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### **ORIGINAL ARTICLE**

### PREVALENCE OF THE SEVEN F'S OF GALL BLADDER DISEASE IN THE PATIENTS PRESENTING AT A PRIVATE HOSPITAL IN SIALKOT PAKISTAN.

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### **ABSTRACT**

#### **Introduction:**

Gallbladder stones, also known as cholelithiasis, are a prevalent medical condition globally. Understanding the risk factors associated with gallbladder stones is crucial for effective prevention and management strategies. This study aims to explore the prevalence of various risk factors associated with gallbladder stones, including demographic, lifestyle, and medical factors.

### Methodology:

A cross-sectional study was done in Imran Idrees Teaching Hospital between January 2024 to March 2024. Convenience sampling was done. Sample size (n=50). Manually designed performs were filled for individual cases. Frequencies and Percentages were calculated at the end of the study

### Results:

Our study showed that 98% of cases of cholelithiasis were females, 56% had age less than 40, 74% of subjects were obese. Out of the female subjects 31.25% were mulitpara while highest incidence 45.84% was among the grand multiparous females

98% of the subjects revealed they had inclination towards fatty/processed foods.

64% of the subjects had flatulence among abdominal symptoms. More than Half (56%) of the subjects had a positive family history of cholelithiasis. 56% of subjects had relatively Fair Complexion

### **Conclusion:**

The prevalence of Gallbladder disease and its association with the studied risk factors was almost similar to the other reported literature.

### **Keywords:**

Cholelithiasis, Gall Stones, 5F's of Gallbladder disease, 7F's of Gallbladder Disease

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### Introduction

Gallstone is the most common biliary pathology. Once thought of as a disease of the western world, the incidence and burden of cholelithiasis are increasing in Asia.1

Most of the patients with gallstone are diagnosed asymptomatic and are incidentally. Symptomatic patients classically present with biliary colic, usually

accompanied by nausea, vomiting and diaphoresis.2 An excellent mnemonic to memorize the risk factors of cholelithiasis is: Fatty, Fertile, Female, Forties, Flatulence (also known as 5F's of Gallbladder Disease) Laparoscopic cholecystectomy is the Gold **Standard Treatment** 

This study aimed to find out the common risk factors of Gallbladder disease among



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the patients presenting to the Surgery Department in a Teaching Hospital.

### **Objective:**

This study was conducted to identify the risk factors and triggers of gallbladder disease in the general population of Sialkot, Punjab.

Time and place of study: Surgery department of Imran Idrees Teaching Hospital located in Daska, Sialkot. From January 2024 to March 2024

Study design: Cross-sectional study

Sample size: 50 cases of cholelithiasis were studied in between the months of January to March 2024. (n=50)

Study duration: 3 months

Inclusion criteria: All the patients with evidence of cholelithiasis documented on ultrasound reports admitted in the Surgery Department of Imran Idrees Teaching Hospital.

Exclusion criteria: Patients with evidence of cholelithiasis/ admitted for reasons other than cholelithiasis in Imran Idrees Teaching Hospital

### Methodology:

A cross sectional study was done among the patients presenting at Imran Idrees Teaching Hospital between January 2024 to March 2024 by the House Officers of Surgery Department.

Manually designed performas were filled for each patient and risk factors/variables were identified and marked individually for every patient.

The variables taken into account in our study were: Age, Gender, BMI, Fertility in females, Flatulence, Family History of Cholelithiasis, Fatty food preferences.

Percentage prevalence was calculated at the end of the study

### Results:

Out of 50 cases of cholelithiasis, 96% were females and only 4% subjects were males. 56% had age less than 40 and 44% had ages in 40s BMI was greater than 25 in 74% of subjects while only 26% had BMI within normal range (18.5-24.9).

Out of the female subjects, 22.91% were nulliparous, 31.25% were mulitpara while highest incidence 45.84% was among the grand multiparous females

98% of the subjects revealed they had inclination towards fatty/processed foods.

64% of the subjects had flatulence as an associated symptom while 36% of subjects did not report any such symptom.

Percentage of the subjects had a family history of cholelithiasis while 44% had no family history of cholelithiasis.

VARIABLES	RESULTS - IN NUMBER	
Gender	Females 48	Males 02
Age	Fourties 22	Below forty 28
ВМІ	>25 37	Normal bmi 13
Fertility	Nulliparou s 11	Multiparous 15 grandmultiparous
Flatulence	Present 32	Not present 18
Fatty food preference	Yes 46	No 4
Family history	Yes 28	No 22

### Table-I

VARIABLES	RESULTS - IN PERCENTAGE	
Gender	Females 96%	Males 4%
Age	Fourties 44%	Below fourty 56%
Bmi	>25 74%	Normal bmi 26%
Fertility	Nulliparous	Multiparous 31.25%
	22.91%	Grandmultiparous
		45.83%
Flatulence	Present 64%	Not present 36%
Fatty food	Yes 92%	No 8%
preference		
Family	Yes 56%	No 44%
history		

### Table-II

### **Discussion:**

Our results are disproportionately higher in women (96%) as compared to men 4%., consistent with the results found in a study done in Abbottabad 2021 (88% females and 11.8% in Males )3, and 72% in females according to an Indian study4, whereas it differs from the other Global studies.5 Higher prevalence was reported individuals aged below 40's (56%),



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comparable to Indian study 56.7%.4 Family History in 56% was comparable to 43.7% in Islamabad6 and 61% Karachi7 Multiparity 31.25% in our study6 is comparable to 37% according to a study done at Shifa International Hospital High BMI in 74% cases is higher than 67.4% obese individuals at KFSH<sup>8</sup>. This relatively higher percentage can be explained by the fact that Cities like Sialkot and Gujranwala in Punjab have an overall high risk and prevalence of obesity and sedentary lifestyle among the citizens

### Conclusion:

We conclude that prevalence of gallbladder disease is higher among the individuals having the following F's Female, Fertile, Forty, Fatty, Family History, Fatty food preferences, with Flatulence, which makes the 7F's of Gallbladder disease.

Our results are consistent with the reported literature and other studies. Understanding the Risk factors of cholelithiasis will help raise awareness among masses about its reversible causes and effective prevention via lifestyle modification and changes in dietary habits.

### **Acknowledgement:**

I would like to thank the Surgery Department of Imran Idrees Teaching Hospital, my Supervisor Dr Brig Irfan Zafar, for facilitating me in the best way possible in completing this Study.

### Limitations:

Due to limited amount of time and lack of labor, our sample size n=50 was less than that of other studies. The study was done in a single hospital of Sialkot, as a result Ethnicity and racial factors couldn't be taken into account in our study.

Disclaimer: None

Conflict of Interest: None Source of Funding: None

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