



## TREATMENT OF LIVER DISEASES: BY DOING SURVEY IN GOVERNMENT HOSPITALS AND PRIVATE CLINICS OF DELHI (SHAHDARA) AREA

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Article Info	ABSTRACT
<p>Received 02/10/2013 Revised 05/11/2013 Accepted 10/11/2013</p> <p><b>Key words:</b> Liver, Antidepressant, NSAIDS.</p>	<p>Treatment of Liver Diseases: By Doing Survey In Government Hospitals And Private Clinics. By doing survey in government hospitals and private clinics of Delhi (Shahdara) area. Firstly prepared questionnaire related to liver disorders. Delhi region in summer March to July. The clinical survey was done in the Delhi Shahdara region for the liver associated problem which a raised at summer. Summer is the most prevalent season for jaundice.90% of patients suffering from jaundice due to infection, 65% doctors suggested remaining on normal diet in uncomplicated cases of jaundice. 60% of doctor prescribe <i>UDILIV</i> (URSODIOL) medicine, 50% doctors suggests only bilirubine test and about 40% prefer ALT and AST also. 80% said that obesity and high fat diet plays a vital role in developing fatty liver disease.65% doctors said NSAIDS should not to be given and 25% said that some antidepressants viz <i>IMIPRAMINE,FLUOXETINE</i> should not prescribe in liver diseases (uncomplicated) and 70% do not prescribe laxative and appetizer. Generally all doctors prescribe neutraceuticals to patients. At last it was concluded that doctors do treat patients effectively and many prescription were rationale.</p>

### INTRODUCTION

Liver a vital organ the largest organ in our body plays a vital role in regulating life processes. This complex organ performs many functions essential to life. The liver located behind the lower ribs on the right side of your abdomen weighs about 3 pounds and is roughly the size of a football. [1, 2]

### Functions of your liver

This vital organ performs many complex functions some of these are:

1. To convert food into chemicals necessary for life and growth
2. To manufacture and export important substances used by the rest of the body

3. To process drugs absorbed from the digestive tract into forms that are easier for the body to use
4. To detoxify and excrete substances that otherwise would be poisonous.

Liver plays a key role in converting food into essential chemicals of life. All of the blood that leaves the stomach and intestines must pass through the liver before reaching the rest of the body. The liver is thus strategically placed to process nutrients and drugs absorbed from the digestive tract into forms that are easier for the rest of the body to use. In essence the liver can be thought of as the body's refinery. [2, 3]

Furthermore liver plays a principal role in removing from the blood ingested and internally produced toxic substances. The liver converts them to substances that can be easily eliminated from the body. It also makes bile a greenish-brown fluid that is essential for digestion. Bile is stored in the gallbladder which after eating contracts and discharges bile into the intestine where it aids digestion. The liver also chemically modifies many drugs

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taken to treat diseases. These changes govern the drug's activity in the body. [6, 11]

- Producing quick energy when it is needed
- Manufacturing new body proteins
- Preventing shortages in body fuel by storing certain vitamins, minerals and sugars
- Regulating transport of fat stores
- Regulating blood clotting
- Aiding in the digestive process by producing bile
- Controlling the production and excretion of cholesterol
- Neutralizing and destroying poisonous substances
- Metabolizing alcohol
- Monitoring and maintaining the proper level of many chemicals and drugs in the blood
- Cleansing the blood and discharging waste products into the bile

### **Liver diseases [5, 6]**

There are many types of liver diseases but among the most important are:

- Viral hepatitis A, B, C, E
- Cirrhosis, Fatty liver
- Liver disorders in children
- Gallstones
- Alcohol related liver disorders
- Cancer of the liver

### **Symptoms and signs of liver disease [11]**

- Abnormally yellow discoloration of the skin and eyes this is called jaundice often the first and sometimes the only sign of liver disease.
- Dark urine, Gray, yellow or light-colored stools.
- Nausea, vomiting and loss of appetite.
- Abdominal swelling liver disease may cause as it causes an accumulation of fluid in the abdominal cavity.
- Prolonged generalized itching. Unusual change of weight an increase or decrease of more than 5% within two months.
- Sleep disturbances, mental confusion and coma are present in severe liver disease. These result from an accumulation of toxic substances in the body which impair brain function.
- Fatigue or loss of stamina.
- Loss of sexual drive or performance.

### **Prevention**

- Don't drink.
- Be cautious about mixing several drugs in particular, alcohol and many "over-the-counter" and prescription medicines do not mix well.
- Avoid taking medicines unnecessarily. Also avoid exposure to industrial chemicals whenever possible.
- Maintain a healthful, balanced diet.

- Consult your physician if you observe any signs or symptoms of liver disease.

### **Alcohol-related liver disorders [6-8]**

There are three separate liver disorders related to alcohol fatty liver, alcoholic hepatitis and alcoholic cirrhosis. Fatty liver the most common alcohol-related liver disorder causes enlargement of the liver and right upper abdominal discomfort. The swollen liver is often tender or painful. Severe fatty liver may cause temporary jaundice and abnormalities of liver function. Abstinence from alcohol can effect complete reversal and cure without leaving residual cirrhosis.

Alcoholic hepatitis is an acute illness often characterized by nausea, vomiting, right upper and middle abdominal pain, fever, jaundice, enlarged and tender liver and an elevation of the white blood cell count. Sometimes alcoholic hepatitis may be present without symptoms. As with fatty liver treatment is primarily supportive and preventive. Any disease which is brought on by alcohol abuse cannot be reversed until alcohol intake is stopped. Once alcoholic hepatitis develops progression to cirrhosis will occur if alcohol consumption continues.

Alcoholic cirrhosis occurs in 10% to 15% of people who consume large amounts of alcohol over a prolonged period of time. However there is considerable variation in the degree of susceptibility of people to given amounts of alcohol and further research is needed to determine why some individuals are more vulnerable to alcohol than others.

### **Cancer of the liver [9, 10]**

The most common form of cancer of the liver is the spread of cancer from other organ systems to the liver. Not much is known about cancer that originates in the liver except that it is associated with viral hepatitis and certain parasites, drugs and environmental toxins. Chronic carriers of the hepatitis B or C viruses are at increased risk to develop liver cancer. Liver diseases appear to be on the increase. Part of this increase may be due to our frequent contact with chemicals and environmental pollutants. The amount of medicine consumed has increased greatly with resulting dangers to the liver.

The liver the detoxifying factory in the body has become an increasingly overworked organ. The present investment in liver research is scant in relation to the magnitude, severity and destructiveness of these diseases. Liver diseases are poorly understood. An adequate investment in effective liver research has the potential of saving billions of dollars and preventing untold human suffering.

### **OBJECTIVE**

The objective was to collect data for the project on "Treatment of Liver Diseases" by doing the survey



## METHODOLOGY

By doing survey in government hospitals and private clinics of Delhi (Shahdara) area.

Firstly prepared questionnaire

1. What kind of liver diseases do people generally suffer?
2. Is jaundice relates to specific season?
3. Do all jaundice patients have to remain on fat less fiber diet?
4. Are symptoms like yellow eyes and itching are sufficient to suspect jaundice?
5. Do patient complain other manifestations with jaundice?
6. Do obesity and high fat diet play major role in developing fatty liver?
7. What is the normal duration of treatment?
8. Drugs which are contraindicated in jaundice treatment?
9. What is common and specific lab? Tests are suggested to patients?
10. How many people often visit for hepatitis b vaccination?
11. Do patients follow the advice regarding vaccination course?
12. Are there any ADR with hepatitis b vaccine?

## RESULT AND DISCUSSION

**Table 1. Survey of jaundice**

Types	Percentage (%)
Jaundice (by infection)	90
Jaundice(normal)	6
Hepatitis-b	3
Hepatitis-a	1

**Table 2. Drug prescribed for jaundice**

Brand name	Percentage (%)
UDILIV	60
HEPABILIV	25
ANABILIV	15

**Table 3. Test suggested by doctor**

Test	Percentage (%)
Bilirubine [B]	50
B+ALT+AST	40
GGT	10

**Table 4. Drugs Contraindicated in Jaundice Therapy**

Drugs	Percentage (%)
NASIDS	65
Antidepressant	25
Others	10

**Table 5. Season for jaundice**

Season	Percentage (%)
Summer	90
Moist Rainy	8
Winter	2

## Types of liver diseases people suffers

On the survey the 90% jaundice caused by infection to take contaminated water and food.

## Important medicines prescribed in jaundice

After the survey in different hospitals and clinics the most prescribed drugs by doctors are UDILIVE, HEPABILIV and ANABILIV.

## Laboratory test suggested by doctor

The most to diagnose to jaundice is bilirubine test and B+ALT+AST.

## Drugs Contraindicated In Jaundice Therapy

NASIDS, Antidepressant is mostly contraindicated in the treatment of jaundice.

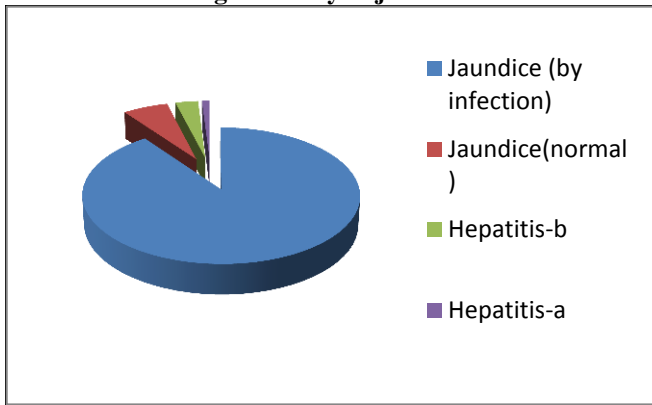
## Jaundice In Specific Season

Mostly in the summer season Shahdara (Delhi) is captured by jaundice.

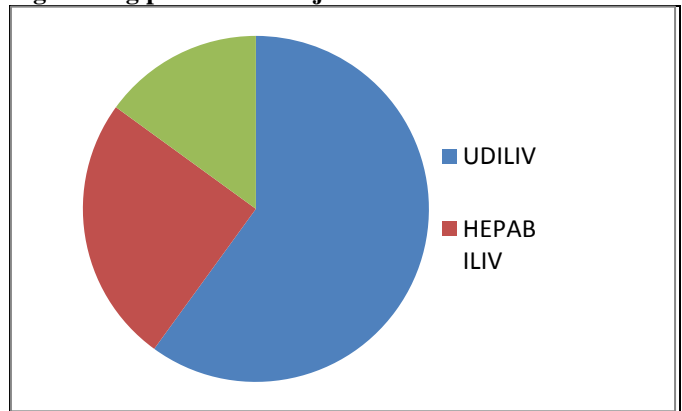
Almost all doctors prescribes nutritional supplements' with other drugs whether it necessary or not. All the doctors prescribe herbal drugs and the first and last choice for is "LIV52".



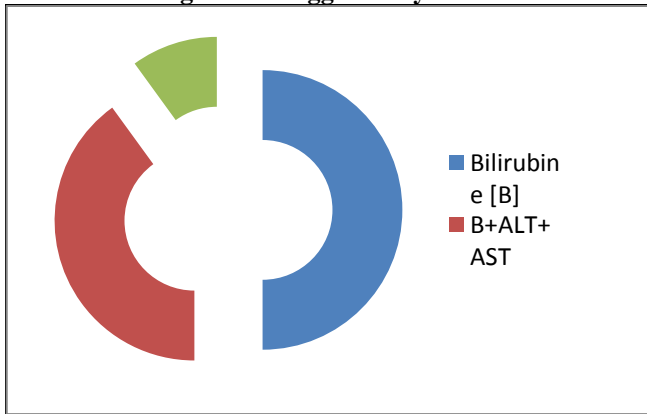
**Fig 1. Survey of jaundice**



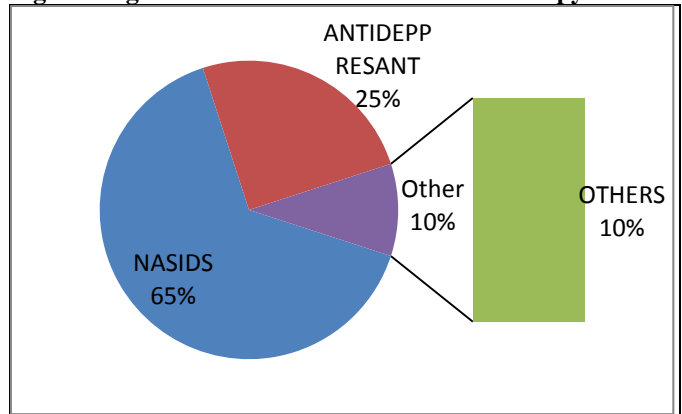
**Fig 2. Drug prescribed for jaundice**



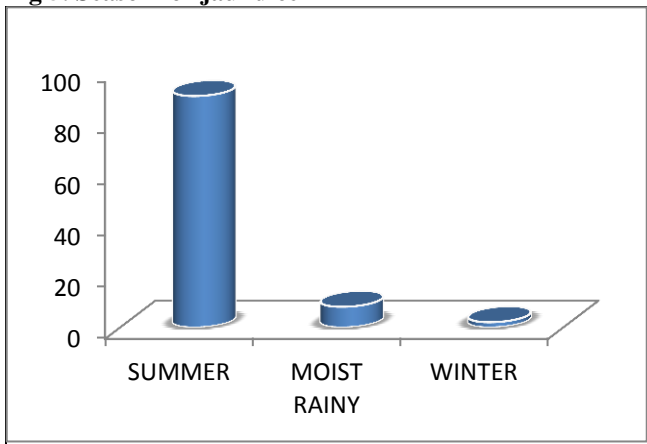
**Fig 3. Test suggested by doctor**



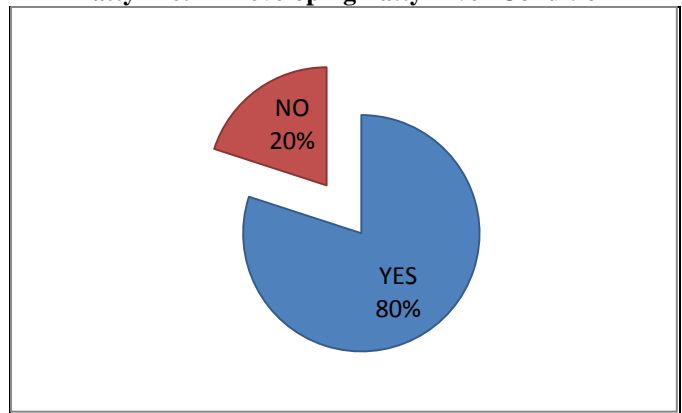
**Fig 4. Drugs Contraindicated in Jaundice Therapy**



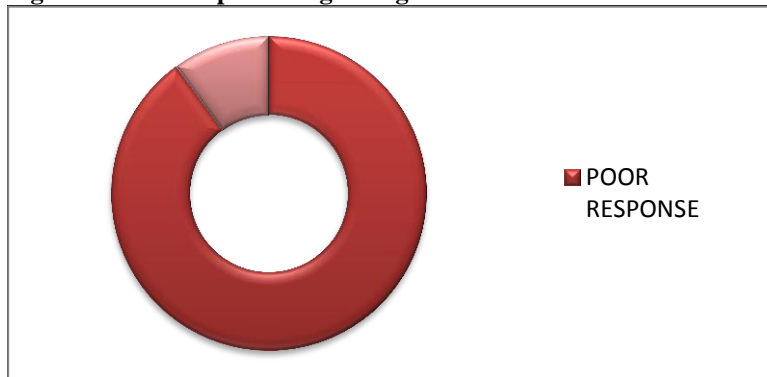
**Fig 5. Season for jaundice**



**Fig 6. Doctors Thinking Regarding Role Of Obesity And Fatty Diet In Developing Fatty Liver Condition**



**Fig 7. Patients Response Regarding Doctors Advice For Vaccination**



## CONCLUSION

The summer is the most prevalent season for jaundice. There were many patients of jaundice in shahdara region mostly due to infection. UDILIV and ANABILIV were prescribing brand though both bi-equivalents. Generally all doctors prescribes neutaceuticals to patients whether it is rational or vice versa. General laboratory test

include: Bilirubin, ALT, AST. NSAIDS and TCA were mostly contraindicated in jaundice therapy. There were little or no patients of major liver diseases viz. Hepatitis A, B, C and cirrhosis. At last it is concluded that doctors do treat patients effectively and many prescriptions were rationale.

## REFERENCES

1. Benjamine L, Shneider S, Philip M. (2008). Pediatric Gastrointestinal Disease. *Connecticut, Pmph-USA*, 751.
2. Calendar R, Finar L. (1996). Physiology, at mcg General Clinical Pharmacy, Newyork, 2(30), 1234.
3. Cotran, Razmi S, Nelson F, Robbin, Stanley L, Abul K. (2005). Robbins and Cortron Pathologic Basis of Disease. *St.Louis Mo Elsevier Saunder*, 878.
4. Extraintestinal Complication, Liver Disease Crohn's and Colitis Foundation of America.
5. Liver Tissue Damage And Treatment Retrieved on 2010-01-22.
6. Liver Information Healthline.Retrieved on 2010-01-22.
7. Liver The Largest Gland In The Body, Medicine Net. Retrived on 2010-01-22.
8. Liver Regeneration May Be Simpler than Previously Thought April 2007 [www.Medicalnewstoday.Com](http://www.Medicalnewstoday.Com) -Articles-67653.
9. Maton A, Hopkins J, Mclaughlin CW, Jill D (1993). Wright Human Biology and Health Englewood Cliffs New Jersery USA.
10. Romer L, Sherwood A, Thomas S. The Vertebrates Body Philadelphia Pa Holt- Saunder international, 354-355.
11. Walker R. Clinical Pharmacy and Therapeutics, IV edition Churchill living stones, 215-231.

