

# A Study to Assess the Knowledge and Risk Factors of Pancreatitis among the Patients Admitted in Krishna Hospital, Karad

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**Abstract: Background:** Pancreatitis is one of the most common gastrointestinal diseases requiring hospitalization worldwide. The burden of this disease on patients and society is expected to increase even more. Pancreatitis is a common disease with a benign course in the majority of patients, but it is associated with serious morbidity, and mortality. Pancreatitis is a serious disorder which can have a severe impact on quality of life. It is necessary to pay more attention on awareness of patients about Pancreatitis and Risk factors of Pancreatitis among the Patients. **Objectives:** To assess the knowledge and risk factors of pancreatitis among the patients admitted in Krishna hospital, Karad. **Material and Methods:** Descriptive approach, non-experimental research design was used for study. 35 samples were included by convenient purposive sampling technique. Setting of study was medical and surgical wards of Krishna hospital, Karad. Structured questionnaire were used which consist of demographic data, knowledge questionnaire, risk factors questionnaire. The collected data were studied and analyzed in terms of objectives of the study using descriptive and inferential statistics. **Results:** Out of 35 patients, majority of patients, 13 (37.15 %) were in age group of 26-35 years, 8 (22.86%) were female and 27(77.15%) were male. According to findings of study, 15(42.85%) patients were having poor knowledge, 18(51.43%) patients were having average knowledge and 2 (5.72%) patients were having good knowledge regarding pancreatitis. Results also shows that 23(65.72%) patients were alcoholics, 18(51.43%) patients were having habit of smoking, 15(42.86%) patients were having diabetes mellitus, 17 (42.58%) patients were taking high glycemic foods and 15(42.86%) patients had past history of bacterial or viral infections. Result shows the significant association between level of knowledge regarding pancreatitis and occupation. **Conclusion:** Result of the study suggests that the knowledge and awareness of patients regarding pancreatitis should be improved. Study concludes that nearly all the risk factors of pancreatitis are preventable. So there is need to conduct health care programs for awareness about prevention of pancreatitis.

**Keywords:** Assessment of Knowledge, Risk factors, Pancreatitis

## 1. Introduction

Acute Pancreatitis (AP) is one of the most common gastrointestinal diseases requiring hospitalization worldwide, with a rising incidence ranging from 13 to 45 per 100,000 persons/year. The burden of this disease on patients and society is expected to increase even more. Chronic Pancreatitis (CP) is a progressive fibro-inflammatory disorder which eventually culminates in permanent impairment of the exocrine and/or endocrine pancreatic function. Although the incidence and prevalence of CP is lower than the reported for AP, this disease significantly reduces patients' quality of life. The annual incidence of CP in industrialized countries has been estimated at 5-12 per 100,000, with a prevalence of about 50 per 100,000 persons.<sup>1</sup>

Many conditions are known to potentially cause Pancreatitis with varying degrees of certainty, and although some variations have been described between countries, most of cases are attributed to biliary stones or sludge, followed by alcohol abuse. Advances in imaging, molecular biology and genetics have broadened the list of possible etiologies, and the number of presumed idiopathic cases (10-15%) will decrease as our understanding of the disease improves.<sup>2</sup>

Globally, in 2013 about 17 million cases of Pancreatitis occurred. This resulted in 123,000 deaths, up from the 83,000. New cases of chronic Pancreatitis develop in about 8 per 100,000 people a year and currently affect about 50 per 100,000 people in the united states.<sup>3</sup> it is more common in men than women. often chronic Pancreatitis starts between the ages of 30 and 40 while it is rare in children.<sup>4</sup>

The epidemiology of chronic Pancreatitis (CP) is incompletely understood. A number of difficulties exist in estimating the prevalence and incidence of CP. Long-term follow-up is often problematic, especially in chronic alcoholics, and obtaining a formal and standardized diagnosis can take years. The available studies are reasonably consistent in their estimation of the incidence of CP but few studies have attempted to estimate prevalence. Although life expectancy in CP is diminished compared with control populations, median survival lies in the range of 15–20 years. Such a survival would suggest a prevalence of CP rather higher than that determined from the survey studies. A recent epidemiological study in France found an annual incidence of 7.8 per 100,000. Assuming a survival of 15–20 years, the annual prevalence should be between 120 to 143 per 100,000. Overall, our understanding of the epidemiology of CP is poor compared with other illnesses. we consider that both prevalence and the rate of pancreatic insufficiency

and of CP are currently underestimated. There is a distinct need for more studies to remedy this lack of knowledge.<sup>5</sup>

Acute pancreatitis has been intensively studied for centuries. Many causes of acute pancreatitis have been discovered, but its pathogenesis theories are multiple and controversial. The true nature of acute pancreatitis still remains to be elucidated. The causes of acute pancreatitis are various, and its mechanism is common. Once the hypothesis is confirmed, traditional therapeutic strategies against acute pancreatitis may be improved, and decompression of pancreatic duct pressure should be advocated in the treatment of acute pancreatitis which may greatly improve the outcome of acute pancreatitis.<sup>6,7</sup>

## 2. Objectives

- 1) To assess the level of Knowledge regarding Pancreatitis among the patients with Pancreatitis admitted in Krishna Hospital Karad.
- 2) .To assess the Risk factors among patients with Pancreatitis admitted in Krishna Hospital Karad.
- 3) To find out associations of Level of knowledge with selected demographic variables.

## 3. Materials and Methods

The research approach used for the study was descriptive approach. Non-experimental research design was used for study. Study was conducted in medical and surgical wards of Krishna hospital, Karad. Present study was conducted on 35 patients with pancreatitis admitted in Krishna hospital Karad. Study period was 10 April 2017 to 7 Jun 2017 . The researcher obtained ethical clearance from Ethics committee of Krishna Institute of Medical Sciences Deemed University, Karad. Researcher obtained permission from concerned authority .after an extensive review of literature, Books, Internet and with the help of guide structured questionnaire was prepared on the basis of Objectives. Tool was divided into three sections 1.demographic data 2.Knowledge questionnaire 3.Risk factors questionnaire .tool was aimed at to assess the knowledge and risk factors of pancreatitis among the patients admitted in Krishna hospital, Karad. Certain modifications were done as per the suggestions given by experts. Entire tool was translated in Marathi. Data collection was done by using convenient purposive sampling technique. The investigator explained the purpose of the study to patients. Informed written consent was taken from the each participant. Data were collected using structured questionnaire. The data were tabulated and analyzed in terms of objectives of the study using descriptive and inferential statistics

## 4. Result

Thirty five patients responded to Pancreatitis questionnaire as instructed. Data Presented in Table no.1 shows that Majority of patients, 13(37.15%) participated in study were in an age group of 26-35 years. Majority of patients, 27(77.15%) participated in study were male .Majority of patients, 30(85.72%) participated in study were Hindu by religion. Majority of patients, 17(48.58%) participated in the

study were did primary education. Majority of patients, 13(37.15%) participated in the study were farmers. Majority of patients, 17(48.58%) participated in the study were having monthly income of Rs.5, 000-10,000.Majority of patients 30(85.72%) were married. Majority of patients 18(51.43%) were having habit of alcoholism. Majority of patients, 13(37.15%) were taking non- vegetarian diet.

As shown in figure no.1, Knowledge scores of patients regarding Pancreatitis who were admitted in Krishna Hospital, Karad was 2(5.72%) Patients were having the Good Knowledge, 18 (51.43%) Patients were having Average Knowledge, 15(42.85% Patients were having Poor Knowledge regarding Pancreatitis.

As shown in Table No.2 ,Major risk factors of pancreatitis among the patients were alcoholism (65.72%), smoking (42.86%), diabetes mellitus (42.86%), high glycemic foods (42.58%) and history of bacterial or viral infection in the past (42.86%). Table No.3 reveals the Association of Level of Knowledge regarding Pancreatitis among the Patients with selected demographic variables; Result found that there is significant Association between Occupation and Level of Knowledge of patients regarding pancreatitis because p value is less than 0.05 i.e.**0.0177**.

**Table 1:**Frequency and Percentage of patients according to sociodemographic variables, (N=35)

Sr. no	Sociodemographic variables	Frequency	Percentage (%)
1	Age(years)		
	15-25 years	4	11.43
	26-35 years	13	37.15
	36-45 years	9	25.72
	Above 46 years	9	25.72
2	Gender		
	Female	8	22.86
	Male	27	77.15
3	Religion		
	Hindu	30	85.72
	Muslim	3	8.58
	Christian	0	0
	Buddha	2	5.72
	Other	0	0
4	Education		
	Illiterate	1	2.86
	Primary	17	48.58
	Secondary/higher secondary	11	31.43
	Graduation and above	6	17.15
5	Occupation		
	Service	5	14.29
	Business	6	17.15
	Unemployed	2	5.72
	Farmer	13	37.15
	House manager	8	22.86
	Retired	1	2.86
6	Monthly income(Rs)		
	<5000	9	25.72
	5,000-10,000	17	48.58
	10,000-15,000	5	14.29
	>15,000	4	11.43
7	Marital status		
	Married	30	85.72
	Unmarried	5	14.29
	Widow	0	0

	Divorced	0	0
8	Habits		
	Alcoholism	18	51.43
	Smoking	4	11.43
	Tobacco chewing /Misery Chewing	9	25.72
	Drug abuse	0	0
	No any Habits	4	11.43
9	Diet		
	Vegetarian	13	37.15
	Non-vegetarian	22	62.86

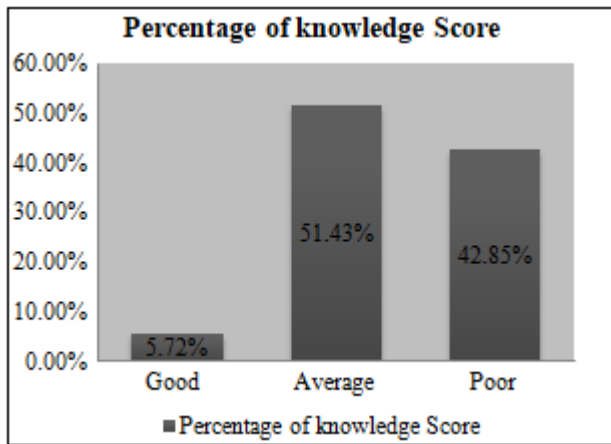
**Table 2:** Frequency and Percentage distribution of patients according to Risk Factors of Pancreatitis among them (N=35)

S.no	Risk factors	Options	N	%
1	Do you drink alcohol?	Yes	23	65.72
		No	12	34.29
2	Do you Smoke?	Yes	18	51.43
		No	17	48.58
3	Do you have habit of consumption of high glycemc foods?	Yes	17	48.58
		No	18	51.43
4	Did you have abdominal trauma anytime in the Past?	Yes	6	17.15
		No	29	82.86
5	Do you have diabetes mellitus?	Yes	15	42.86
		No	20	57.15
6	Did you suffer from any bacterial or	Yes	15	42.86

	viral Infections in the past?	No	20	57.15	
7	Did you suffer from peptic ulcer in the past?	Yes	12	34.29	
		No	23	65.72	
8	Have you ever undergone Endoscopic Retrograde Cholangiopancreatography (ERCP)?	Yes	0	0	
		No	35	100	
9	Are you having any family history of pancreatitis?	Yes	5	14.29	
		No	30	85.72	
10	Did you suffer anytime from jaundice?	Yes	5	14.29	
		No	30	85.72	
11	Have you undergone any bladder surgery before?	Yes	3	8.58	
		No	32	91.43	
12	Do you have any illness before the attack of disease?	Gallstones	Yes	10	28.58
			No	25	71.42
		Hyperlipidemia	Yes	2	5.72
			No	33	94.29
		Hypercalcemia	Yes	0	0
			No	35	100
13	Have you taken medicines for any illness in the past?	Estrogen Therapy	Yes	0	0
			No	35	100
		Antibiotics	Yes	15	42.86
			No	20	57.15
		Anticonvulsants	Yes	0	0
			No	35	100
	Diuretics	Yes	3	8.58	
		No	32	91.43	

**Table 3:** Association of Level of Knowledge with Demographic Variables

Demographic Variable	Options	Level of knowledge			Chi-square Value	P value	Inference
		Poor	Average	Good			
Age	15-25 years	2	2	0	1.539	0.9569	NS
	26-35 years	5	7	1			
	36-45 years	4	5	0			
	Above 46 years	4	4	1			
Gender	Female	3	5	0	0.9092	0.6347	NS
	Male	12	13	2			
Religion	Hindu	13	16	1	4.719	0.3174	NS
	Muslim	1	1	1			
	Christian	0	0	0			
	Buddha	1	1	0			
	Other	0	0	0			
Education	Illiterate	0	1	0	2.831	0.8297	NS
	Primary	7	9	1			
	Sec. /higher secondary	4	6	1			
	Graduation	4	2	0			
Occupation	Service	3	2	0	21.527	0.0177	S
	Business	4	2	0			
	Unemployed	0	2	0			
	Farmer	5	7	1			
	Housewife	3	5	0			
	Retired	0	0	1			
Monthly Income	<Rs.5000	5	3	1	4.774	0.5731	NS
	Rs.5,000-10,000	5	11	1			
	Rs.10,000-15,000	2	3	0			
	>Rs.15,000	3	1	0			
Marital Status	Married	13	15	2	0.4278	0.8074	NS
	Unmarried	2	3	0			
	Widow	0	0	0			
	Divorced	0	0	0			
Habits	Alcoholism	7	10	1	7.578	0.2707	NS
	Smoking	3	0	1			
	Tobacco/mishri chewing	5	4	0			
	Drug abuse	0	0	0			
	No any habits	1	3	0			
Diet	Vegetarian	5	8	0	1.686	0.4304	NS
	Non-vegetarian	10	10	2			



**Figure 1:** Bar graph showing Percentage distribution of patients according to level of knowledge regarding Pancreatitis

## 5. Discussion

As shown in table no.1 majority of the participants of this study were male patients.. Many studies showed that men are at higher risk for Pancreatitis than females.<sup>8,9</sup> this gender differences might be related to the differences in habits . Alcohol is the most frequent cause of Pancreatitis Worldwide.<sup>10</sup>

The findings of this study revealed that alcoholism, smoking, diabetes mellitus, high glycemic foods and history of bacterial or viral infection in the past are considered as major risk factors of Pancreatitis. This result supported the findings of the most of the previous study.<sup>10-17</sup>

Patients knowledge about the Pancreatitis was analyzed and revealed that more participants (42.85%) had poor level of knowledge, half of the participants( 51.43%) had average level of knowledge and very few(5.72%) of participants had good level of knowledge regarding pancreatitis. These result supports the finding of Włochal M(2015)study in which About 80% of the surveyed patients evaluated their level of nutritional knowledge as good or very good.<sup>18</sup>.knowledge deficit about Pancreatitis may be related to lack of health information resources in general and inactivation of health awareness program .

## 6. Conclusion

Findings of study show that pancreatitis is most common in males than the females and it mostly occurs in the age group of 26-35 years. In overall populations in study, (42.85%) patients were having poor level of knowledge regarding pancreatitis. So result of this study suggests that the knowledge and awareness of patients regarding pancreatitis could be improved. study also shows that major risk factors of pancreatitis among the patients were alcoholism (65.72%), smoking (42.86%),diabetes mellitus (42.86%), high glycemic foods (42.58%) and history of bacterial or viral infection in the past (42.86%). findings revealed that peoples having habit of alcoholism and smoking are at higher risk of getting the pancreatitis . nearly all the major risk factors of pancreatitis found in present study are preventable and this require a full commitment by the health

care facility and staff. there is need to arrange health care programs for awareness about prevention of pancreatitis .so that the pancreatitis can be preventable at some extent.

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