

Department of Microbiology

WORLD HEPATITIS DAY

Date: 28/07/2025

Time: 9:00 AM – 5:00 PM

Location: KLE JGMMMC, Hubballi, KAHER University

Organized by: Department of Microbiology

Objective

World Hepatitis Day 2025 was observed with the theme *“Hepatitis: Let’s Break It Down.”*

The objectives included encouraging testing, promoting the Hepatitis B birth dose vaccine, combating stigma, and integrating hepatitis care into national health systems to prevent liver cancer and severe disease.

An E-Poster Competition was conducted on this occasion. The winners were Bhajjyanth and Aditi (Batch 2022-23).

Photographs:

WHAT IS HEPATITIS B?

- Approximately 1 in 47 people in India is infected with Hepatitis B.
- It is viral infection of liver
- Caused by DNA VIRUS from Hepadnaviridae family.

STRUCTURE

It is spherical shape DNA virus. Outer envelope containing surface antigen for cell entry. DNA and DNA POLYMERASE - Virus replication. HEPATITIS B SURFACE ANTIGEN - circulate in the blood.

PATHOGENESIS OF HEPATITIS B

ENTRY AND TRANSMISSION → TARGET ORGAN - LIVER → VIRAL REPLICATION → IMMUNE RESPONSE AND LIVER DAMAGE → CHRONIC HEPATITIS

INTERPRETATION OF SEROLOGICAL MARKERS

HBsAg	HBeAg	Anti-HBc IgM	Anti-HBc IgG	Anti-HBs	Phase
+	-	-	-	-	Early phase of acute infection
+	+	+	-	-	Acute infection
-	-	+	-	-	Window phase
-	-	-	+	-	Recovered from HBV
-	-	-	-	+	Immunized

DIAGNOSIS

1. SEROLOGICAL MARKERS.
2. LIVER FUNCTION TEST.
3. ULTRASOUND ABDOMEN - LIVER SIZE AND CIRRHOSIS OR TUMORS.

MANAGEMENT

Acute hepatitis - usually self limiting supportive treatment only - rest, hydration, avoid alcohol, nutrition
Chronic hepatitis - >6month
Antiviral therapy - tenofovir, entecavir
Suppress viral replication
Regular monitoring
Liver transplant - for end-stage liver disease

Prevention

- Vaccine
- Safe sex practices
- Avoid sharing blood, needles or razors

Govt Program: NVHCP (2018)

- Free testing & antivirals
- Birth-dose vaccination
- Goal: Elimination by 2030

- Aditi pai (2022-23)



WORLD HEPATITIS DAY 2025 E- poster on "HEPATITIS- Lets Break it Down"

1. BADIYANTA SANYAL(Reg. No AA022204)
JGMM Medical College, Hubballi, Karnataka.

TITLE: "Decode, Detect, Defeat: Breaking Down Hepatitis B"

INTRODUCTION

Hepatitis is a silent yet serious disease that affects millions worldwide. It refers to inflammation of the liver, commonly caused by viruses such as Hepatitis A, B, C, D, and E.

What makes hepatitis dangerous is that many people remain unaware of their infection until it's too late. Early detection, vaccination, and timely treatment can save lives.

One Virus, Millions Affected, One Global Fight

Over 250 million people worldwide are living with chronic Hepatitis B. Each year, around 820,000 people die from complications like liver cancer and cirrhosis. It's known as a "silent killer" because of its ability to go undetected for years.

"In the Crosshairs: Populations Most at Risk of Hepatitis B"

- Newborns & Infants (Perinatal Transmission)
- People Who Inject Drugs (PWID)
- Healthcare Workers & Lab Technicians
- Sexual Contact with HIV-Positive Individuals

Awareness = Hope: Why Hepatitis B awareness matters—

Reasons why awareness so crucial in these sensitive and important matters are:

- Silent But Serious:** Hepatitis B often has no symptoms until liver damage is severe. Awareness helps people recognize the risk, get tested early, and start treatment before complications become life-threatening.
- Test to Protect:** Millions live unknowingly with Hepatitis B. Promoting testing can detect infections early, reduce transmission, and give people a chance to manage their health before it's too late.
- No Shame, Just Facts:** Fear and stigma stop people from seeking help. Awareness campaigns replace myths with facts, encouraging open discussion, early diagnosis, and supportive environments for those affected by the virus.
- Support for Families:** Awareness campaigns provide emotional and financial support for families battling Hepatitis B.

Graph Showing prevalence of Hep B age wise and Gender wise:

PREVENTION OF HEPATITIS B

REFERENCES:

- World Health Organization. Global health sector strategy on viral hepatitis 2016-2021: Towards ending viral hepatitis. Geneva: WHO; 2016.
- Neayvan S, Thong M, Souri E, Conton L, Wiktor S, Low-Bar D, et al. Requirements for global elimination of hepatitis B: a modelling study. *Lancet Infect Dis.* 2018;18(12):1399-408.
- Ministry of Health and Family Welfare, Government of India. National Viral Hepatitis Control Program. Operational Guidelines. New Delhi: Health Dept; 2016.
- Goldman D, Han J, Malmgren RT, Krane C, Oh JJ. Estimation of worldwide prevalence of chronic hepatitis B virus infection: a systematic review of data published between 1950 and 2013. *Lancet.* 2015;385(10033):548-55.
- Prasad Chatterjee Collaborators. Global prevalence, treatment, and prevention of hepatitis B virus infection in 2016: a modelling study. *Lancet Gastroenterol Hepatol.* 2016;1(4):383-403.

Hope, Help, Heal: A Strategic Approach To Hepatitis B Awareness—

- Educate:** Engage local launch mass media and community-level campaigns to spread accurate, stigma-free information. Integrate Hepatitis B education into routine antenatal care, and public health programs.
- Vaccinate for Prevention:** Ensure birth-dose hepatitis B vaccination within 24 hours of birth. Promote vaccination for unvaccinated adults in high-risk groups.
- Test, Track, Treat:** Screening and Case Management. Scale up routine screening in hospitals, ANC clinics, blood banks, and prisons.
- Strengthen Systems:** Integrate hepatitis services into primary healthcare and digital health platforms. Build capacity through training of healthcare workers and reliable diagnostic labs.

CONCLUSION

Hepatitis B continues to pose a serious global health challenge, but greater awareness can drive early detection, timely vaccination, and effective treatment. Educating individuals, families, and healthcare providers about the risks, prevention strategies, and symptoms is key to reducing its impact.

Awareness efforts help combat stigma, encourage testing, and support those affected by the disease. By standing together this World Hepatitis Day, we move closer to a future where no one suffers in silence — and every person has the chance to live a healthy, hepatitis-free life.

INFECTION PREVENTION WEEK (IIPW) 2025

Date: 19/10/2025 to 25/10/2025

Time: 9:00 AM – 5:00 PM

Location: KLE JGMMMC, Hubballi, KAHER University

Organized by: Department of Microbiology

Theme

“Stand UPPP for Infection Prevention” (Unite, Protect, Prevent, Prevail)

Objective

Preventing Infection Together.

Brief Report

Infection Prevention Week 2025 was celebrated to emphasize teamwork and simple preventive practices such as hand hygiene to create safer healthcare environments.

The program was conducted for 2nd year MBBS students to raise awareness and highlight the crucial role of infection control in daily life. The activities encouraged students to adopt preventive measures from proper handwashing to adherence to safety protocols.

Photographs



WORLD AIDS DAY

Date: 01/12/2025

Time: 9:00 AM – 5:00 PM

Location: KLE JGMMMC, Hubballi, KAHER University

Organized by: Department of Microbiology

Objective

World AIDS Day 2025 was observed with the theme *“Overcoming Disruption, Transforming the AIDS Response.”*

As part of the awareness program, the Department of Microbiology distributed red ribbons to teaching staff and 2nd year students to symbolize solidarity with people living with HIV and to remember those who have lost their lives to AIDS.

A quiz competition was also conducted to enhance knowledge and awareness among students.

Participants: Teaching staff, non-teaching staff, and students

Photographs



WORLD LEPROSY DAY

Date: 30/01/2026

Time: 9:00 AM – 5:00 PM

Location: KLE JGMMMC, Hubballi, KAHER University

Organized by: Department of Microbiology

Objective

World Leprosy Day was observed to create awareness among students about leprosy and to promote knowledge, empathy, and community health responsibility among future healthcare professionals.

Activities Conducted

Lepra Quest – Quiz on Leprosy

An academic quiz covering etiology, clinical manifestations, transmission, diagnosis, treatment (MDT), national programs, prevention of disability, social stigma, and rehabilitation.

Cinemeducation – Documentary on Leprosy

The documentary highlighted real-life patient experiences, challenges, discrimination, early detection, treatment, and the role of healthcare workers.

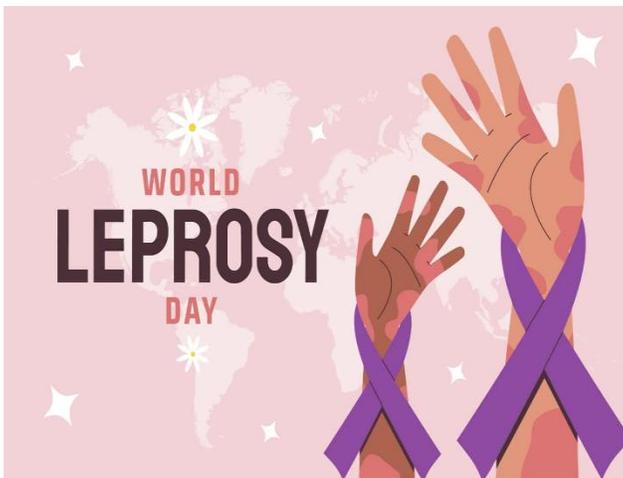
Reflection Writing Activity

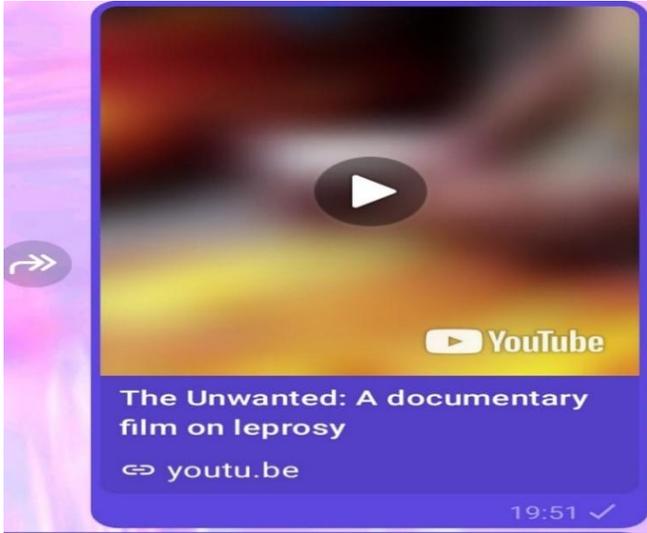
Students reflected on myths and misconceptions, social stigma, and their responsibilities as future healthcare professionals.

Outcome

The program improved knowledge, reduced stigma, promoted empathy, and strengthened public health awareness regarding leprosy. The activities were informative, interactive, and well received by students.

Photographs:





Lepra Quest Quiz Winners

Name	Time Taken	Score
Zoha Fathima Abbas	10 min 29 sec	48 / 50
Karibasappa Yaligar	15 min 13 sec	48 / 50
Abhishek S Kalakeri	15 min 26 sec	48 / 50
Nilkesh Kamlakar Ghongade	16 min 56 sec	48 / 50


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