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Research Article

## A study to assess knowledge regarding fatty liver among bank employees working in selected banks at Mangaluru

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### ABSTRACT

**Background:** Fatty liver is closely associated with lifestyle. The bank employees have been often witnessed having junk food, coming home late and not engaged in any physical activity. Hence, an attempt has been made by the investigator to assess the knowledge of bank employees regarding fatty liver condition so that an educational intervention will be planned to motivate them for remaining physically active and healthy. **Objectives:** The descriptive study assessed the knowledge regarding fatty liver among bank employees. **Materials and Methods:** The 109 subjects were selected by convenience sampling technique. The knowledge questionnaire having 24 items and baseline Performa having 12 items were given for the subjects to place their responses. **Results:** The mean percentage of 50 revealed in present study showed that subjects were with inadequate knowledge regarding fatty liver condition. There was a significant association between knowledge of bank employees regarding fatty liver and age ( $\chi^2 = 28.31$ ,  $p = 0.001$ ), religion ( $\chi^2 = 178.37$ ,  $p = 0.001$ ), type of family ( $\chi^2 = 34.13$ ,  $p = 0.01$ ), designation ( $\chi^2 = 48.02$ ,  $p = 0.001$ ), job experience ( $\chi^2 = 25.64$ ,  $p = 0.001$ ), qualification ( $\chi^2 = 10.46$ ,  $p = 0.001$ ), food from restaurant ( $\chi^2 = 70.56$ ,  $p = 0.001$ ), and BMI of the subjects ( $\chi^2 = 73.04$ ,  $p = 0.001$ ). **Conclusion:** From the findings it can be inferred that more the years of job experience, more the chances of getting fatty liver. IEC activities can play a great role to improve the knowledge of bank employees regarding fatty liver condition.

**Keywords:** Knowledge, fatty liver and bank employees.**Article Info:** Received 30 Sep, 2018; Review Completed 29 Oct 2018; Accepted 31 Oct 2018; Available online 15 Nov 2018

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### INTRODUCTION

The liver is a vital organ, located in the right upper quadrant of the abdominal cavity just below the diaphragm. It weighs about three pounds [1.44-1.66kg] and is the body's second largest organ.<sup>1</sup> The liver is thought to be responsible for up to 500 separate functions, usually in combination with other systems and organ.<sup>2</sup> Some fat in the liver is normal. When the amount of fat makes up more than 5% to 10% of the weight of the liver, healthy liver cells are replaced by fat cells and this condition is known as fatty liver. Fatty liver disease is closely associated with lifestyle, and public enlightenment of the lifestyle factors is important in reducing the risk factors and thus prevalence of chronic liver diseases.<sup>3</sup>

Both alcoholic and non-alcoholic fatty liver are becoming more common. Up to 20% of adults may have either

alcoholic fatty liver or non-alcoholic fatty liver and more than 6 million children have one of these conditions, which are most common in Asian and Hispanic children. Recent evidences indicate that non-alcoholic fatty liver disease increases the risk of heart disease in adult who are overweight or obese and can lead to complications like cirrhosis of liver, liver cancer, liver failure etc. The global prevalence of non-alcoholic fatty liver disease is 25.24% with highest prevalence in the Middle East and South America and lowest in Africa.<sup>4</sup>

The investigator has often witnessed the friends in the banking industry having junk food, completing the lunch hour within ten minutes, coming home late and not engaged in any physical activity. In India, most of the adults at the age of 35 having increased BMI, accumulation of fat in the abdomen and unaware of the facts of annual health checkups. All these aspects have urged the investigator to

take up this study. Based on the study findings further the recommendation will be given to the headquarters of selected banks so that they can motivate the employees through an educational intervention to remain physically active and healthy.

## MATERIALS AND METHODS

### Study setting and sample size

The research design selected for this study was descriptive design. The study was carried out in national banks including Syndicate banks, Karnataka banks and Indian overseas banks located in Mangaluru, Karnataka. In the present study, samples consist of 109 homemakers who were selected by convenience sampling technique, based on inclusion criteria.

### Tools and techniques:

Baseline proforma with 9 items and structured knowledge questionnaire to assess the knowledge on fatty liver condition with 24 items [ $r=0.75$ ] was used to collect data from homemakers.

### Data analysis:

The data was collected after obtaining prior permission from the concerned authority to conduct the study. The participants were assured about the confidentiality of their responses. The data was analyzed in terms of objectives of the study using both descriptive and inferential statistics. The data obtained was plotted in the master sheet.

## RESULTS

Majority of the subjects, (56.9%) were young adults between the age group of 26-40. The job experience of employees revealed that 43.1% were with the job experience of below 5 years and nearly half proportion (47.7%) were taking food from canteen and nearby restaurants. Most of them, (89%) had no previous information regarding fatty liver condition. A small proportion (5.5%) was with the habit of alcohol consumption. The BMI revealed that 32.2% were at the risk of getting liver related diseases including fatty liver condition [Table 1, Fig 1].

The overall grading of knowledge score showed that nearly half of the subjects (44.1%) had inadequate knowledge regarding fatty liver condition [Table 2].

**Table 1: Frequency and percentage distributors of subjects according to baseline characteristics.**

n=109

Sl. No	Baseline characteristics	f	%
1.	<b>Age</b>		
	Below 25	19	17.4
	26 to 40	62	56.9
	41 to 60	28	25.7
2.	<b>Religion</b>		
	Hindu	102	93.6
	Muslim	1	0.9
	Christian	6	5.5
3.	<b>Type of family</b>		
	Nuclear	85	78.0
	Joint	24	22.0
4.	<b>Job experience</b>		
	Below 5 years	47	43.1
	6 to 10 years	24	22.0
	11 to 15 years	10	9.2
	Above 15 years	28	25.7
5.	<b>Afternoon lunch</b>		
	Brought from home	57	52.3
	Brought from canteen/hotel	52	47.7
6.	<b>Any previous information</b>		
	Yes	12	11.0
	No	97	89.0
7.	<b>If yes, from whom</b>		
	Employer	96	88.1
	Mass media	8	7.3
	Health personnel	5	4.6
8.	<b>Previous diagnosis</b>		
	No	109	100
9.	<b>Alcohol consumption</b>		
	Yes	6	5.5
	No	103	94.5

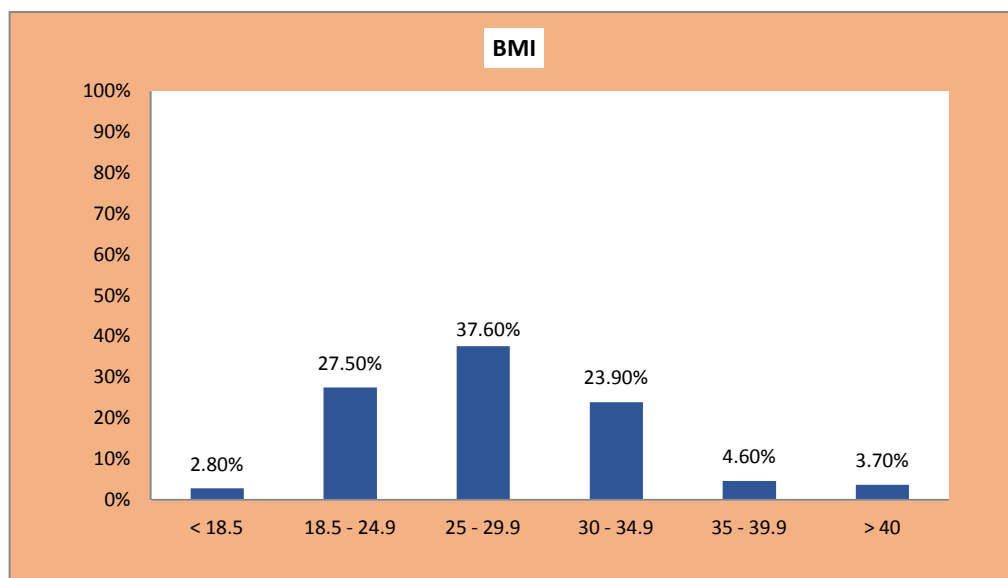


Figure 1: Description of subjects according to their BMI.

Table 2: Overall grading of knowledge scores of bank employees regarding fatty liver condition.

n=109

Sl. No.	Knowledge score	Frequency	percentage	Inference
1.	Poor	31	11.9	Inadequate
2.	Average	30	32.1	
3.	Good	35	27.5	Adequate
4.	Excellent	13	28.4	

There was a significant association between knowledge of bank employees regarding fatty liver and age ( $\chi^2 = 28.31$ ,  $p = 0.001$ ), religion ( $\chi^2 = 178.37$ ,  $p = 0.001$ ), type of family ( $\chi^2 = 34.13$ ,  $p = 0.01$ ), designation ( $\chi^2 = 48.02$ ,  $p = 0.001$ ), job experience ( $\chi^2 = 25.64$ ,  $p = 0.001$ ), qualification ( $\chi^2 = 10.46$ ,  $p = 0.001$ ), food from restaurant ( $\chi^2 = 70.56$ ,  $p = 0.001$ ), and BMI of the subjects ( $\chi^2 = 73.04$ ,  $p = 0.001$ ).

## DISCUSSION

The mean percentage of 50 revealed in present study showed that subjects were with inadequate knowledge regarding fatty liver condition. The current study is supported by a study conducted by Ghevariya V in 2014, where the results showed that 84% subjects were not aware about fatty liver conditions.<sup>5</sup> There was a significant association between knowledge of bank employees

regarding fatty liver and age, religion, type of family, designation, job experience, qualification, food from restaurant and BMI of the subjects. The study conducted by Ahsan M in 2013 depicted that there is association between knowledge scores and age, previous information and BMI of the subjects.<sup>6</sup>

## CONCLUSION

From the findings it can be inferred that more the years of job experience, more the chances of getting fatty liver. IEC activities can play a great role to improve the knowledge of bank employees regarding fatty liver condition.

**Financial support and sponsorship:** Nil.

**Conflicts of interest:** There are no conflicts of interest.

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## Ethical clearance:

YUEC109/2017



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## YENEPOYA UNIVERSITY ETHICS COMMITTEE

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Dear Ms. Reziya Hafeez

Postgraduate/ Principal investigator (PG/PI)  
Dept of Community Health Nursing

Protocol No: 2017/048

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Dr. Mohammed Cuttigar

Yenepoya University Ethics Committee approves your protocol number 2017/048 titled "A study to assess the knowledge regarding fatty liver among employees of selected banks at Mangalore" after reviewing the following documents through an expedited review process.

1. Protocol Version 1
2. Informed Consent & Participant Information Sheet Version 1

It is understood that the study will be conducted under your direction, as per the submitted protocol with a total of 109 research participants only. Any or all data collected before the date of this approval letter will be disregarded for the purpose of this study. The approval is valid for six months. For studies which will continue for more than the validity period of the approval, it is the responsibility of the PG/PI to submit the continuing review within one month of the due date on or before 18 February 2018. Failure to do so may result in delay in continuation of approval and the data collected in the interim period will not be included in the study. YUEC reserves the right to conduct on-site monitoring to assess the research process as per the Indian GCP guidelines. Approval is liable to be withdrawn in case of failure to maintain standards.

Wherever applicable, it is the responsibility of the PG/PI to inform the YUEC about any on-site serious adverse event (SAE) - expected or unexpected, or death report urgently, within 24 hours (even if there is holiday) as per the formats specified by email or a letter. It is the responsibility of the PG/PI to send detailed report of the SAE or death after due analysis to the chairman of YUEC and the head of the institution within 14 calendar days of SAE or death.

No deviations or amendments of the protocol and/or informed consent document should be initiated without prior written approval by the YUEC. The YUEC expects that the PG/PI should promptly report to the YUEC any deviations from, or amendments of, the protocol to eliminate immediate hazards to the research participants and about any new information that may affect adversely the safety of the research participants or the conduct of the trial.

Once the study is completed, it is the responsibility of the principal investigator to submit the closure report with the summary of the study.

Signature of the Member Secretary

Secretary  
Yenepoya University Ethics Committee

Date: 18/03/2017