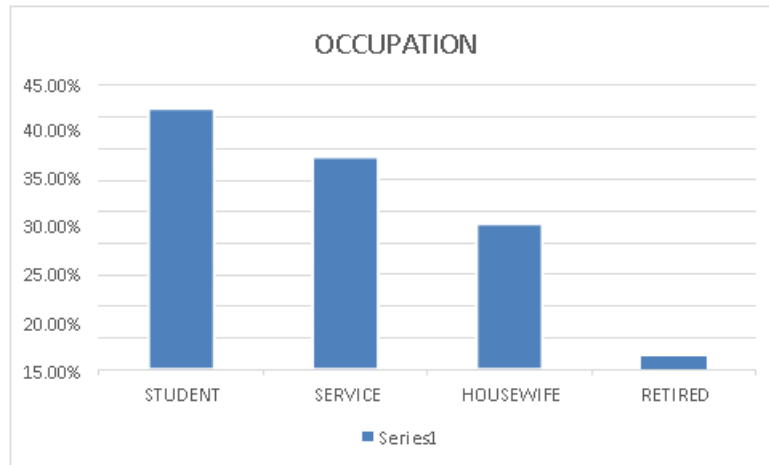


OCCUPATION

	PERCENTAGE	NO. OF PARTICIPANTS
STUDENT	41.35%	43
SERVICE	33.65%	35
HOUSEWIFE	23.08%	24
RETIRED	1.92%	2

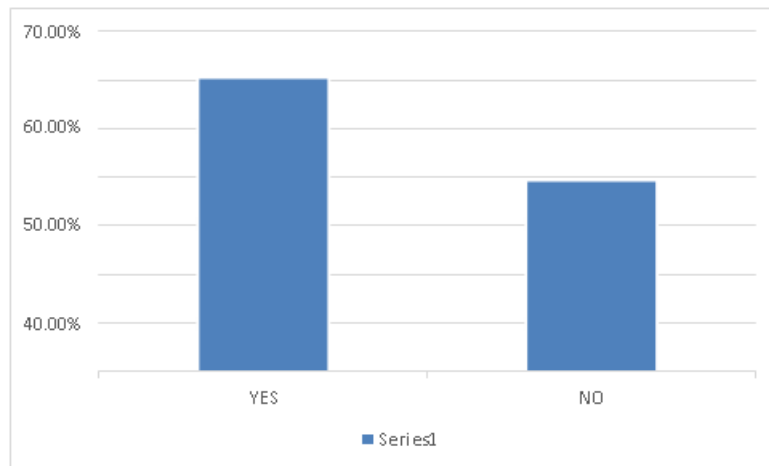
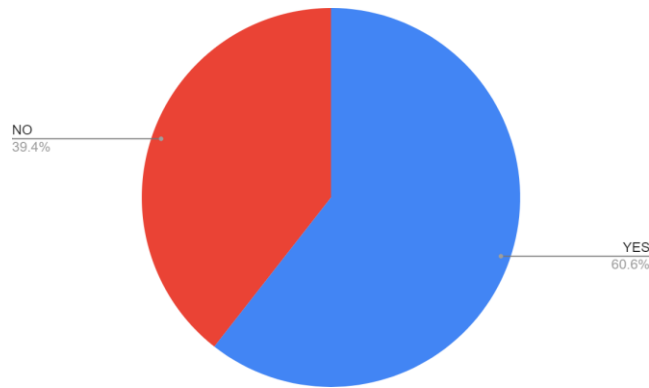
OCCUPATION





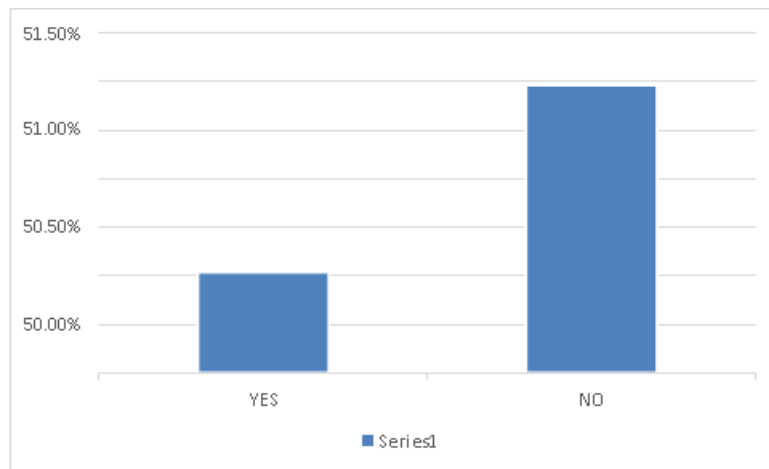
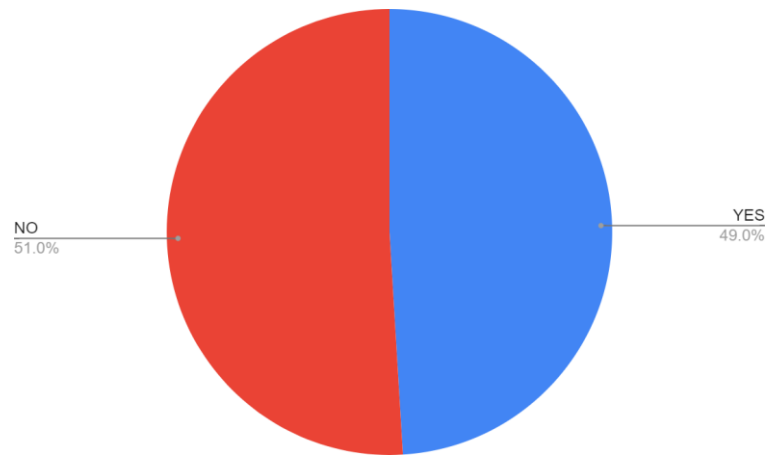
Are you aware about non alcoholic fatty liver disease ?

	PERCENTAGE	NO.OF PARTICIPANTS
YES	60.58%	63
NO	39.42%	41



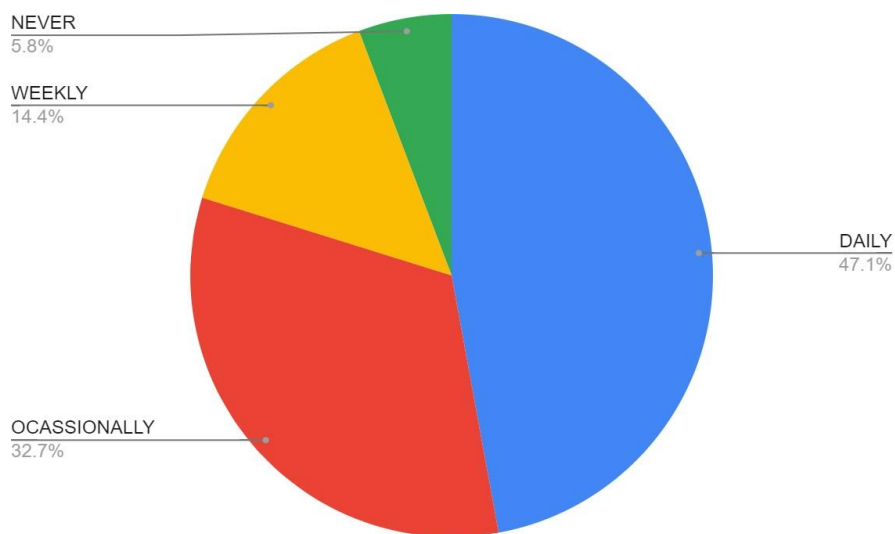
Does your work involves physical activity?

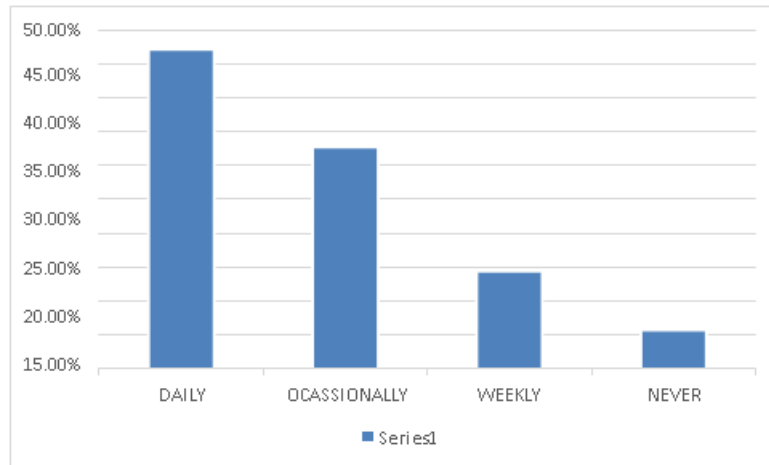
	PERCENTAGE	NO.OF PARTICIPANTS
YES	49.04%	51
NO	50.96%	53



How frequently do you exercise to maintain fitness ?

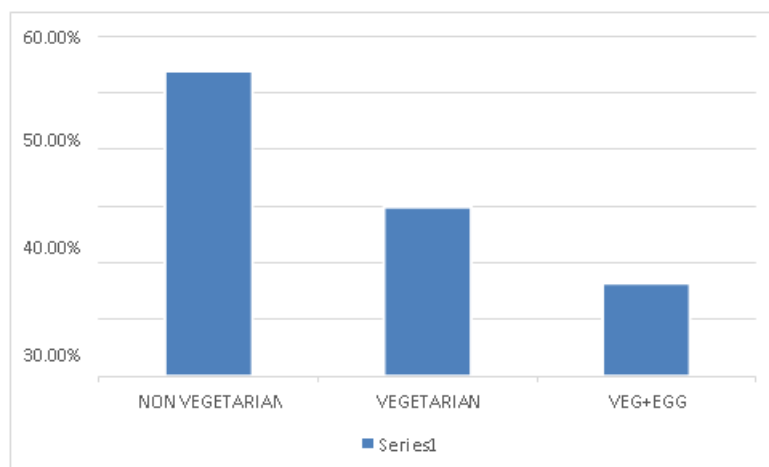
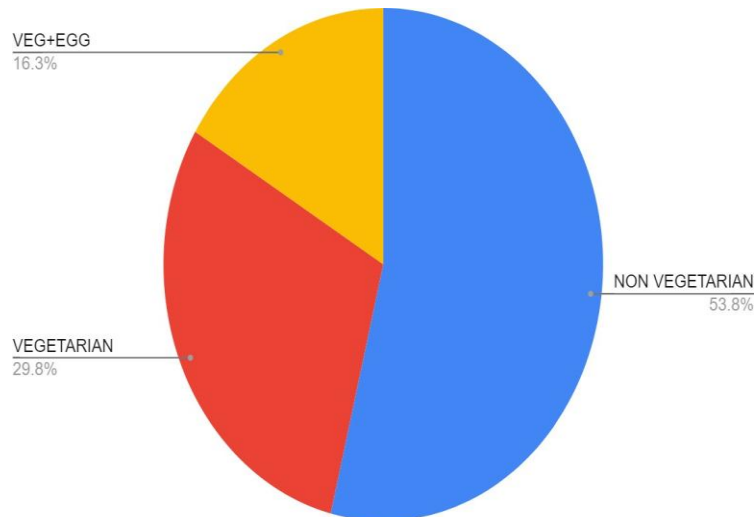
	PERCENTAGE	NO.OF PARTICIPANTS
DAILY	47.12%	49
OCASSIONALLY	32.69%	34
WEEKLY	14.42%	15
NEVER	5.77%	6





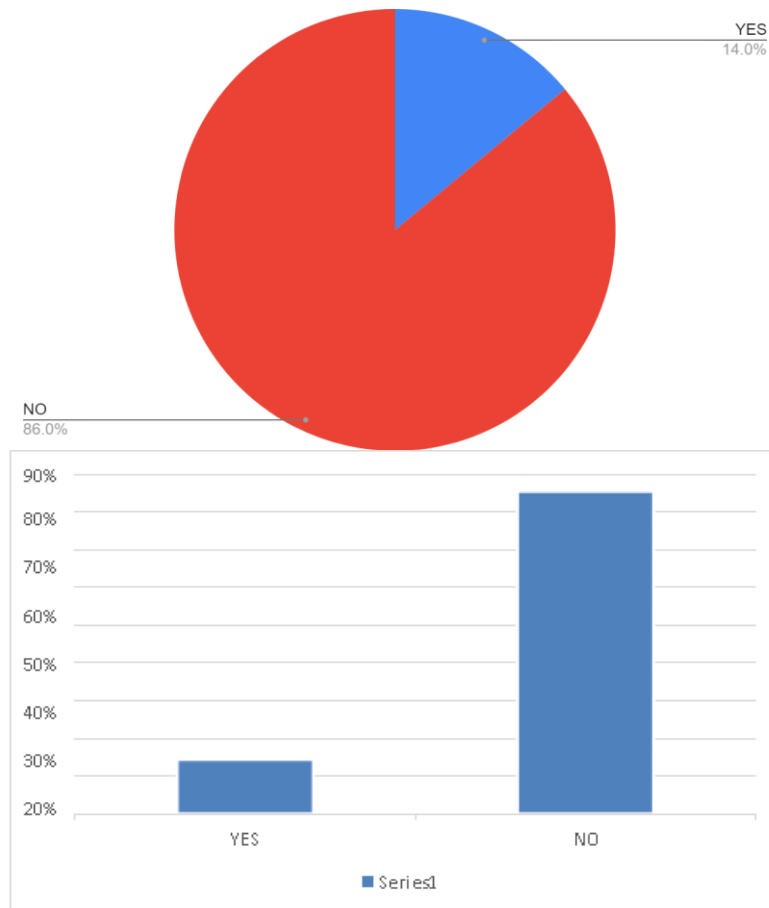
What are your food habits ?

	PERCENTAGE	NO.OFPARTICIPANTS
NON VEGETARIAN	53.85%	56
VEGETARIAN	29.81%	31
VEG+EGG	16.35%	17



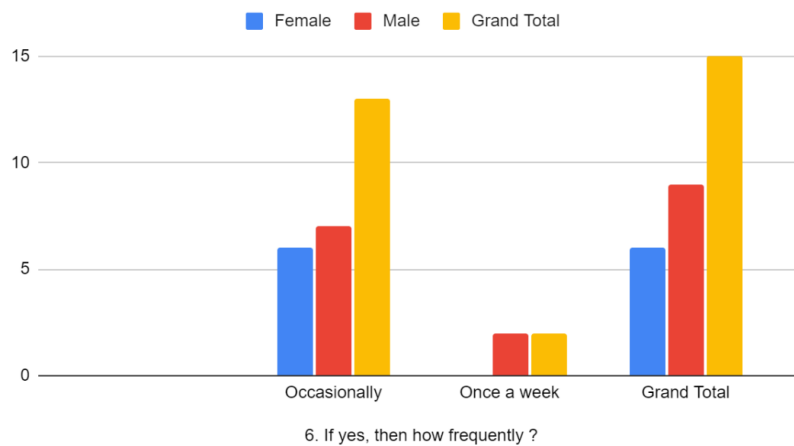
Do you consume alcohol ?

	PERCENTAGE	NO.OFPARTICIPANTS
YES	14%	15
NO	86%	89



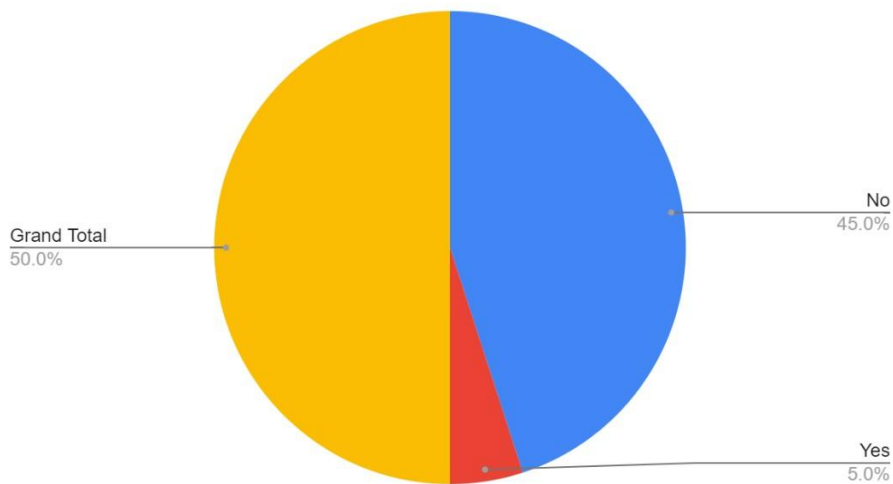
6. If yes, then how frequently ?	Female	Male	Grand Total
	0	0	0
Occasionally	6	7	13
Once a week		2	2
Grand Total	6	9	15

Female, Male and Grand Total



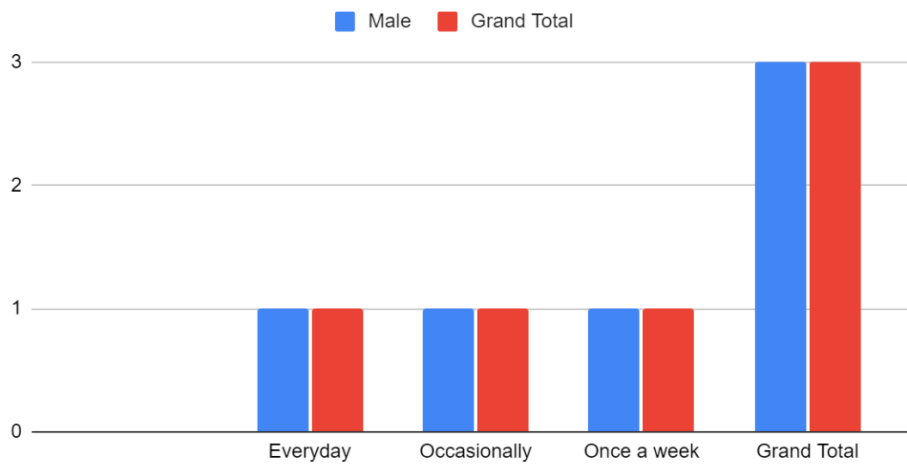
COUNTA of 7. Do you smoke ?	2. Gender		
7. Do you smoke ?	Female	Male	Grand Total
No	74	27	101
Yes		3	3
Grand Total	74	30	104

Male



<i>COUNTA of 8. If yes, then how frequently ?</i>	<i>2. Gender</i>		
<i>8. If yes, then how frequently ?</i>	Female	Male	GrandTotal
	0	0	0
Everyday		1	1
Occasionally		1	1
Once a week		1	1
Grand Total	0	3	3

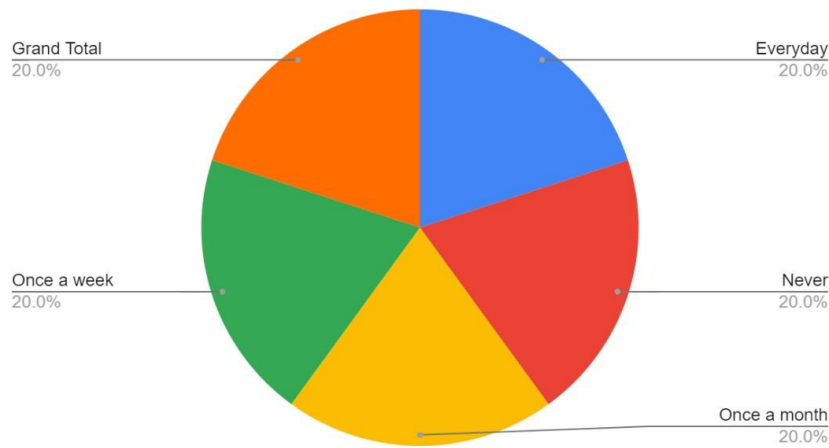
Male and Grand Total



8. If yes, then how frequently ?

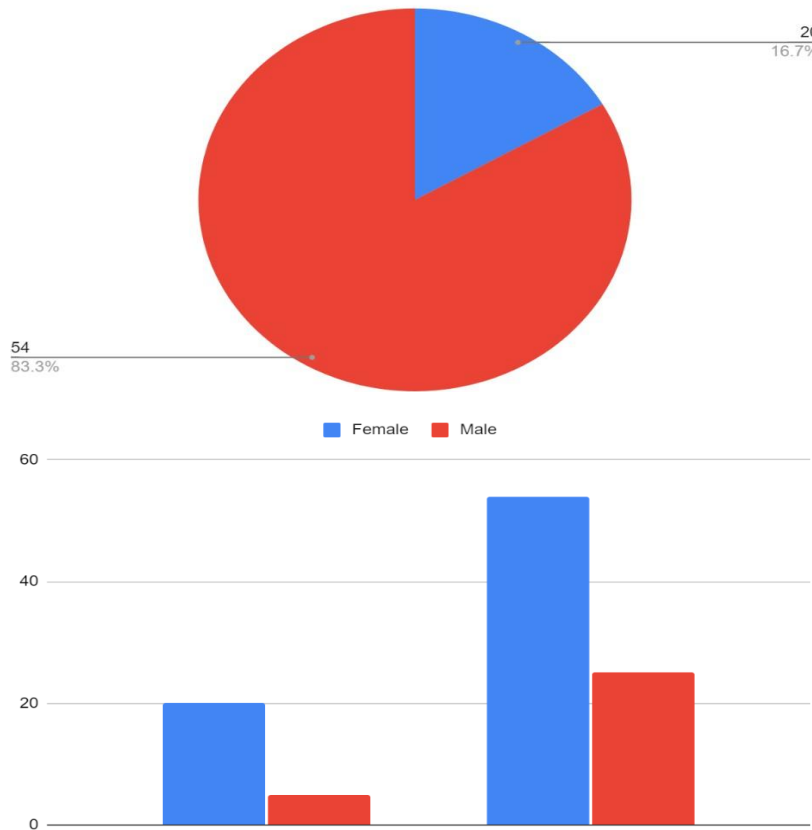
<i>COUNTA of 9. What is your frequency of havingjunk food ?</i>	<i>2. Gender</i>		
<i>9. What is your frequency of having junk food ?</i>	Female	Male	GrandTotal
Everyday	3	4	7
Never	2	1	3
Once a month	33	8	41
Once a week	36	17	53
Grand Total	74	30	104

Count of 2. Gender

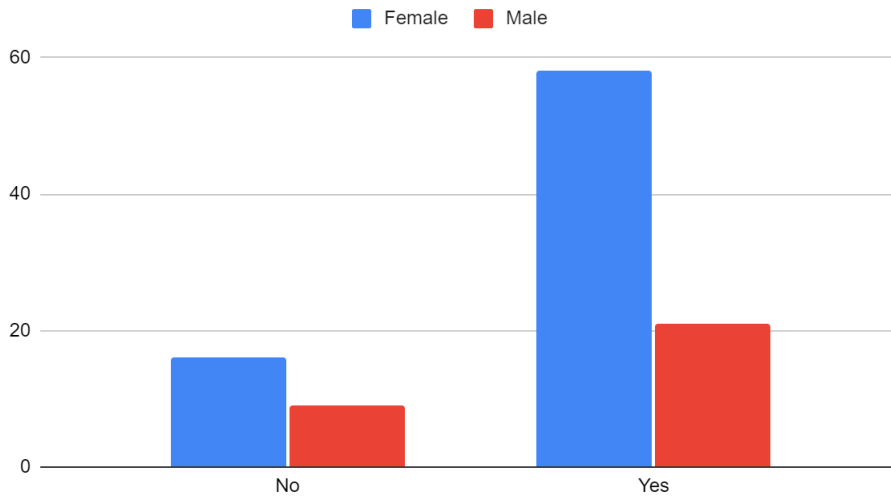


COUNTA of 10. Have you heard about liver cirrhosis/fibrosis ?2. Gender			
10. Have you heard about liver cirrhosis/fibrosis ?	Female	Male	Grand Total
No	20	5	25
Yes	54	25	79
Grand Total	74	30	104

Male vs Female

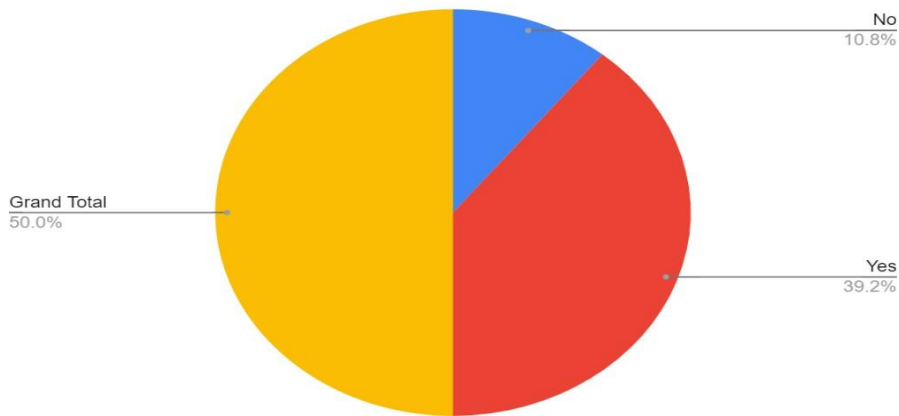


COUNTA of 11. Do you think that non - alcoholic fatty liverdisease causes liver cirrhosis/ fibrosis ?			
11. Do you think that non - alcoholic fatty liver disease causesliver cirrhosis/ fibrosis ?	2. Gender		Grand Total
	Female	Male	
No	16	9	25
Yes	58	21	79
Grand Total	74	30	104



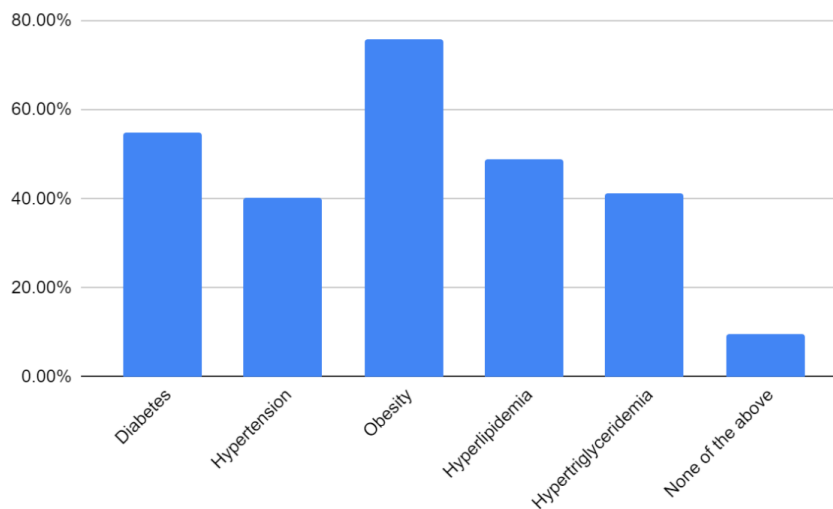
11. Do you think that non - alcoholic fatty liver disease causes liver cirrhosis/ fibrosis ?

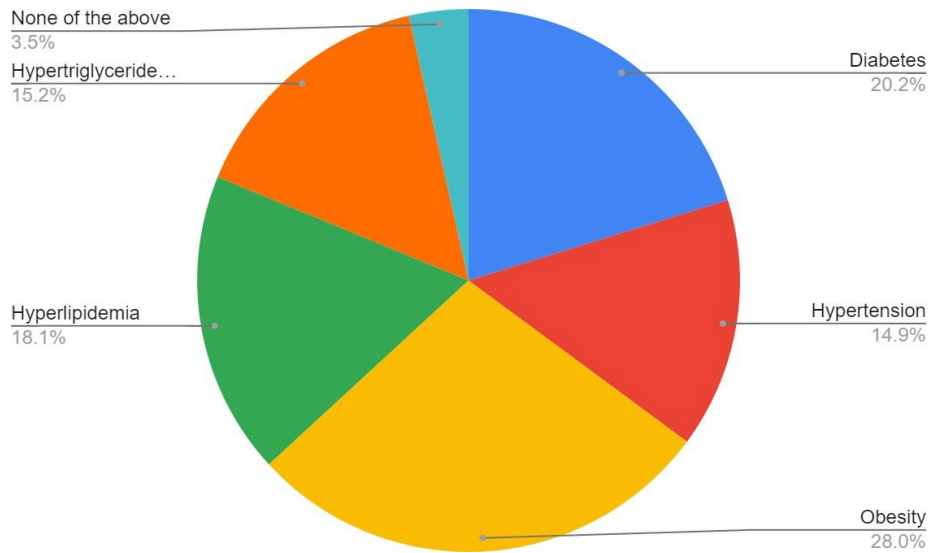
Female and Male



12. Which of these are the risk factors for non - alcoholic fatty liver disease according to you ?

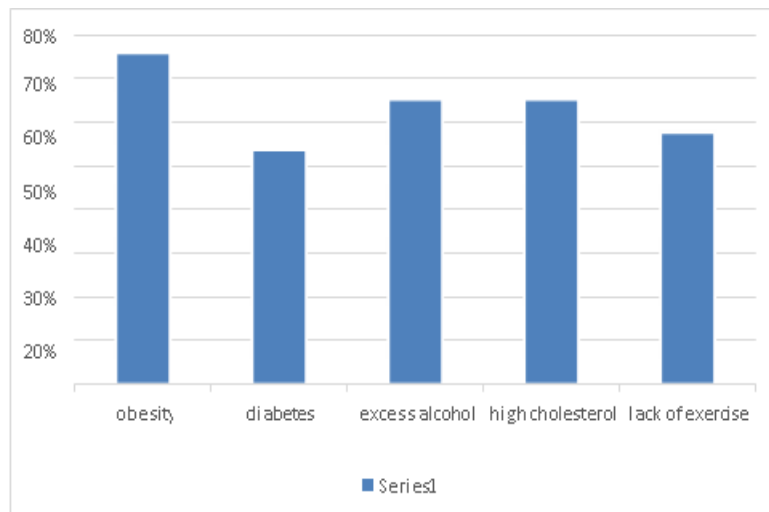
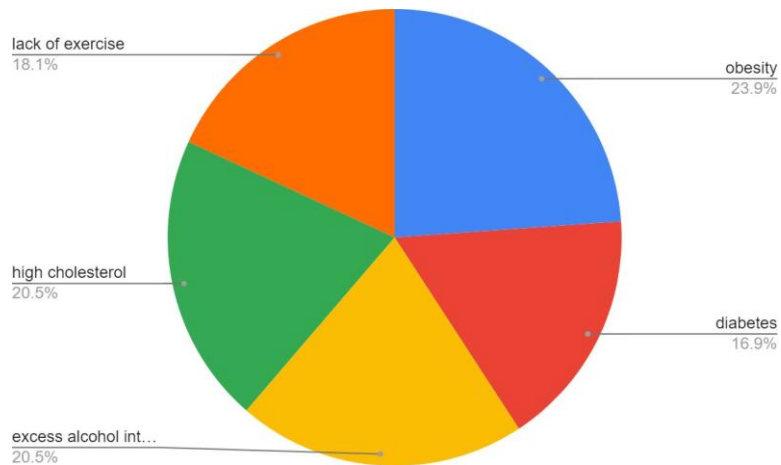
Diabetes	57	54.8%
Hypertension	42	40.4%
Obesity	79	76%
Hyperlipidemia	51	49%
Hypertriglyceridemia	43	41.3%
None of the above	10	9.6%





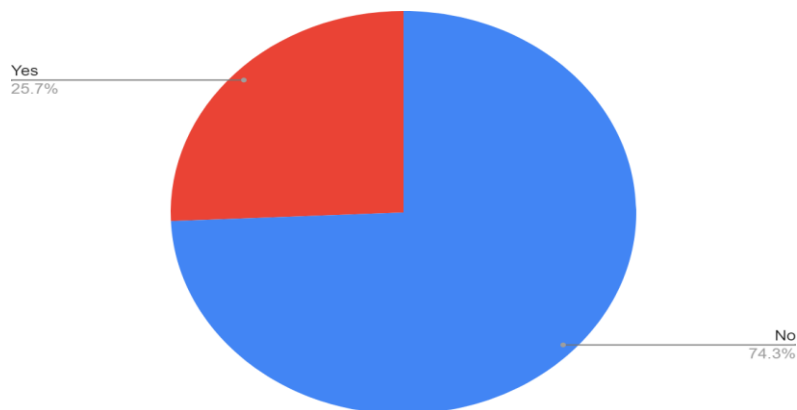
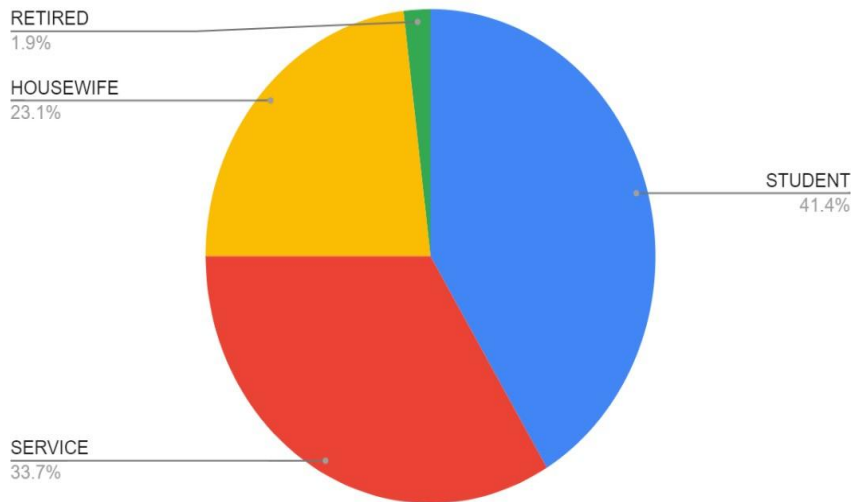
13. Which of these conditions do you think can cause fatty liver ?

	PERCENTAGE	NO. OF PARTICIPANTS
obesity	76%	79
diabetes	53.80%	56
excess alcohol intake	65.40%	68
high cholesterol	65.40%	68
lack of exercise	57.70%	60

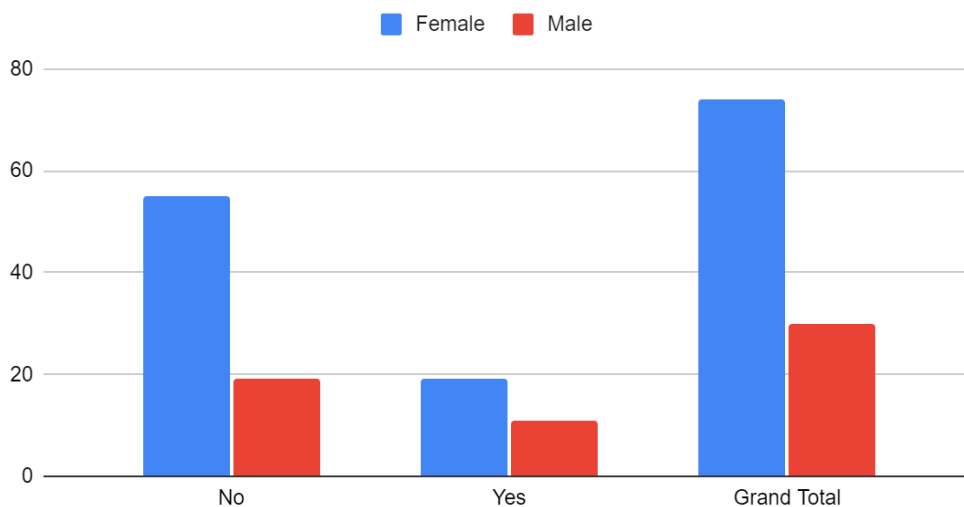


COUNTA of 14. Do you think that non alcoholic fatty liverdisease is genetic ?		2.Gender		
14. Do you think that non alcoholic fatty liver disease isgenetic ?		Female	Male	GrandTotal
No		55	19	74
Yes		19	11	30
Grand Total		74	30	104

OCCUPATION



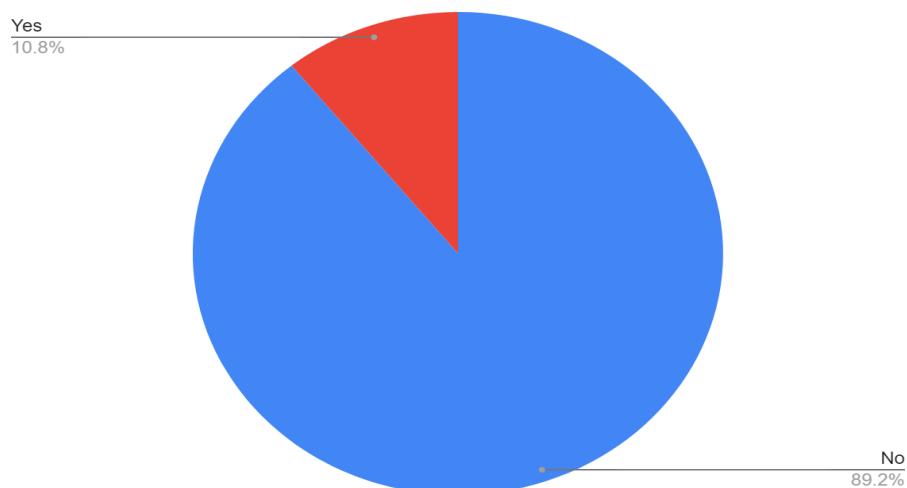
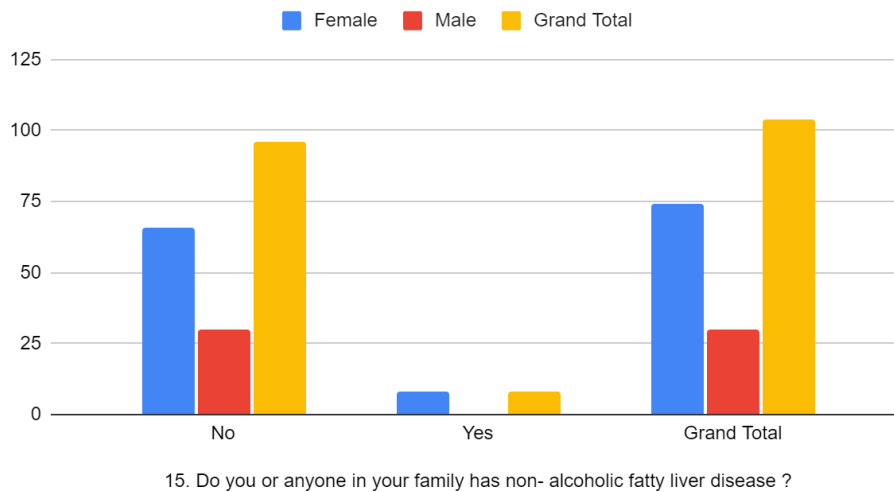
Female and Male



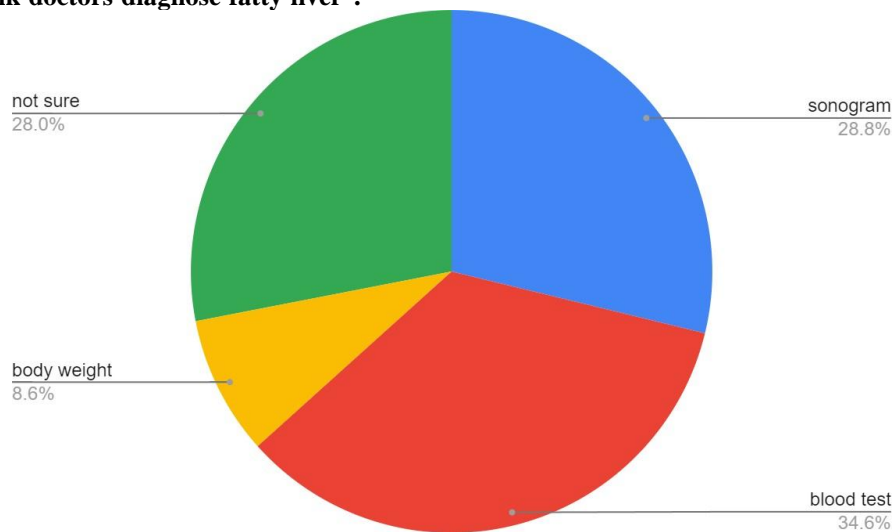
14. Do you think that non alcoholic fatty liver disease is genetic ?

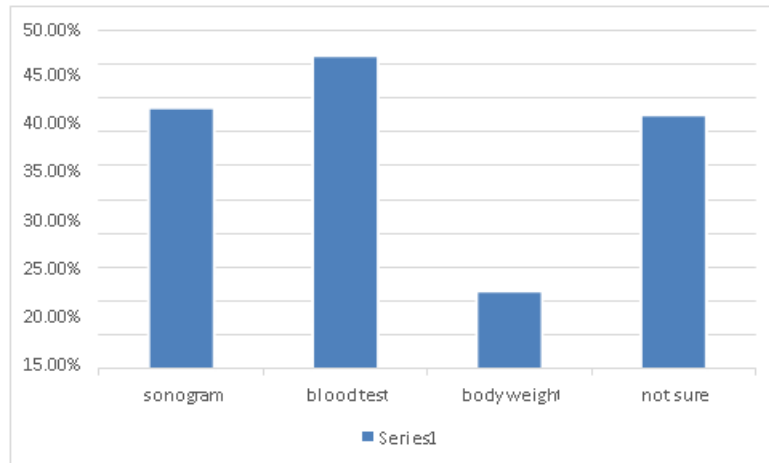
COUNTA of 15. Do you or anyone in your family has non-alcoholic fatty liver disease ? 2. Gender			
15. Do you or anyone in your family has non- alcoholic fatty liver disease ?	Female	Male	Grand Total
No	66	30	96
Yes	8		8
Grand Total	74	30	104

Female, Male and Grand Total



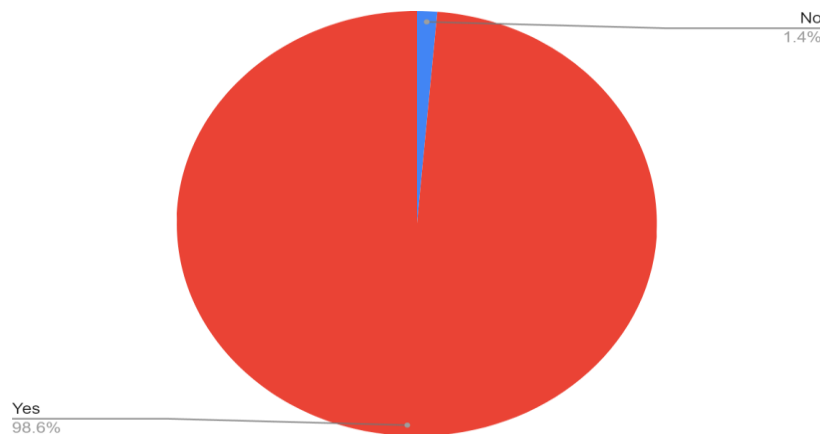
How do you think doctors diagnose fatty liver ?



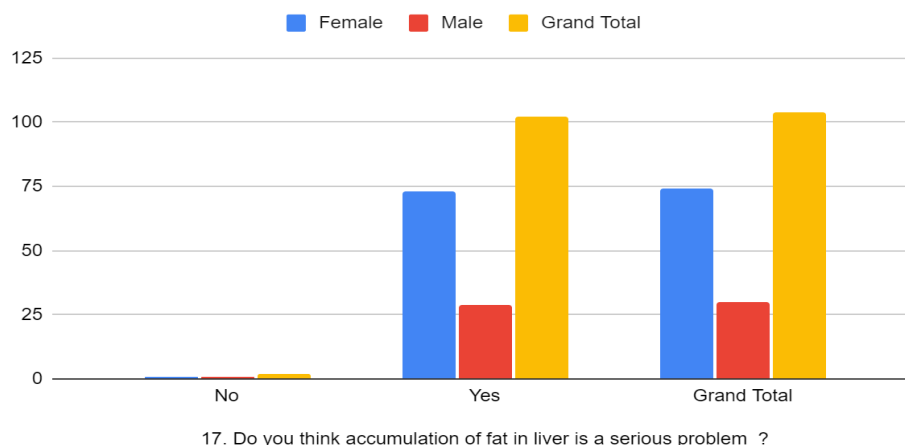


	PERCENTAGE	NO. OF PARTICIPANTS
sonogram	38.50%	40
blood test	46.20%	48
body weight	11.50%	12
not sure	37.50%	39

COUNTA of 17. Do you think accumulation of fat in liver is a serious problem ?	2. Gender		
	Female	Male	Grand Total
No	1	1	2
Yes	73	29	102
Grand Total	74	30	104

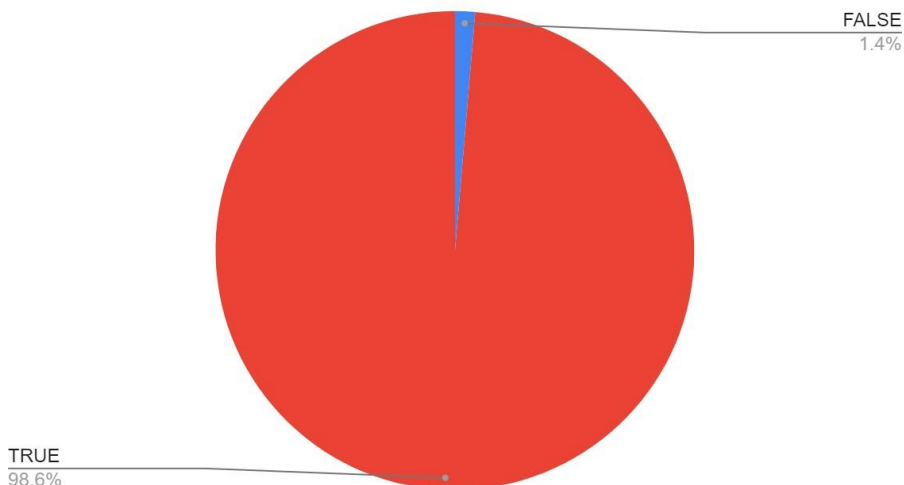


Female, Male and Grand Total

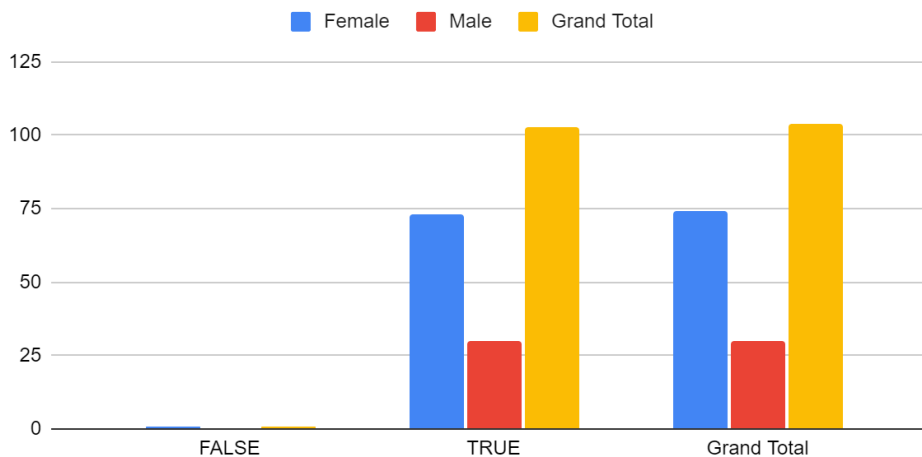


COUNTA of 18. Non- alcoholic fatty liver disease is preventable ?	2. Gender		
18. Non- alcoholic fatty liver disease is preventable ?	Female	Male	Grand Total
FALSE	1		1
TRUE	73	30	103
Grand Total	74	30	104

Female and Male



Female, Male and Grand Total



18. Non- alcoholic fatty liver disease is preventable ?

In this study total number of adult participants were 104. Among them 71.15% were female and 28.85% were male. The age groups 18 - 25 years 42.31%, 26 – 45 years 25%, 46 - 60 years 30.77%, 60 years and above 1.92%. Among 51% of participants their work involved physical activity. Exercise intervention has useful influence on NAFLD.^[6] Among the respondents 53.85% were non vegetarian, 29.81% vegetarian and veg plus egg were 16.35%. More frequent fast food consumption results in a higher risk of NAFLD.^[7] Moderate alcohol consumption in NAFLD me aggravate fibrosis and increase the risk of future development of end stage liver disease.^[8] In the present study 86.67% of the participants consume alcohol occasionally, 13.34% consume once a week. NAFLD is associated with metabolic disorders such as type 2 diabetes mellitus, hypertension, dyslipidemia and obesity.^[9] The antioxidant, anti

inflammatory, anti apoptotic properties of vitamin e a pragmatic therapeutic choice.^[10] Lifestyle interventions targeting diet, physical activity for weight are effective for managing NAFLD.^[11]

CONCLUSION

NAFLD has become most common chronic liver disease. People with overweight and lack of exercise targets the most important factors. NAFLD not only is a chronic hepatic disease but also it predisposes to development of type 2 diabetes mellitus. Prevention of risk factors can reduce the risk of NAFLD.

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