Knowledge Regarding Risk Factors of Cholelithiasis: An Assessment

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Abstract

The research project attempts to assess the level of knowledge regarding risk factor of Cholelithiasis among the patients coming to AIIMS Patna. The objectives of the research project were to assess the level of knowledge regarding risk factors of cholelithiasis among adults, and association between knowledge of risk factor of cholelithiasis in selected demographic variables. The conceptual framework of the study was developed on the basis of Roy's Adaptation Model. Quantitative approach was used for the research project. The study was carried out in AIIMS Patna. The research project comprised of 100 samples. Pilot study was conducted in 10 samples and the tool was found to be not feasible because samples were unable to answer the questions, therefore questions were modified and the research project was started. The reliability coefficient for the structured questionnaire was calculated by split-half technique and it was found r=0.73. Data was collected by administering a questionnaire. Data were analyzed by using descriptive and inferential statistics. The result of the research project showed that most of the samples (69%) have an average knowledge and 26% samples have good knowledge and 5% of samples had poor knowledge. The findings of the research project support the need for health education regarding risk factor of cholelithiasis so that there will be an improvement in their daily living practices and prevention of disease.

Keywords: Risk Factors; Knowledge; Cholelithiasis.

Introduction

Cholelithiasis The presence of stone in the gall bladder is referred to as cholelithiasis. It is derived fromthe Greek word chol (bile) + ith (stone) + iasis (process). Gallstone disease is one of the most common problem affecting the biliary tract . Autopsy reports had shown the prevalence of gallstones from 11-36%. Stone forms as a result of solids, settling out of solution or after Precipitation of solutes in the solution. The major organic solutes in bile are bilirubin, bile salts, Phospholipids and cholesterol. Gall stones are classified by their cholesterol content as either cholesterolstone or pigment stone. Pigment stones can be further classified as either black or brown. In Western countries about 80% of gall stones are cholesterol stones and about 15-20% are black pigment stones. In Asia both types of pigment stones are more common. There are many ways of practicing the healing art, but there is only one real way, naturalremedies are the simple agencies of nature, that will not tax or debilitate the system through their powerful properties like- pure air, water, cleanliness, a proper diet, purity of life and firm trust in divine power, are remedies for the want of which thousands are dying. Yet these remedies are going out of date because their skillful use require work that the people do not appreciate. Many are ignorant of the relation between their health and

their habit of eating, drinking and working to sustain their health.

The Food Association of India says that, lifestyle and food habits changes as economy develops. There is significance increase in the consumption of fat, sugar and energy dense foods. Urbanization puts junk foods and fast foods with in easy reach of population. In India these factors rise because of bad eating habits and lack of exercises , and these lead to various disorders specially GI problems in the population.

Reports from a Research Institute in Delhi, saysthat, Gall Bladder diseases affects 10-25% adults in United States. Although some persons who are affected may not have symptoms. It has the second highest cost of any digestive disease at 5.8 billion annually and results in over 8000000 hospitalization each year.

The gallbladder is a small pear shaped pouch or sac present adjacent under the liver. The stored bile is concentrated in the gall bladder. The bile stagnation or its composition difference causes gall stone. This pebble like substance can be cholesterol stone or pigment stones.

Cholesterol stones are account for about 80% of gall stones. Majority of the gall stones are caused by complex interaction of genetic and environmental factors. Women tends to have highest body fat and less active liver than males which increase the risk of gall stones in them. Most of the gall stones are silent and will not produce any symptoms.

The morbidity and burden of cost incurred by gallstones is increasing day by day, if corrective measures are not taken on time then, it can result as silent stones in future.

Statement of the Problem

A research project to assess the level of knowledge regarding risk factors of cholelithiasis among the patients coming to AIIMS Patna.

Objectives

* To assess the knowledge regarding risk factors of cholelithiasis among adults.

* To find association of the level knowledge of risk factor of cholethiasis with selected demographic variables.

Operational Definitions

Knowledge: According to *Oxford Dictionary-* "knowledge means- facts , information and skills acquired through experience or education; the theoretical or practical understanding of a subject".

In our study knowledge means to assess the knowledge regarding risk factors of cholelithiasis.

Risk Factors: According to *WHO-* "risk factor means- a risk factors is any attribute, characteristics or exposure of an individual that increases the likelihood of developing a disease or injury".

In our study risk factor means something that increases the risk or succeptibility for getting cholelithiasis.

Cholelithiasis: According to *Oxford Dictionary-* "the formation of gallstones".

In our study, Cholelithiasis means the presence of stone in the gallbladder is referred to as cholelithiasis.

Assumptions

* Adults may have some knowledge regarding risk factors of cholelithiasis.

Research Methodology

1. Research Approach

The research approach used in this research project is Quantitative research approach.

2. Research Design

The research project aims at finding out the level of knowledge regarding risk factors of cholelithiasis among the samples, hence the descriptive design was considered to be appropriate and therefore accepted.

3. Variables

Research Variables: In this research project the research variable is knowledge regarding the risk factors of cholelithiasis.

Setting of the Research Project: Setting refers to the area where the research project is conducted.

The research projectwas conducted in the selected areas of AIIMS, Patna.

Population: In this research project population consist of all patient's who are coming in AIIMS, Patna.

Sample and Sampling Technique: The sample of the research projectare 100 patients coming to the AIIMS Patna.
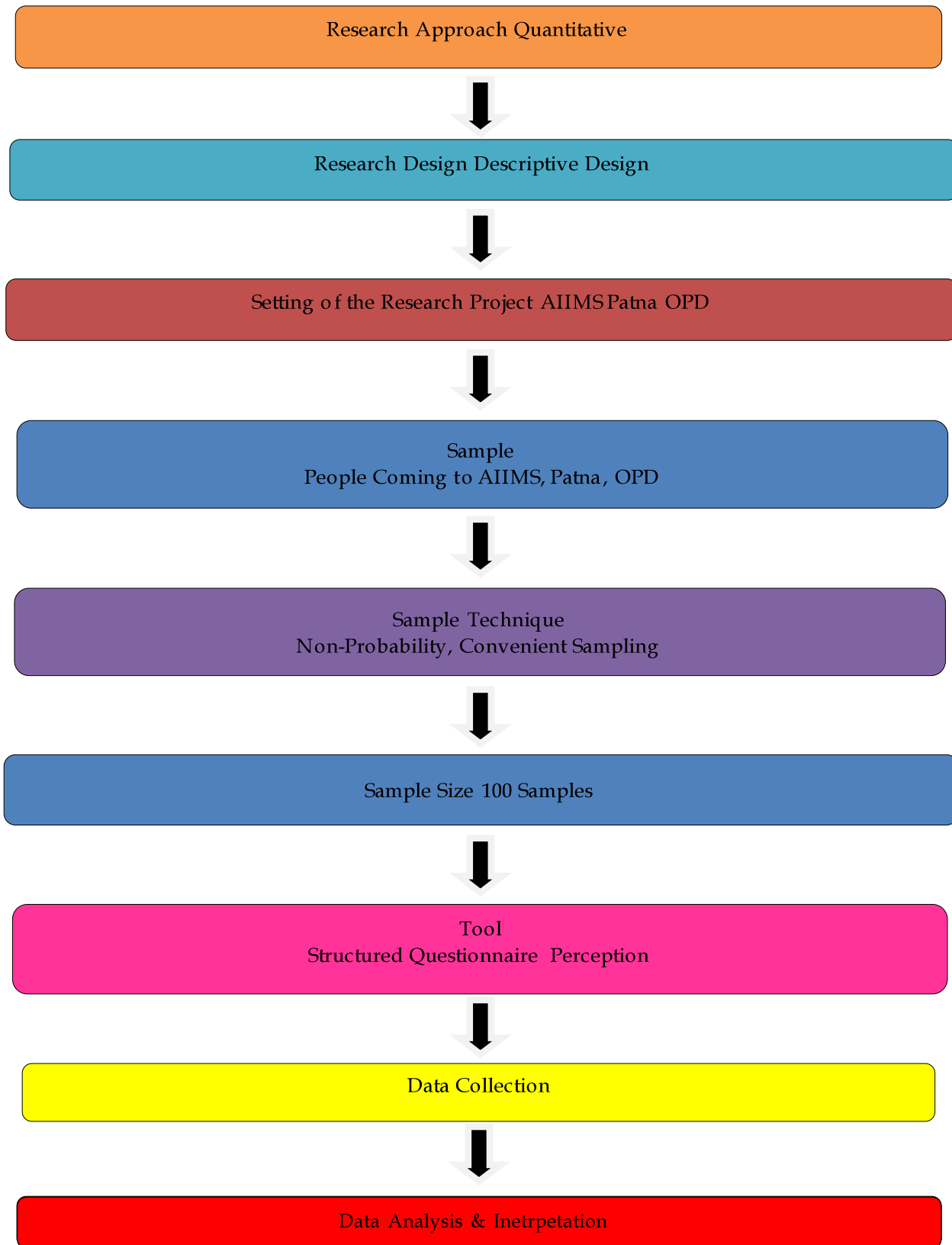
Research Approach Quantitative

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Research Design Descriptive Design

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Setting of the Research Project AIIMS Patna OPD

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Sample
People Coming to AIIMS, Patna, OPD

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Sample Technique
Non-Probability, Convenient Sampling

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Sample Size 100 Samples

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Tool
Structured Questionnaire Perception

↓

Data Collection

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Data Analysis & Inetrpetation

Fig. 1: Schematic Representation of the Research Project

Table 1: Depicts the frequency and percentage of demographic variables   N=100

S. No.	demographic variables	Category	Frequency (f)	Percentage (%)
1	Age	11-40 years	76	76%
		41-70 years	24	24%
2	Gender	Female	45	45%
		Male	55	55%
3	Marital Status	Married	66	66%
		Single	34	34%
4	Educational Status	Illiterate	15	15%
		Literate	85	85%
5	Annual Income	< 5000	32	32%
		>5000	68	68%
6	Religion	Hindu	88	88%
		Others	12	12%
7	Residence	Rural	49	49%
		Urban	51	51%
8	Water Supply	Govt. supply	27	27%
		Others	73	73%
9	Nutritional Status	vegetarian	42	42%
		Non- vegetarian	58	58%

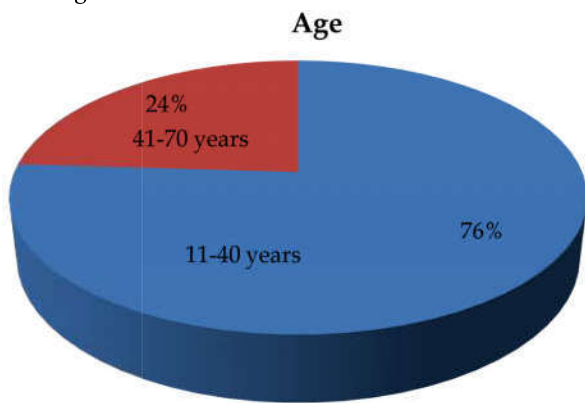*Graphical representation of the demographic variables*

1. Age

Fig. 2: Age wise distribution of samples in relation to their age in years.

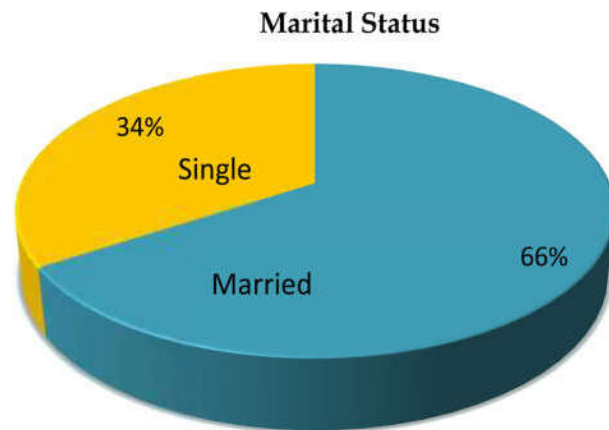Majority (76%) of the samples were in the age group of 11-40 years.

Fig. 4: Distribution of samples in relation to their Marital status.
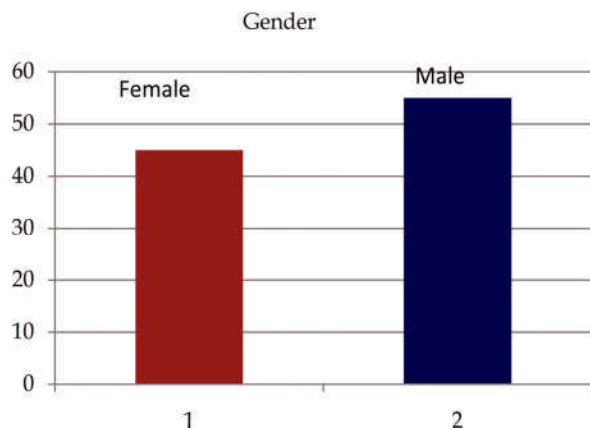
Majority (66%) of the samples were married.

Fig. 3: Distribution of samples according to gender.
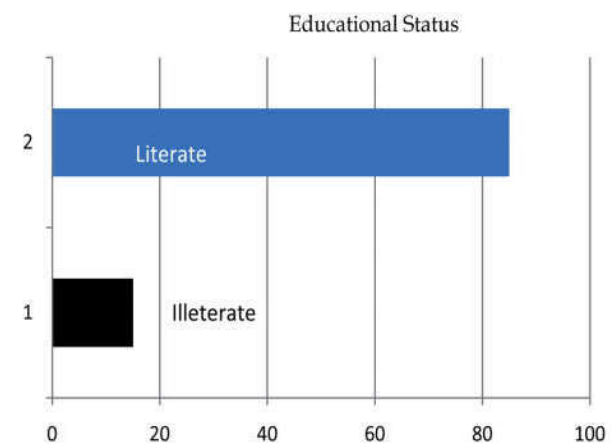
Majority (55%) population of were male

Fig. 5: Distribution of samples in relation to their Educational status.

Majority (85%) of the samples were literate.

Sample Selection Criteria

Inclusion Criteria

The adults who are available at the time of data collection.

The adults who are willing to participate in the research project.

Exclusion Criteria

- Adults who are below 18 and above 70 years of age.
- Adults who are health professionals.

Sampling Technique

In this research projectconvenient sampling technique is used.

4. Tools/Instruments

Description of Tools-

Tool 1 (Section A): Questionnaire to assess demographic variable.

Tool 2 (Section B): To assess the level of knowledge regarding risk factors of cholelithiasis.According to our questionnaire B

- The right answer is given score of 1 (one)
- The wrong answer is given score of 0 (zero)

If the Sampleis having

- Score *11-15* then the level of knowledge is = *Good knowledge*
- Score *6-10* then the level of knowledge is = *Average knowledge*
- Score is *less than 5* then level of knowledge is = *Poor knowledge.*

Reliability

For reliability, test was conducted on 10 samples at AIIMS, PATNA. From that we concluded our tool is reliable for this research project. Reliability was tested by Split-half technique *(r= 0.731).*
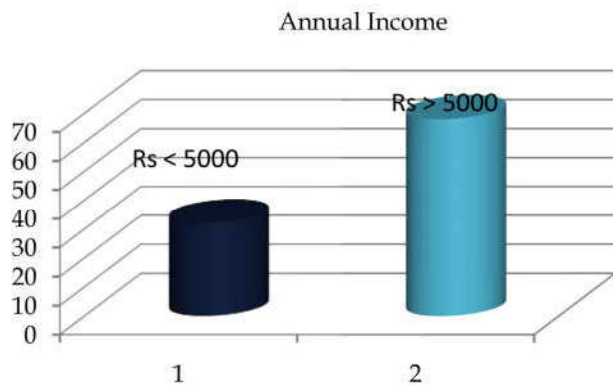

Fig. 6: Shows percentage wise distribution of samples in relation to their monthly income.

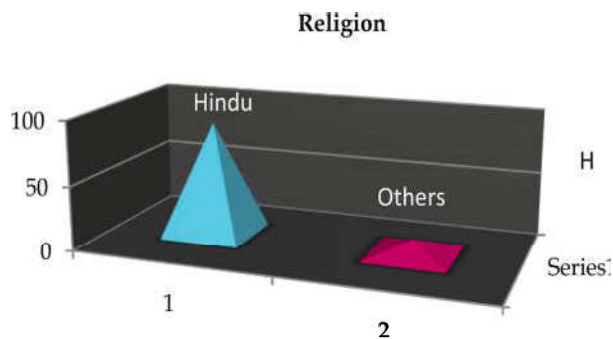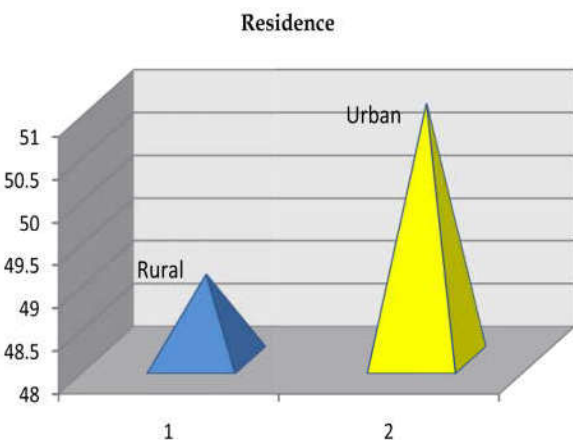Majority (68%) of the samples were earning more than Rs 5000 annually.

Fig. 8: Shows percentage wise distribution in relation to area of residence.

Majority (51%) of the samples were living in urban area.

Fig. 7: Shows percentage wise distribution of samples in relation to their religion

Majority (88%) of the samples were Hindus.

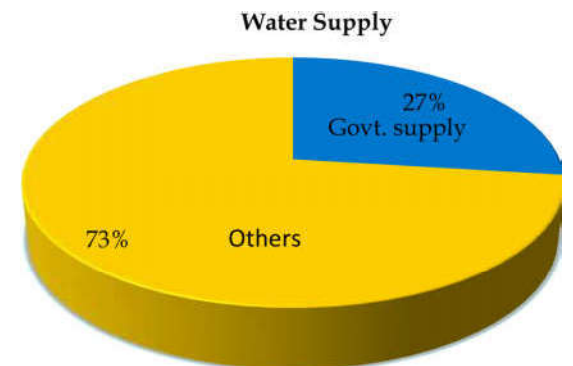**Fig. 9:** Distribution of samples in relation to water supply.

Majority (73%) of the samples were getting water supply from other sources
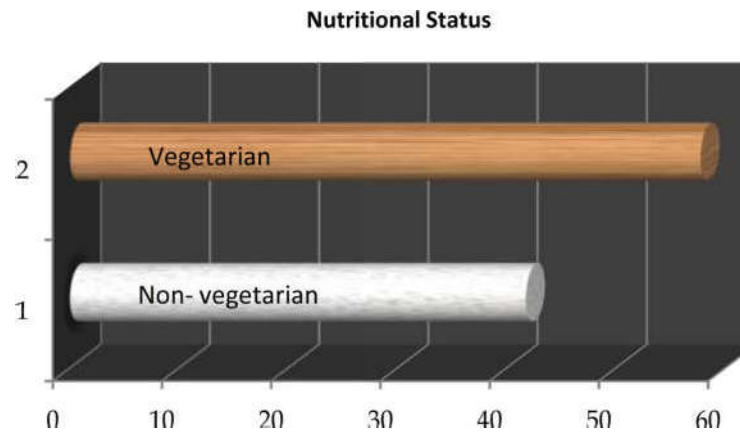
Nutritional Status

Fig. 10: Shows percentage wise distribution of samples in relation to their nutritional status.
Majority (58%) samples were non- vegetarian.

Table 2: Mean, median, standard deviation to level of knowledge regarding risk factors of cholelithiasis according to scores of population   N= 100

Level of knowledge	Frequency (f)	Percentage (%)
Good knowledge	26	26%
Average knowledge	69	69%
Poor knowledge	05	05%

Table 3: Depicts association the level of knowledge of risk factors of cholelithiasis with selected demographic variables
N=100

Demographic Variables	Category	Knowledge Score		DF	X2
		<Median	>Median		
Age	11- 40 Years	33	43	1	0.0429*
	41- 70 Years	11	13		
Gender	Female	20	25	1	0.01*
	Male	25	30		
Marital Status	Married	25	41	1	3.9769**
	Single	20	14		
Educational Status	Illiterate	06	09	1	0.0072*
	Literate	33	52		
Annual Income	<5000	13	19	1	0.2173**
	>5000	31	37		
Religion	Hindu	39	49	1	0.7369**
	Others	06	06		
Residence	Rural	23	26	1	0.1457**
	Urban	22	29		
Water Supply	GOVT. Supply	13	14	1	0.1478**
	Others	32	41		
Nutritional Status	Vegetarian	16	26	1	1.3947**
	Non- Vegetarian	29	21		

*not significant at $p</= 0.05$ level** significant at $p>/= 0.05$ level

Analysis and Interpretation of Data

Organization and Presentation of Data

The data and the findings have been organized and presented under the following sections.

Section 1: Consist of findings related to demographic data to elicit the personal information of the sample which comprises of age, gender, educational status, marital status, water supply, income, nutritional status, residence, religion.

Section 2: Consist of findings related to level of knowledge regarding risk factors of cholelithiasis.

Section B: Assessment in terms of knowledge scores of population regarding risk factors of cholelithiasis.

Findings of the Research Project

Major findings of the research project are presented under the following headings.

Section 1: Description of Thedemographic Variables of the Samples.

1. Majority (76%) of the samples were in the age group of 11-40 years

2. Majority (55%) population of samples were males.

3. Majority (66%) of the samples were married.

4. Majority (85%) of the samples wereliterate.

5. Majority (68%) of the samples were earning more than 5000 annually.

6. Majority (88%) of the samples who participated in the research project are Hindus

7. Majority (51%) of the samples were living in urban area.

8. Majority (73%) .of the samples were getting water supply from other sources.

9. Majority (58%) samples were non- vegetarians.

Section 2: Description of the Level of Knowledge among Patients Coming to Aiims, Patna, OPD.

1. 69% of samples had average knowledge regarding the risk factors of cholelithiasis.

2. 26% of samples had good knowledge regarding the risk factors of cholelithiasis.

3. 5% of samples had poor knowledge regarding the risk factors of cholelithiasis.

4. The chi square was calculated to find out the association between level of knowledge regarding risk factors of cholelithiasis with selected demographic variables. Data represented in table 3 shows that there is no significant association between level of Knowledge and variables such as age, gender and educational status and having Significant association between nutritional statuses, water supply, residence, religion, annual income and marital status.

Discussion

The present research project aimed to assess the level of knowledge regarding the risk factors of cholelithiasis among the patients attending AIIMS, PATNA. The research project findings revealed that 26% people had good knowledge, 5% people had poor knowledge and 69% of people had average knowledge.

Mean score of our study was 8.92200, median= 9.0000, mode= 8.00 and standard deviation was 2.23688. This result supported the similar cross-sectional study's result , conducted by Lawan, UM, Yust, WN, Musaba, (2001) in Northern America to assess the knowledge regarding risk factors and prevention of cholelithiasis among 300 population, in which the findings says that the mean score of the peoples knowledge of cholelithiasis regarding risk factors and its prevention was 8.0 +/- 2.1.

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