

Knowledge and awareness amongst illiterate females aged 18-65 years on causes of Hepatitis and Liver disease in urban slums in India

Vibhuti Sharma^{1,2}, Brijesh Chander Sharma^{1,2}, Shiv Kumar Sarin^{1,2}

1. Institute of Liver and Biliary Sciences 2. The Liver Care Foundation, New Delhi

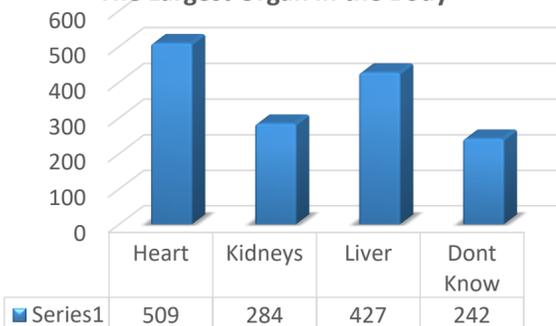
BACKGROUND

- There is high incidence of death from cirrhosis and hepatic-cellular cancer as sequelae of hepatitis B infection.¹
- Prevalence of Hepatitis B in India varies from 1-13% with an average positivity at 4.7% accounting for 40-50 million in the population.²
- The highest rate of the disease occurs in the ages of 20-49 years,³ risking 30-70% of the population's degradation of well-being.⁴
- The natural history of Hepatitis is unpredictable with progression to cirrhosis or regression to latency with underlying risks of reactivation.⁵
- Hepatitis B is transmissible via horizontal and vertical routes² and can be prevented by vaccine^{3,6,7} supported by awareness⁸

Research Question: Is there awareness among marginalized illiterate women living in slums on causes of hepatitis and liver disease?

- 98.2% women did not know of anyone with a liver disease but out of the 1.8% that did, 51.7% were illiterates (p=0.003) who qualitatively linked this with symptoms of swelling in the abdomen and jaundice
- Out of the 35% selecting the heart as the largest organ in the body, 52% of the answers were from illiterates (p<0.001)

The Largest Organ in the Body



METHODS

- A consecutive door-to-door survey was carried with a Hindi translated questionnaire in a face-to-face approach.
- Participants agreeing to participate, following explanation of purpose, gave informed consent.
- The survey covered 18 major urban slums of North Delhi from noon onwards
- 1462 women surviving on less than INR 5000 per month were assessed
- This survey took place over 1 year

QUESTIONNAIRE

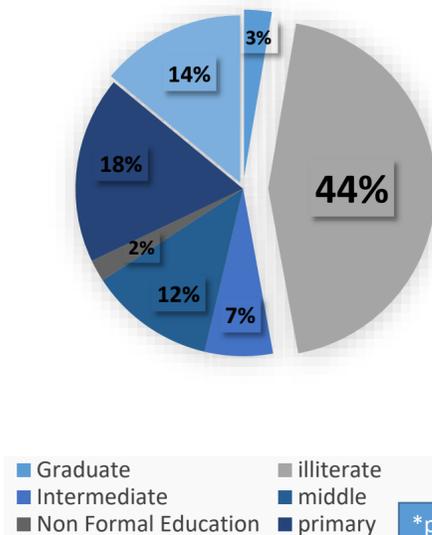
- The Largest organ within the human body is:
 - Heart
 - Kidneys
 - Liver
 - Do not know
- Liver is located:
 - Under the stomach
 - Right of the stomach
 - Between the two kidneys
 - Don't know
- Liver performs the following functions:
 - Helps to defend against germs in your body
 - Relieves tensions
 - Acts as filter to remove toxic substances
 - Produces bile
- Liver diseases can be caused by:
 - Shaking hands
 - Eating unhygienic food
 - Eating fried food
 - Drinking tea
- Hepatitis A can be caused by:
 - Tattooing
 - Eating unhygienic food
 - Smoking
 - Drinking alcohol
- Alcohol can cause:
 - Heart failure
 - Liver failure
 - Liver cancer
 - Kidney failure
- Have you heard of a vaccination to prevent hepatitis-B?
 - Yes
 - No
- Hepatitis B can be caused by:
 - Eating contaminated food
 - Getting your ears pierced
 - By sharing needles
 - Tooth extraction
- Have you been vaccinated against hepatitis B?
 - Yes
 - No
- Can liver transplant be done for liver disease?
 - Yes
 - No
- Is liver transplant possible in India?
 - Yes
 - No
- Would you be willing to donate your liver after death for liver transplant?
 - Yes
 - No
- Would you like information through?
 - Booklets
 - Lectures
 - TV
 - Calendars
- How can a non-profit organization help patients?
 - Phone lines
 - Support groups
 - Interactive website
 - Free consultation



RESULTS

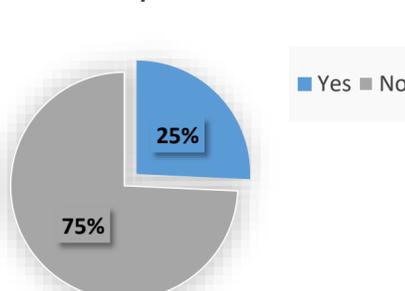
- Data was free from skewness (0.9)/kurtosis (0.7)
- The mean age was 29.4 (SD±8.38)
- 70% (n= 1022) of the women interviewed were homemakers
- 25.4% (n= 371) were unskilled workers

Education Status of the Women Interviewed*



- Hepatitis B is caused by sharing needles was accepted by 34.3% (n=223) illiterates as compared to 11.5% (n=75) accepting that ear piercing and 6% (n=39) tooth extraction were other causes (p=0.021)
- Though 62% (n=402) illiterate women knew that Hepatitis B vaccination existed (p<0.001), 74% of the dataset (n=1462) were not vaccinated (p=0.005)

Have you been vaccinated against Hepatitis B?



- 41% illiterates (n=265) felt that Hepatitis B was caused by eating unhygienic food though 34% (n=243) guessed that it could also be caused by sharing injectable needles (p=0.021).
- 54.5% (n= 354) illiterate females appreciated education in the form of lectures through support groups as compared to 16.8% (n=109) opting for media such as television or 15.2% (n=99) wanting booklets (p<0.001).



CONCLUSIONS

- There is a lack of clarity in knowledge of what viruses are transmitted by which route.
- There is scope in preparing a robust interactive education program targeting these marginalized communities as part of a holistic vaccination program against Hepatitis B.
- Policy makers can actively strategize methods for this impoverished low literate group which remain vulnerable and unattended unless an active intervention is put into place.
- Simple distribution of IEC material unless seen as interactive may not be effective as per our results.
- This questionnaire needed to be subjected to confirmatory factor analysis for validation of its components.

REFERENCES

- Khan, M., Dong, J. J., Acharya, S. K., Dhagwahdorj, Y., Abbas, Z., Jafri, S.M.W., Mulyono, D. H., Tozun, N. & Sarin, S. K. (2004), Hepatology issues in Asia: Perspectives from regional leaders. Journal of Gastroenterology and Hepatology, 19: S419-S430.
- Sarin, SK; Summary and recommendations of single theme conferences on Hepatitis B and C: Indian association for study of the liver (INASL); Journal of Gastroenterology and Hepatology (2002) 17, S197-S203
- Viral Hepatitis B: Fact sheet; updated October 2005 <http://www.cdc.gov/ncidod/diseases/hepatitis/b/fact.htm>
- Baum Andrew, Dimsdale Joel E: Quality of Life in Behavioural Medicine Research; Lawrence Erlbaum Associates, 1995, Retrieved from www.questia.com
- Jacobson Ira; Agreeing Terminology to Describe Disease and Define Response (The Language of Hepatitis B: The Disease and Its Treatment); Weill Cornell Medical College, Deptt of Gastroenterology and Hepatology; Chronic Hepatitis B: Refining Management Approaches and Addressing the Issues
- Lok, Anna S. F., McMahon, Brian J.; Chronic Hepatitis B; AASLD Practice Guidelines, Table 3, pgs. https://www.aasld.org/eweb/docs/chronichep_B.pdf
- The Hepatitis Foundation International; The ABC of hepatitis, 2005 http://ethnomed.org/ethnomed/patient_ed/viet/abc_hep_eng.pdf
- Samuel SO; A Physician's Guide to Hepatitis B, A Silent Killer; Jade Ribbon Campaign, Asian Liver Center, Stanford University School of medicine; 2005

CONFLICTS OF INTEREST

Non Declared

Contact Information

NAME: Vibhuti Sharma

TEL NO: 9811061461

EMAIL: vibutisharma@yahoo.com

