## **PROJECT PRAKASH**



PROGRAMMED
APPROACH TO
KNOWLEDGE AND
SENSITIZATION
ON HEPATITIS

PROJECT REPORT 2017 - 2021







# PROJECT PRAKASH 2017 - 2021

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> Designed by: Arpit Kumar



## **DIRECTOR'S FOREWORD**

Viral hepatitis is a global concern, especially endangering the population of developing nations. It is cited as an extremely common infection present among communities. Nearly 2 billion people are predicted to be suffering from hepatitis B alone with over 325 million serving as chronic carriers of the hepatitis B and C. Prevalence of hepatitis B is considered to be two-four times higher among healthcare workers (HCWs) mainly attributable to occupational risk. The prevalence of hepatitis C is also reported to be higher among HCWs indicating the healthcare professionals to be among the most vulnerable groups for viral hepatitis.

To be a factor in achievement of global standards in viral hepatitis management, Institute of Liver and Biliary Sciences along with Cipla Foundation, established and implemented health care system strengthening project PRAKASH. The two components of the program - Hepatitis Induction Program (HIP) and Hepatitis Update Program (HUP) for all level of health care workers are made available using both, the traditional cascade model of training and other platforms available for enabling electronic, e-learning courses. It is an integrated initiative for the prevention and control of viral hepatitis in India which would further contribute to achieve Sustainable Development Goal (SDG) 3.3 which aims to end viral hepatitis by 2030.

This report sets forth the concept and outcomes of project PRAKASH. The project has helped build a squad of healthcare professionals equipped with the vital knowledge and skills on viral hepatitis management.

I am happy with the progress of project PRAKASH and want to congratulate the project team at ILBS. I do hope that the team will continue to aim higher, in line with the global and national needs to control and manage viral hepatitis and its complications.

Dr. S. K. Sarin Director, ILBS



## **PREFACE**

Viral hepatitis is a global public health challenge and has been recognised by WHO as well as United Nations as an issue that needs concerted efforts for its elimination. It is estimated that viral hepatitis accounts for 1.4 million deaths per year.

Cipla Foundation is committed to WHO's global call of action towards eliminating viral hepatitis by 2030. In partnership with Institute of Liver and Biliary Sciences, New Delhi (ILBS), we identified three major challenges to hepatitis namely, lack of awareness, lack of appropriate diagnosis and lack of treatment. Together with ILBS, we support initiatives in field of research, promoting awareness, facilitate immunization and access to information for patients, the medical and scientific community, and the public at large.

We strive to empower the workforce in healthcare delivery such as the paramedics, who play a vital role in bridging gaps and bringing patients closer to better quality of care. We were fortunate to have established a unique partnership with ILBS, committed to train frontline healthcare workforce and medical professionals.

Project PRAKASH launched in 2017, has facilitated early diagnosis and timely treatment of hepatitis by creating a cadre of skilled professionals. Till date the project has trained 8000+ healthcare professionals from 500+ hospitals and institutes across 25 states of India.

Cipla Foundation is thankful to Dr. S. K. Sarin and the team at Institute of Liver and Biliary Sciences for partnering with us in this unique journey and join the global call for action, taking forward Cipla Foundation's purpose of 'Caring for life'.

#### Ms. Rumana Hamied

Managing Trustee, Cipla Foundation

## **MESSAGE**

Of many public health issues overwhelming the existing health care systems and workforces around the globe, viral hepatitis has established itself to be of greater concern. Every year, hepatitis B and C alone account for more than 1 million deaths worldwide, 78 percent of the world's hepatocellular carcinoma, and more than half of all fatal cirrhosis.

Considering the prevalence of viral hepatitis and lapse in its effective management, Institute of Liver and Biliary Sciences and Cipla Foundation joined hands to address the challenge through numerous wide-ranging efforts. Project PRAKASH aims towards baseline assessment of existing capacity of healthcare delivery system in management of viral hepatitis and to build the capacity of existing healthcare workforce in viral hepatitis management.

The present report is the outcome of the first phase of project PRAKASH (1<sup>st</sup> August, 2017- 31<sup>st</sup> March, 2021), highlighting the chief objectives, methodology and the outcome of the program so far. The report is divided into sections including: project background, introduction to the program, methodology and types of trainings offered for various health care professionals and major achievements of the project.

This report is not free of limitations, though we have tried our best to minimize any kind of documentation errors. We intend to share the detailed information on the implementation of project PRAKASH, so that this report can serve as a reference document for parallel stakeholders, in their efforts towards better healthcare workforce. We look forward to criticism and suggestions from our readers.

**Dr. Anil Agarwal** Head, Administration ILBS

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## **ACKNOWLEDGEMENTS**

Efficacious accomplishment of project PRAKASH is enormously reassuring for all the affiliates. Though, it would not have been possible without the kind support and help of many individuals. We would like to extend our sincere appreciation to all of them.

We are highly obligated to Dr. S. K. Sarin, Director, ILBS for his leadership and persistent direction in implementation of the project. It is his vision that the project has taken desirable shape. He constantly encouraged us to deliver and it was all his trust in team that led us to think beyond the limits of conventional wisdom.

We would like to express our special gratitude and thanks to Dr. Anil Agarwal, Head, Administration, ILBS and senior in-charge of this project for having confidence in our competences to execute this project. His supervision and extensive backing throughout the project are indispensable.

We would like to convey our thankfulness towards the organisation team for making us a part of this wonderful family. Working with you has been a reward indeed. Without the management and all the provided support, the success of the undertaking could not have been achieved.

We recognize the efforts of resource persons from Institute of Liver & Biliary Sciences, New Delhi & other institutions who have contributed immensely in accomplishing the desired outcomes. We are perpetually grateful to all the speakers for providing tremendously educational content during lectures that were conducted during various trainings.

Just as important is the involvement of the Cipla Foundation through their financial grant for carrying out this project and facilitating us through all possible means to ensure smooth functioning and also for being patient with us even at the toughest hours. Efforts of each one of you accorded with the team's energies and resulted in the fruitful advancement of this project.

Appreciations to everyone who enables us to be a part of this initiative, thank you for letting us serve and contribute.

We wholeheartedly acknowledge the hard work that has been put in successfully completing project PRAKASH, hereby acknowledging the following members and recognize them for their untiring contribution.

Faculty:- For scientific	guidance and support		
Dr. Ekta Gupta	Professor, Virology		
Dr. Ankur Jindal	Associate Professor, Hepatology		
Administration:- For hand	holding & leading the way		
Dr. Anil Agarwal	Head		
Mr. Arun Prakash	Assistant Manager		
Finance:- Smootheni	ng out the processes		
Mr. Naveen Narang	Senior Manager		
Mr. Ashish Singhal	Deputy Manager		
Mr. Shiv Tripathi	Executive		
IT:- For providing technical support			
Mr. Rajnish Kishore	General Manager		
Mr. Manish Dutta	Deputy Manager		
METMU:- For creating beautiful collaterals			
Mr. Gaurav Agarwal	Assistant Manager		
Mr. Dhiraj Kumar	Graphic Designer		
Other departments at ILBS for their valuable contribution & support			
Clinical Nursing	HR		
College of Nursing	Hospitality		
Operations	Purchase		
Fire & Security	BVG		
Some speci	al mentions		
Dr. Mini George	Dr. Sapna Chauhan		
Mr. Dinesh Taneja	Dr. Sabin Syed		
Dr. Archisman Mohapatra	Dr. Jyotismita Pathak		
Dr. Archana Ramalingam	Mr. Pranav Keshan		
Mr. Vivek Pai	Ms. Aayushi Rastogi		

## **ILBS**

#### Our Vision

To be the premier provider of health care and centre of excellence in competency-based training, skill development and cutting-edge research in liver, biliary and allied science. The institute envisions to become a leading Liver University par-excellence.

#### **Our Mission**

With patient care as first, our mission is to continuously strive forward for developing a liver care facility second to none internationally, inculcating the best of clinical practices, and ethics, in diagnosis and treatment of liver and related organs.

To achieve this the main goal is to strive and maintain the highest standards of healthcare with state-of-the-art facility, a resource centre for specialized education, training and dedicated translational research to find new cures for liver and biliary disease. The institute continuously strives forward to be torchbearer of not only healthcare and education but also to actively participate in policy making and reaching out to masses at the grassroot for prevention of liver diseases.

ILBS started in 2010 as an autonomous institution with a generous support from the Government of National Capitol Territory of Delhi as teaching hospital with a monothematic theme of liver and Biliary sciences. Despite the odds it

A centre of
excellence for
diagnosis, cure &
prevention of liver
and biliary diseases
and a leading
university

faced, in a short span of 8 years, the Institute of Liver and Biliary Science has achieved a national status of not only a specialized referral centre much sought after for best of the liver care treatment, but also a preferred destination of students to get advanced training in areas of liver and allied sciences. In fact, ILBS is a unique amalgamation of medical university with a hospital system management of corporate style.

#### The Four Pillars of Liver Care









With a dedicated best of the clinical minds in field of hepatology, it is the only hospital in nation that has a dedicated paediatric hepatology department caring for the children affected with familial liver diseases.

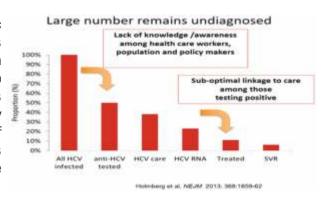
ILBS is one of the first in nation to specialize in GI bleed, hepatic coma, liver failure, liver dialysis unit and dedicated team in liver nutrition. The hepatic hemodynamic, trans jugular liver biopsies and hepato-biliary EUS procedures done in ILBS are amongst the highest in country. From a humble beginning of few transplants, ILBS has crossed a milestone of doing almost 100 transplants in a year. For those awaiting transplant, the Institute has dedicated unit on artificial liver support system and ray of hope for patients are the specialized protocols on GCSF + erythropoietin treatment and faecal microbiome transplant. Liver care will remain neglected without the kidney care and ILBS is proud of its Liver-Kidney critical care and kidney transplant unit. The Institute has got both the NABH and NABL accreditation.

**Governance System:** The Institute practices a closely-knit system of intradepartmental "inclusive and ethical governance" which has immensely benefited the organization in quick decision making and translation into meaningful and timely implementation, which is highly essential for the holistic growth of this organization.

Our Values				
Integrity Dedication Excellence			Excellence	
Team Work		Focused		

## **ILBS-WHOCC**

VIRAL HEPATITIS: A major public health problem, viral hepatitis caused 1.34 million deaths in 2015, a number comparable to deaths caused by tuberculosis and higher than those caused by HIV. However, the number of deaths due to viral hepatitis is increasing over time, while mortality caused by tuberculosis



and HIV is declining. Most viral hepatitis deaths in 2015 were due to chronic liver disease (720 000 deaths due to cirrhosis) and primary liver cancer (470 000 deaths due to hepatocellular carcinoma).

Globally, in 2015, an estimated 257 million people were living with chronic HBV infection, and 71 million people with chronic HCV infection. A strategic information system based on surveillance and programme data is needed to direct policy change and implementation. Second, service coverage of testing and treatment needs to be rapidly scaled up. Third, hepatitis services need to be delivered through a public health approach to benefit all. Fourth, sustainable financing is required to enable universal health coverage, the overarching framework for health in the 2030 agenda for sustainable development. Fifth, innovations are necessary; new diagnostics, treatments, cure and vaccines need to be developed, tested and delivered urgently to transform the hepatitis response and attain the elimination targets.

ILBS has achived the distinction of being a World Health Organization Collaborating Centre (WHOCC) on liver disease and second on viral hepatitis.

The collaboration between ILBS and WHO would enable systematic collection and analysis of community and hospital-based data on hepatitis A, B, C and E, including various aspects of transmission, prevention, and treatment specific to low resource settings in India. Such data would help WHO in developing guidelines and recommendations on these aspects of diseases and formulate policies accordingly. The collaborating centre will also serve as a resource center for training of different categories of healthcare workers in relation to viral hepatitis and liver diseases.

## **BACKGROUND**

There are many challenges to prevent and eradicate viral hepatitis from the country. Hepatitis infection is one of the leading causes of end-stage liver diseases like HCC and liver transplantation in India where more than 50% of chronic liver diseases occurs due to HBV and HCV contributes to almost 20% of chronic liver diseases cases. More than 36 million people are infected with HBV and 18 million with HCV in India. There is a huge gap between the numbers of the patients infected every year vs number of healthcare professionals available to treat such patients. Various studies have indicated that good level of knowledge, attitude and practice among nurses will help us in achieving long term goals of standard precautions for themselves and patients leading to decreased number of positive HBV and HCV cases.

It is necessary to enhance knowledge of the healthcare professionals including doctors, nurses and technicians not only for better discharge of their duties to protect the patients but also to protect themselves from getting infected due to exposure to various percutaneous injuries.

Project PRAKASH has been conceptualised and a delivery mechanism formalised so that comprehensive knowledge sharing among technical experts from ILBS and healthcare professionals across India could be done at a common platform.

ILBS being the only liver specialist institute has under taken this initiative with an aim to reduce the burden of viral hepatitis in the country by enhancing the knowledge of healthcare professionals in treatment and management of viral hepatitis patients.

The overall aim of the PRAKASH training program is in harmony with the National Viral Hepatitis Control Program (NVHCP) i.e. capacity building of existing human resources in management of viral hepatitis and its complications. Both, the programs are in line with each other with the intention of raising the awareness level about hepatitis infection across the nation thereby aligning the program with global mandate of viral hepatitis elimination by 2030 set by WHO. Also, development of Hepcare App is directed towards integration of IT skills in hepatitis management.

## INTRODUCTION

Viral Hepatitis is a recognized public health problem worldwide, resulting in 1.4 million annual deaths. Nearly 240 million cases of Hepatitis B and 130-150 million cases of hepatitis C contributes to the disease burden globally. India accounts for 15.3% of the global burden with to approximately 40 million cases of hepatitis B and 6-12 million cases of hepatitis C. Healthcare workers (HCWs) are highly prone to blood-borne infections from patients due to close contact while treatment. Despite the availability of safe and effective vaccine against HBV, less than 50% of the HCWs are found to be fully vaccinated and among them considerable population of HCW has low anti-HBs titre levels. Negligence has been reported as the most common reason for not getting vaccinated against HBV, indicating unawareness about the severity of the disease can potentially predispose the HCWs to higher risk of HBV and HCV.

The above can only be achieved by building capacity in the existing healthcare delivery system by imparting knowledge of screening, diagnosis, prevention and treatment of viral hepatitis amongst healthcare providers. It is being felt that the knowledge of viral hepatitis, especially B and C is necessary for our doctors, nurses and lab technicians for better discharge of their duties to protect the patients and themselves from these infections.

Project PRAKASH is a training program for primary care physicians, and paramedical professionals to provide comprehensive training in screening, diagnostic and therapeutic services for viral hepatitis to general and high-risk population of the country. The program was initiated in August 2017 with an aim to increase the knowledge of health care professionals and to better train them in treating patients with viral hepatitis.

The two major components of PRAKASH are			
HIP - Hepatitis Induction Program	HUP - Hepatitis Update Program		

The project has successfully trained more than 8,000 healthcare professionals including doctors, nurses and laboratory technicians from 500 plus healthcare institutions across 25 states and UT's in the country.

## **OBJECTIVE**

Project PRAKASH aims to provide quality healthcare to the patients by updating the knowledge & skills of the in-service healthcare professionals in primary health care across the country so that they become self-sufficient in treating & managing viral hepatitis and associated complications efficiently & effectively and subsequently are able to monitor outcomes.

#### Objectives of the project

- To build capacity of healthcare professionals for the management of viral hepatitis in the country.
- To help create a model of awareness and training for healthcare providers.
- Conduct a quick baseline assessment of existing Knowledge, Attitude, Practices (KAP) and capacity of health care delivery system in management of viral hepatitis

The findings from the above objectives will be supportive in drafting long term goals in elimination of viral hepatitis in the country. The learnings of the trainings/studies will go a long way in formalising policies required in better dissemination of training to healthcare providers in various trainings.

Title of the project: The project was formally named as "PRAKASH"

PRogrammed Approach to KnowledgeAnd Sensitization on Hepatitis

#### **Project Duration**

The Project was commenced on  $1^{\rm st}$  August 2017 with three and a half years period ending on  $31^{\rm st}$  March 2021. Hiring of the project staff was the first step and once the staff was hired, trainings were initiated at two different centres in New Delhi. From  $3^{\rm rd}$  quarter onwards full-scale trainings were implemented at Institute of Liver and Biliary Sciences for in-service nurses and a formal program was launched by Dr. S. K. Sarin, Director, ILBS on World Health Day i. e.  $7^{\rm th}$  April 2018. The F2F trainings were conducted at ILBS till February 2020.

The face to face trainings were formally discontinued from March 2020 after the global crisis of COVID-19 hit the world. From March 2020 till August 2020, the project has been occupied in database management, presentations of findings in various scientific journals suitable as per the study findings. The findings of the studies conducted under the project will also help in further restructuring of the project.

Since September 2020, online training on co-management of COVID-19 & viral hepatitis under Hepatitis Update Program was initiated for nursing and laboratory professionals. The trainings were conducted on regular basis till 31<sup>st</sup> March 2021.

During the project tenure 54 national level trainings were conducted on regular basis for 8,000+ in-service doctors, nurses, and laboratory technicians on various aspects of viral hepatitis.

#### Targets and expected outputs of the project

Goals attained after project completion are listed below:			
Decrease in burden of viral hepatitis	Reduced burden of viral hepatitis in country through availability of trained healthcare taskforce for better treatment and management of viral hepatitis.		
Inculcating standard precautions as a habit	Instilling standard precautions as the foundation for preventing transmission of viral hepatitis during patient care in all health care settings.		
Presentation of findings	Using the findings of the studies in policy formulation in better discharge of services to viral hepatitis patients.		

#### Project sites and beneficiaries

Project site is Institute of Liver and Biliary Sciences, New Delhi. Out of 54 trainings, six have been conducted at other centres due to logistic issues in and around Delhi/NCR and also to promote and ensure wider participation.

The direct beneficiaries of the project were in service healthcare professionals including medical doctors, dentists, nurses and laboratory technicians working in any type of healthcare setting across the country.

In-direct beneficiaries includes institutions from where these healthcare professionals have attended the training program. Other beneficiaries include patients and family members visiting hospitals for treatment of viral hepatitis.

## Implementing agency:

A formal MoU has been signed between ILBS and Cipla Foundation hereby declaring Institute of Liver and Biliary Sciences, New Delhi as the implementing partner.

	Partner Organisations			
CIPLA Foundation	The financial grant to run the program was provided by Cipla Foundation along with the operational support to the project from time to time.			
WHO	ILBS is a WHO Collaborating Centre (WHOCC) for Viral Hepatitis and Liver Diseases in the country. The one of the major mandates of the collaboration is to provide training to healthcare professionals in viral hepatitis so as to achieve the global mandate of eradication of viral hepatitis by 2030.			
DGHS	Directorate General of Health Services, New Delhi has collaborated with project PRAKASH to ensure maximum participation of healthcare professionals from Delhi Government Hospitals.			

## **OUR TEAM**

#### Dr. Anil Agarwal - Head, Administration



Dr. Anil Agarwal is a dynamic medical professional and general administrator, strategic thinker, decision maker with more than 23 years experience in government service under various capacities in general administration & hospital establishment along with discharge of quasijudicial responsibilities. He is looking after the overall administration of the ILBS since its inception and has vast experience in policy planning and financial management along-with day-to-day general administration of this unique hospital-cum-medical university of national prominence. It is because of him that in his advisory capacity to project PRAKASH, this program could see the light of the day in its present form. Dr. Agarwal is a gentle human being with full of energy & enthusiasm and always there for providing his administrative support for taking ILBS to newer heights of glory.

#### Mr. Arun Prakash - Assistant Manager, Admin & Senior Program Officer (Projects)



Mr. Arun Prakash is working with ILBS for past 12+ years in administration department. He is currently looking after the duties as Assistant Manager (Admin) & Senior Program Officer (Projects) at ILBS. During his working journey of 21 years, he has served his expertise in many healthcare government institutions like GTB Hospital Delhi, Directorate of Health Services, Delhi, Ministry of Health, Uttarakhand etc. He has also worked in healthcare project SCOVA aided by World Bank aimed at training of healthcare workers at grass root level in the state of Uttarakhand. He is at the forefront of aligning the requirements of all public health projects at ILBS with the government rules and regulations along-with smoothening of processes, approvals for various activities required on day to day basis.

#### Ms. Akanksha Bansal - Senior Manager (Projects)



Ms. Akanksha Bansal has over 15 years of experience in successful management of projects. She has been working in ILBS since 2016 and is successfully managing 3 nationwide projects on public health programs. She has played a key role in successful implementation and has anticipated and managed programmatic issues over the years and subsequently able to leverage lessons learned from past experiences.

She also carried the responsibility for the successful delivery of the proposed activities, implementation of the project's objectives and management of their inter-dependencies. She is the key person for coordination of the project with the funding agencies for regular updates, reporting and fund acquisition.

Number of projects: 3 Number of publications: 16

#### Mr. Vinay Kumar - Senior Executive



Mr. Vinay Kumar has 5 years of experience in managing multiple job responsibilities including co-ordination, data management, calling & emailing. His area of expertise is maintaining and cleaning of data using excel and SPSS. He has played a key role in providing administrative support to researchers in compiling and generating reports, papers etc. He has joined ILBS in 2018 and works towards ensuring the complianc of the project activities including carrying out the training programs smoothly. He also ensures regular uploading, updating the project websites/elms software, maintenance of scientific data collection processes using excel and SPSS software. He is also actively in involved in preparation of utilisation certificate, quarterly and annual reports for funding agencies.

Number of projects: 3 Number of publications: 5

#### Mr. Ashish Kumar - Senior Executive



Mr. Ashish Kumar has over 13 years of experience in administrative and human resource work including data base management of employees, maintenance and updating of records, processing of inter-departmental approvals, travel booking of staff, maintaining coordination with banks etc. AT ILBS, he looks after departmental administrative procedures including co-ordination for trainings, inter-departmental processing of files and approvals etc. He also manages general activities related to participants enrolment, registration and other needed communication. Additionally, manages the co-ordination with HR, Finance, Purchase & IT department for various requirements during trainings.

Number of projects: 3 Number of publications: 4

#### Mr. Arpit Kumar - Senior Executive Technical



Mr. Arpit Kumar is a technical expert with more than 5 years of experience in quality control for data collection and reports, creation of communication collaterals on various designing softwares etc. He has worked with some of the prestigious institutions like National Health Resource Repository & Tandem data Processing Ltd.

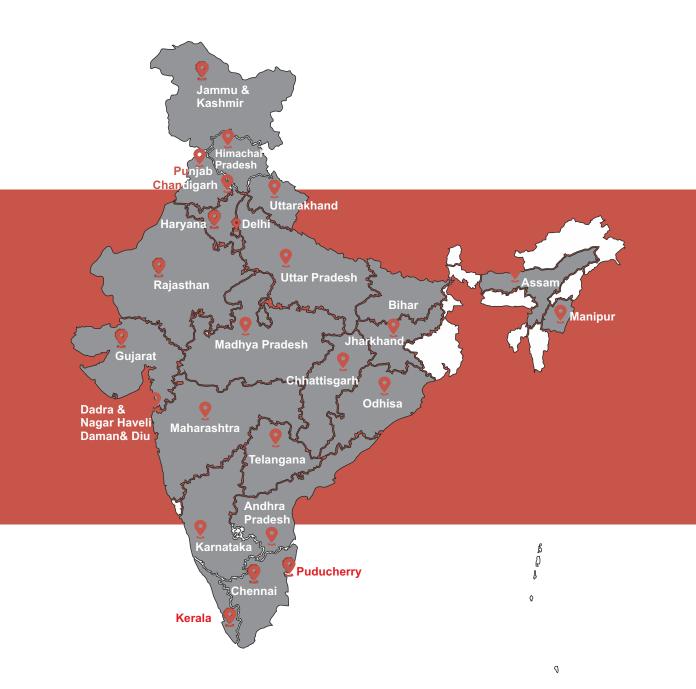
At ILBS, he carries the responsibility of information technology supportive activities like relay of online sessions through ZOOM, designing of certificates, modules, reports, brochures, IEC material. He also aids in providing additional support for trainings as well as involved in data sorting and cleaning of the collected information, calling to participants for trouble shooting etc.

Number of projects: 3 Number of publications: 4

## **OUR REACH**

In keeping with the WHA's global campaign of 'Finding the Missing Millions', project PRAKASH has successfully taken its intervention of updating knowledge of healthcare professionals in viral hepatitis to the tier 2 and tier 3 healthcare institutions across 25 states and UTs in the country by increasing the accessibility to viral hepatitis treatment in rural and urban areas in the various parts of the country.

25 | 500+ 8000+ STATES INSTITUTIONS PARTICIPANTS



## **TARGETS**

#### MoU vs Achieved

The elemental MoU signed between ILBS & CF mentions the goal of conducting capacity building programs for 2,000 healthcare workers over a period of 3 years ending 30<sup>th</sup> September 2020.

Albeit, owing to the project progress and several other operational and financial modifications required in the MoU, a revised budget sheet with a revised target of 3,600 HCWs training was signed for the 2nd and 3rd financial year applicable from 1<sup>st</sup> April 2019 till 30<sup>th</sup> September 2020.

Due to COVID-19 pandemic, the project activities were compelled to be shifted in the last financial year hence, a 3rd budget sheet with an extension of 6 months ending 31<sup>st</sup> March 2021 was signed between ILBS & CF with an estimated target to train 1200 nursing professionals in co-management of viral hepatitis & COVID-19.

Table: Total number of health care workers trained in each quarter

S. NO.	FINANCIAL YEAR	QUARTER	TARGET	ACHIEVED
1		APR 2018 - JUN2018	200	549
2	YEAR I	JUL 2018 - SEP 2018	200	517
3	TEART	OCT 2018 - DEC 2018	200	372
4		JAN 2019 - MAR 2019	200	467
5		APR 2019 - JUN 2019	775	1315
6	YEAR II	JUL 2019 - SEP 2019	775	1557
7		OCT 2019 - DEC 2019	775	1153
8		JAN 2020 - MAR 2020	775	604
9		APR 2020 - JUNE 2020	250	-
10	YEAR III	JUL 2020 - SEP 2020	250	270
11		OCT 2020 - DEC 2020	600	402
12		JAN 2021 - MAR 2021	600	844
TOTAL		5600	8050	



Figure indicating number of health care workers trained vs estimated target in the MoU

As depicted in the above table, the project team was able to successfully train approximate 1,900 HCWs in the first year itself, thereby achieving the overall target of the project period in the year of commencement.

The second financial year has been most lucrative so far, resulted in training of more than 4,500 HCWs in various aspects of viral hepatitis, which could be documented as an over achievement of the set target.

Due to adverse effect of COVID-19 pandemic, all training program came to a halt and the focus has been shifted to training HCWs in dealing with the adversities of the pandemic. The first 2 quarters have been utilised in writing various papers and training methodologies for the purpose of various publications. From  $3^{\rm rd}$  quarter onwards the project team conceptualised a training to match up to the current situation of COVID-19 pandemic and proposed to conduct training for HCWs on co-management of viral hepatitis & COVID-19.

In accordance with the MoU, the gross outcome of training 5,600 HCWs has been way over achieved by a margin of 150%, resulting in furthering the knowledge of 8,050 HCWs on various aspects of viral hepatitis covering 25 states and union territories across the country.

## **METHODOLOGY**

#### Phase 1: Preparation of Training:

The cohort of each training differs on the basis of scientific content. Liaising with various colleges and institutes and preparation for participant engagement was done to maximise the program reach within the targeted beneficiaries. The step wise details of the activity are listed below:



**Identification of resource persons** - The resource persons for the program were identified on the basis of topic expertise post discussion among key stakeholders. The speakers were faculty members from medical colleges, nursing colleges and topic experts from ILBS as well as other healthcare institutes. Speakers were provided with a standard honorarium amount for each session.



**Finalisation of agenda and course curriculum:** Post resource person identification, interaction among project team and speakers resulted in drafting the objectives for the sessions. Who will teach what, removal of duplication of information etc. During regular intervals these discussions were initiated and presentations were updated from time to time as per the new updates as and when new advancement came.



**Accreditation of training:** Accreditation from the concerned authorities were obtained for various trainings wherever applicable, like from Delhi Nursing Council for nursing training program; Delhi Dental Council for dentist's training program etc so as to provide maximum benefit of the program to the participating HCWs.



**Development of module:** The project team prepared the first draft of the module which was later revised in accordance with the guidance received from various resource persons at ILBS. The final draft (chapter wise) was validated by the internal and external experts and later was put together in a scientific module which was shared with the concerned participants of each training program as study and reference material post training.



**Development of KAP Study & Pre-& Post Test:** The KAP & pre-& post-test questionnaire was developed by the project team and was shared with subject matter experts for review and validation. The questionnaires were finalised as per the comments received from the subject experts after incorporating the necessary changes.



Liaising and engaging with various institutions: The course information was circulated through various modes and mediums including phone calls, emails and SMS for participants registration for the upcoming trainings. A WhatsApp group was formed including nodal officers from various hospitals, medical and nursing colleges and associations. These members helped in registration of participants on regular basis. The registration was done offline through messages and online through emails. The details required for registration were participant's name, hospital name, mobile number & email ID. Once the registration of participants was received a confirmatory email and SMS including details of the upcoming training program like date, timings, duration etc was sent on their registered mobile number and email id.

**Travel Reimbursement:** Participants attending training program were provided with travel reimbursement with Rs. 500/- flat travelling with in Delhi/NCR. For outstation participants reimbursement was provided on the basis of 3rd AC travel cost of train with actual submission of tickets with an upper limit of Rs. 5,000/- for nursing professionals and Rs. 10,000/- for medical professionals.



At the end of the program, each participant submits the provided travel reimbursement form including bank account details for NEFT transfer of funds. The funds were directly transferred to participants account after validation of tickets within 30 - 45 days post attending the training program. The financial support was provided so as to reduce the financial burden of the HCWs and enhance the reach of training program.

#### Phase 2: Conduct of Training:

Once the preparation of the training was over, the next step was to register the targeted audiences through circulation of scientific content in various healthcare institutions and enrol them in different training programs conducted through face to face or online medium. The detailed step wise methodology applied in all trainings are listed below:



**Registration:** Face to face trainings of HCWs were conducted at APJ Abdul Kalam Auditorium, Institute of Liver and Biliary Sciences, New Delhi. The timings of all the training program were 8:00 AM on wards till 6:00 PM in the evening. As these were full day training program, breakfast and lunch was provided to all the participants during the day. Once the participants arrive at ILBS, approximately 45 minutes in the morning were kept for registration and breakfast.



**Pre-Test & KAP Study:** An online cross sectional KAP study on viral hepatitis was conducted on the participants via survey monkey platform, before commencement of training. The link was sent via SMS on their registered mobile number. The KAP study for each program focused on all aspects of prevention and management of Viral Hepatitis. IT support was provided to all participants to provide uninterrupted experience while filling out the form.



**Delivery of sessions:** Once the questionnaire was filled by the participants, sessions on various topics related to viral hepatitis were delivered by the experts. The full day training program consisted of relevant topics with session duration ranging from 45 minutes to two hours each. After each session, participants queries were addressed in question & answer round. The content delivered through presentations were regularly updated as per the new advancements in viral hepatitis.



**Post Test:** Online post-test questionnaire was sent to all participants at the end of the training program via SMS on their registered mobile number. The link consisted questions of the knowledge component of KAP Study.



**Feedback:** An online feedback was collected using survey monkey platform from participants at the end of the session to assess the quality of the lectures. The form consisted of five segments: 1. Relevance of the topics (topic wise); was the content delivered balanced, objective and evidence based. 2. Has the participant gained confidence in implementing the learning in their own setting. 3. Has participant learnt anything new unknown earlier. 4. Were they satisfied with the arrangements? and 5. If they have any suggestions to make.



**Certification:** All participants attending full day training program were provided with the 'Certificate of Participation' at the end of the program. Also, printed scientific module were provided as a ready reference material to the participants.



**Continuing learning experience:** All the session presentations along with other scientific literature were sent to the participants on their registered email ids. All scientific sessions were pre-recorded and uploaded on the vimeo site. The link for the video lectures was shared with all the participants at the end of the program.

**Hep Care App** was also developed by the project team to be used by HCWs while counselling of hepatitis patients and family members.





## **NURSING PROGRAM**

Several studies have indicated that the risk of transmission of HBV and HCV is 4 times higher amongst healthcare professionals in comparison to the general public. Every year lakhs of positive cases of nursing acquiring HBV & HCV infection are registered due to percutaneous injuries encountered due to occupational exposures. This happens because nurses are at the forefront of patient management. An uninformed nurse can lead to poor management of HBV and HCV patients and also exposes themselves to occupational exposures like needle stick injury, bio-medical waste etc.

**The training program was designed to emphasis on** updating them on all aspects of nursing management of viral hepatitis including major emphasis on universal precautions guidelines for HCWs safety from viral hepatitis infection.

#### **Hepatitis Induction Program**

It is a one-day training program conducted to build capacity of nursing professionals in diagnosis and management of viral hepatitis in the country. The program is conducted at ILBS with live audience or at any other institute with telemedicine setup for relay of session from ILBS telemedicine centre.

#### Some of the highlights of the program are listed below:

- A one-day (8 hour long) training program on viral hepatitis.
- Didactic lectures/video demonstrations/hands on training by the faculty or expert
- State of the art facility for the transmission of session with Wi-Fi access to all participants to participate in KAP study and pre-& post-test.
- Detailed scientific material in the form of viral hepatitis modules were prepared by the experts. All the scientific material including presentations, module and other important scientific guidelines were shared with the participants as reference material.
- A 'Certificate of Participation' is awarded to all the participants at the end of the program.
- No financial commitment/expense from the participant/participating institute side.
- Travel expenses reimbursement is provided to all the participants according to the project policy.
- Refreshments (lunch, and tea) for the participants is provided by the Institute.
- The program was accredited with 8 credit hours by Delhi Nursing Council.

#### **SCIENTIFIC SCHEDULE**

Торіс	Speakers
KAP Study & Pre-Test	TEAM
Introduction of HIP & HUP	Ms. Akanksha Bansal
Overview, Epidemiology & Management of Viral Hepatitis	Dr. Sapna Chauhan
Clinical feature of Viral Hepatitis	Ms. Madhavi Verma
Laboratory diagnosis of Viral Hepatitis	Dr. Reshu Agarwal
Safe needle practice-Live Demonstration	Mr. Gaurav Singh
Needle stick injury and injection saftey	Ms. Tarika Sharma
Disinfection & sterlization in context of Viral Hepatitis	Ms. Cicily Babu
Role of Fibroscan in Viral Hepatitis	Ms. Seena Babu
Counselling of patient & family member	Ms. Anila Goswami
Post Test & Feedback	TEAM

#### Hepatitis Update Program 1.0

There are many other complications associated with viral hepatitis. And nurses play a crucial role in managing the patients with chronic viral hepatitis. HUP has been conceptualised with an to provide a continued e-learning program to track the progress made on the training imparted through HIP and to create a model towards a continued and advanced training on viral hepatitis and other liver ailments.

The aim of the e-learning program is to provide specialized knowledge to healthcare professionals at their own pace and time availability and was run through (elms) e-learning management software. The e-learning education has been attempted to cultivate an active learning process for both parties.

#### Components to the program:

- **Duration:** The course duration was 3 months. All the queries of the participants were solved through blogs and emails.
- **Course Curriculum:** The curriculum included 15 topics related to hepatitis and other liver related specialized procedures and diseases.
- Pre-Test Evaluation: Before the beginning of the HUP, all the participants will
  have to attempt an online pre-test to assess their knowledge in their
  subject.
- **Asynchronous Session:** The second component is the recorded session by the topic expert for participants to listen and learn.
- Learning modules: Once the participants have attended the recorded session, they will move on the scientific module (chapter wise) of that topic for self-learning.

- **Self-Assessment:** After each and every module there will be self-assessment questions (MCQ based) for assessing the knowledge gained through video lecture and module.
- **Post Test Evaluation:** At the end of the course, all the participants will have to attempt post-test. It will be used as a measurement matrix to analyse the impact of the program on the basis of their knowledge before and after the course completion.
- Participants who have completed the all the above-mentioned criteria received a "Course completion Certificate".

The e-learning education has been attempted to cultivate an active learning process for both parties.

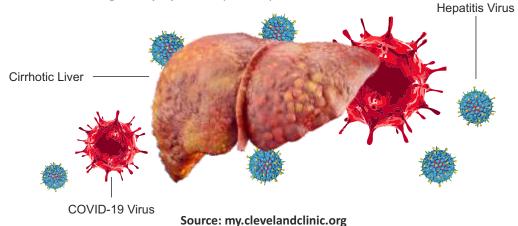
#### **SCIENTIFIC SCHEDULE**

Topic	Speakers
Approach to abnormal LFTs	Ms. Madhavi Verma
Infection Control Practices (self & others) and PPE	Ms. Tarika Sharma
Nurses rolein early detection of complication of chronic	
hepatitis	Ms. Cicily Babu
Prevention of blood born infections & PPE	Mr. Amit Kumar
Preperation and management of patient undergoing	
liver biopsy	Ms. Manjusree
Preperation and management of patient undergoing	
TIPS & HVPG	Ms. Suma Simon
Assesment scales for critically ill hepatitis patients	Ms. Bindu B. Nair
Management of Ascites	Ms. Anila Goswami
Management of Hepatic Encephlopathy	Ms. Anne
Nurses role in liver dialysis, SLED and CRRT	Ms. Asha Varghese
PERI and intra operative nursing care of patient undergoing	Mr. Sanjay Joshi
transplantation liver	
Post-operative nursing care of patients undergoing liver	Ms. Rosamma Xavior
transplantation	
Preparation and management of patient undergoing	Ms. P. Jamuna Rani
clonoscopy & endoscopy	

### **Hepatitis Update Program 2.0**

As per a review document published in May 2020 in Clinical Liver Disease, it was inferred that nearly 50% of patients with COVID-19 may experience hepatic manifestations ranging from "asymptomatic abnormalities in hepatic biochemical tests to the rare case of acute liver failure."

According to EASL, COVID-19 has resulted in many hepatitis elimination programs slowing or stopping altogether. A 1-year delay in hepatitis diagnosis and treatment could result in an additional 44,800 liver cancers and 72,300 deaths from HCV globally by 2030 participants.



Owing to the speculations and uncertainty around the management of COVID-19 and viral hepatitis, under the umbrella of project PRAKASH, a two days Hepatitis Update Program addressing the basics of both the conditions was devised for nursing professionals. Intent of the program was to disseminate scientifically backed knowledge and to address the related queries of the participants.

Торіс	Speakers
Virtual 'Netiquttes'-Do's & Don'ts	Ms. Akanksha Bansal
Overview of viral hepatitis & COVID-19	Ms. Aayushi Rastogi
Impact of COVID-19 on National Viral Hepatitis	Dr. Archana Ramalingam
Control Program (NVHCP)	
Diagnostic precautions in COVID-19 & viral hepatits	Dr. Sabin Syed
Management of COVID-19 in viral hepatitis	Ms. Tarika Sharma
Management of acute viral hepatitis in children	Dr. Vikrant Sood
Counselling of viral hepatitis patients during COVID-19	Dr. Mohit Varshney





## **DOCTORS PROGRAM**

### **Hepatitis Induction Program**

Hepatitis B & C infections are major public health problem across the world. The infection has affected almost all the countries and chronicity of these diseases causes end stage liver diseases like cirrhosis & HCC. In most of the cases, both HBV & HCV goes undetected leading to severe damage to the liver. This can be avoided to a larger extent, if knowledge pertaining to viral hepatitis diagnosis, prevention, treatment and management can be updated and provided to treating physicians at timely intervals. In most cases, earlier diagnosis of HBV and HCV infections reduces the scope of damage to the liver.

Hence, the training program titled 'HIP' was formalised with an aim to provide primary care providers a comprehensive update on how to prevent, diagnose, treat and manage viral hepatitis.

Торіс	Speaker	
Pre-Training Assessment	TEAM	
Overview and epidemiology of viral hepatitis	Dr. Archana Ramalingam	
Viral markers, diagnosis & screening of viral hepatitis	Dr. Ekta Gupta	
Diagnosis & management of hepatitis A and E	Dr. Ankur Jindal	
Diagnosis & management of hepatitis B and D	Dr. Rakhi Maiwall	
Diagnosis & management of hepatitis C	Dr. S. K. Sarin	
Identification and treatment of complications	Dr. Ashok Chaudhary	
Live Demonstration:		
1. Hepatic Hemodynamic Lab	Dr. Rajan V.	
2. Virlogy Lab	Dr. Ekta Gupta	
3. Fibro scan	Dr. Ankur Jindal	
Pre and post test counselling of patients and family	Dr. Vinod Arora	
Indications for referral of patients with hepatitis		
NSI & PEP in context of viral hepatitis	Dr. Reshu Agarwal	
Post-Training Assessment	TEAM	

### 'Viral Hepatitis in Pregnancy - Unravelling the mystery'

Viral hepatitis is a cause for major health care burden in India. Hepatitis B, when acquired at or near delivery, is transmitted vertically in as high as 60% of unborn children. This has grave consequences for the child as nearly 90% of these infections shall become chronic and translate into liver cirrhosis or hepato-cellular carcinoma in the children. hepatitis c is well known to get transmitted vertically and the virus may lead to hepato-cellular carcinoma in the mother as well as the child. Hepatitis E, shows an increased attack rate in pregnancy. The incidence of fulminant hepatic failure and mortality rate is much higher than that associated with other hepatic viral infections.

The aim of the training is to find out the causes, clinical course and factors predictive of mortality in pregnant women suffering from viral hepatitis in context of Indian scenario and to come up with a consensus statement to reduce the burden of viral hepatitis in pregnancy.

Topics	Speakers		
Hepatitis B & Pregnant Women			
Viral hepatitis in pregnancy – an overview	Dr. Manoj K Sharma		
Current recommendations for screening & immunoprophylaxis	Dr. V. Rajan		
HBsAg+ pregnant woman - hepatologist's view point	Dr. S. K. Sarin		
HBsAg+ pregnant woman- an obstetrician's view point	Dr. Manju Puri		
Recent advances in prevention of HEV in pregnancy	Dr. Ankur Jindal		
Hepatitis B in children	Dr. Seema Alam		
Hepatitis B & Saftey Issue			
Anti-virals in HBV – safety in pregnancy and lactation	Dr. Anoop Saraya		
Safe practices guidelines for the HCWs	Dr. Ekta Gupta		
Hepatitis in Pregnancy			
Fulminant hepatic failure in pregnancy - diagnostic approach	Dr. Ashok Kumar		
Fulminant hepatic failure – medical management in ICU	Dr. Rakhi Maiwall		
Fulminant hepatic failure – obstetric management	Dr. Sharda Patra		
Management of newborn of HBsAg+ pregnant woman	Dr. Praveen Kumar		
Liver transplantation in FHF in pregnancy – When to decide	Dr. Ashok Choudhury		
Outcome of liver transplantation in pregnancy	Dr. Piyush K Sinha		
FORUM FOR THE CLINICIAN'S	Dr. Ratna Biswas		

### 'Viral Hepatitis in Dentistry - spreading smiles, not hepatitis'

In many cases, discrimination and stigma, or fear and past experience can prevent people with hepatitis B or C from accessing dental and other healthcare services and various times non-disclosure of the hepatitis B & C positive status by the patient puts safety of the treating dental surgeon and of other patients at high risk. Therefore, one must make an endeavour to ensure a welcoming and non-judgmental approach to treating all patients, to ensure the provision of effective healthcare and follow-up with adequate safety of their own.

Thus, the training program aims at creating proper awareness, to instil proper attitude toward clinical aspects of the infection and towards the patients which are critical to prevent the spread of these infections and to sensitize the practicing and upcoming generation of dental surgeons to the safety protocols to be followed in their routine as well as surgical practice. The workshop would also provide a common platform for both dentists and hepatologists to discuss the facts related to the diseases of equal importance, diagnostic measures and management protocols.

Topic	Speaker	
KAP Study & Pre-Test Assessment	Ms. Akanksha Bansal	
Dentistry & Liver Diseases		
Introduction - role of oral health in general health	Dr. Vikrant Mohanty	
Liver diseases & its oral manifestation - hepatologist's viewpoint	Dr. S. K. Sarin	
Liver diseases & its oral manifestation - dentist's viewpoint	Dr. Shalini Gupta	
Periodontal disease & hepatic disorders - dentist's viewpoint	Dr. Shruti Tondon	
Periodontal disease & hepatic disorders - Hepatologist's viewpoint	Dr. Manoj K. Sharma	
Viral Hepatitis & Dentistry		
Viral hepatitis: overview & epidemiology in context of dentistry	Dr. Sapna Chauhan	
Needle Stick Injury (NSI) & Post-Procedure Prophylaxis (PEP)	Dr. Reshu Agarwal	
Healthcare workers safety to blood borne viruses	Dr. Ekta Gupta	
Sterilization & infection control in dental practices	Dr. Pankaj Sharma	
Forum for the clinicians - Case discussions	Dr. Ajay Logani	
Post Test Assessment & Feedback	TEAM	

### 'Viral Hepatitis Testing - discovering the challenges'

Despite the high prevalence of HBV & HCV, and the availability of effective curative treatment for HCV infection, as well as long-term suppressive antiviral treatment for HBV; most people infected with HBV or HCV globally have never been tested and so remain unaware of their infection. Key reasons for this current very low rate of hepatitis testing in LMICs include: limited laboratory capacity and access to reliable HCV diagnostics and lack of testing guidance to the healthcare providers working in the laboratories.

The main objective of the program is to inform feasibility of potential recommendations on testing approaches (who and where to test) and how to test (selection of assays) in the viral hepatitis testing guidelines, and also to assess key perceived barriers/challenges and strategies to address these and so guide implementation of hepatitis testing and treatment services.

Topic	Speaker
KAP Study & Pre-Test Assessment	Ms. Akanksha Bansal
Diagnostic Challenges & Advances	;
Overview of viral hepatitis: diagnostic challenges & advances	Dr. Ekta Gupta
Newer diagnostics & management approaches for HBV infections	Dr. S. K. Sarin
Real Time PCR: diagnostic challenges	Dr. Shobha Broor
Serological testing in viral hepatitis: diagnostic challenges	Dr. Reshu Agarwal
Infection Prevention & Control Pract	ices
Quality control in clinical virology	Dr. Navin Kumar
Post Exposure Prophylaxis (PEP) for HBV & HCV	Dr. Poonam Loomba
Forum for the clinicians - clinical case discussion	Dr. Krithiga R.
Live Demonstration to Newer Testing Tec	chniques
Demonstration of next generation sequencers	Dr. Shwetank Sharma
Demonstration of sequencing techniques	Dr. Reshu Agarwal
Demonstration of near point of care molecular assays	Dr. Abhishek Padhi
Demonstration of various nucleic acid extraction systems	Dr. Vibha Mehta
Demonstration of CLIA	Dr. Arvind Khodare
Demonstration of fibro scan	Ms. Seena Babu
Post training assessment	Ms. Akanksha Bansal





## LT'S PROGRAM

#### Viral Hepatitis Diagnostic Laboratory Support Program

There is a huge burden to undetected/untested HBV & HCV cases across the globe. The global burden of viral hepatitis B & C accounts for over 300 million cases. Apart from this, there is a huge gap as majority of people are unaware of their infection. Over the years, new advances have been made in rapid testing of HBV and HCV. These new technological advances can help in early detection of the infection leading to early treatment in HBV & HCV patients.

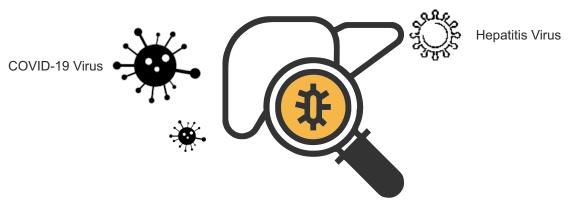
To overcome this gap, training for laboratory technicians was scheduled to update them in latest advances available in testing of viral hepatitis and to give them first-hand experience in involving them in various hands on testing procedures related to HBV & HCV.

Topic	Speaker
KAP Study & Pre-Test Assessment	Ms. Akanksha Bansal
Laboratory Diagnosis	
Overview of viral hepatitis (A-E)	Dr. Ekta Gupta
Serological methods in viral hepatitis testing & quality control	Dr. Krithiga R.
Molecular methods in viral hepatitis testing	Dr. Nitin Kumbhar
Bio-safety	
Good laboratory practices	Dr. Krithiga R.
Needle Stick Injury (NSI) & Post Exposure Prophylaxis (PEP)	Dr. Reshu Agarwal
Hands-on & Live Demonstration	
Rapid card tests	Ms. Nitiksha
ELISA	Mr. Gaurav Singh
CLIA	Mr. Nand Kishor
Micropipetting techniques and caliberation	Mr. Keshav
Post training assessment & feedback	Ms. Akanksha Bansal

### **Hepatitis Update Program**

The acceptance and awareness of diagnostic measures to detect and contain COVID-19, leverages an opportunity to amplify awareness of viral hepatitis to the same level as that of HIV and COVID-19 to improve health status. It may take a pandemic to catalyse awareness and increase testing for HBV & HCV.

Building on the above-mentioned state project PRAKASH, developed a two day online training program for the laboratory professionals. The training was designed in a manner to provide a detailed overview on viral hepatitis, COVID-19, serological and molecular methods in laboratory testing of viral hepatitis, laboratory diagnosis of COVID-19, bio medical waste management, needle stick injures etc.



Торіс	Speaker
KAP Study & Pre-Test Assessment	Ms. Akanksha Bansal
Viral Hepatitis	
Overview of viral hepatitis (A-E)	Dr. Ekta Gupta
Serological methods in viral hepatitis testing & quality control	Dr. Reshu Agarwal
Molecular methods in viral hepatitis testing	Dr. Vibha Mehta
Needle Stick Injury (NSI) & Post Exposure Prophylaxis (PEP)	Dr. Reshu Agarwal
COVID-19	
Overview of COVID-19 infection	Dr. Ekta Gupta
Laboratory diagnosis of COVID-19	Dr. Reshu Agarwal
Bio-safety & waste management in COVID-19	Dr. Akshita Mehta
Good laboratory practices & clinical virology	Dr. Vibha Mehta
Post training assessment & feedback	TEAM





## **SCREENING & VACCINATION**

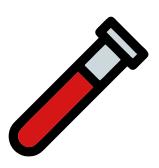
#### **Towards an Immunized World**

Project PRAKASH has not only worked towards enhancing the capacity of healthcare professionals in prevention and management of viral hepatitis, but also has gone a step further in its commitment towards zero viral hepatitis. We have since 2018 organised multiple camps, targeted at promoting hepatitis immunisation.



The first activity undertaken in this perspective was organizing a camp on World Hepatitis Day in 2018 for nursing professionals at ILBS, the chief commotion of this was to encourage the beneficiaries to get their titres checked for hepatitis B, so that they are aware about their current immunization status. The need of the activity was based on the learning of our various training programs, where even the healthcare professionals lack in knowledge to differentiate between being vaccinated and being immunized. Overall 175 nursing professionals availed the services.

Subsequently camps under the 'I pledge' campaign under project EMPATHY were organized in 2018 and in 2019 in collaboration with Project PRAKASH. Community camps were placed at Delhi Metro Rail Corporation headquarters, DMRC colony as well as one at Airports Authority of India, these camps were not merely limited to screening of hepatitis B and C, but provided an opportunity for vaccination against hepatitis B to the registered members. A total number of 1089 of individuals were screened for hepatitis b & c and more than 800 people received hepatitis B vaccination through this intervention, which was financially cosupported by Cipla Foundation and project EMPATHY (Empowering People Against Hepatitis) funded by Airports Authority of India.



In November 2019, during the training program for dental professionals, a screening and vaccination camp for the partakers was organised, under which more than 200 participants were screened for HBV & HCV and Hepatitis B vaccination, this intervention was funded by project EMPATHY. The overall reach is listed in the table below: -

Туре	Location	Beneficiary
Titre	ILBS	HCWs from hospitals across Delhi
	DMRC, HQ	Employees
Screening &	AAI	Employees
Vaccination	DMRC COLONY	Family of DMRC employees
	ILBS	Dentist

The overall initiative has screened more than 1300 individuals and have provided vaccination to 1053+ persons.

## **HEPCARE APP**

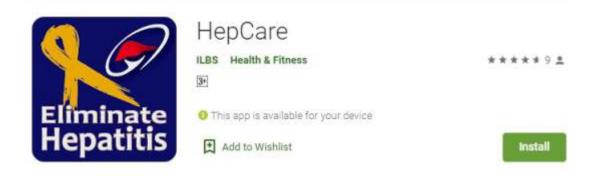
#### **VIRAL HEPATITIS: FINDING THE MISSING MILLIONS**

There are lacunae in knowledge and awareness among community regarding hepatitis B and hepatitis C specifically among at risk population, leading to misinformation, miss opportunities for prevention and treatment, and stigmatization of infected populations. The consequences for members of atrisk communities are important in that missing opportunities for prevention can lead to infection of additional people with HBV and HCV. Once infected, they frequently are unaware of their infection and so run the risk of unknowingly infecting others and of not receiving appropriate medical management. Although there have been no large-scale, population-based, controlled studies of community knowledge about hepatitis B and hepatitis C, all published surveys have shown that knowledge about these diseases is sparse.

To overcome this lack of knowledge and to provide accurate information regarding viral hepatitis to general and high-risk population; HepCare App was conceptualised and launched on 28th July 2018 i.e. World Hepatitis Day.

### Some of the features of the app are:

- The app can be used as a ready reference material by the healthcare professionals to educate the patients and general public on VH (diagnostic and treatment related information)
- 2. The app can directly be used by general public as information portal on VH.
- 3. Accessible to all (healthcare professionals, patients and general public)
- 4. Risk Assessment Survey form is built in the app for a quick assessment to analyse whether the individual is at risk for getting VH or not.



# STATEWISE DISTRIBUTION

S. No.	STATES	INSTITUTIONS	PARTICIPANTS
1	Andhra Pradesh	04	04
2	Assam	02	05
3	Bihar	02	07
4	Chandigarh	03	11
5	Chhattisgarh	02	02
6	Dadra & Nagar Haveli &	01	02
	Daman & Diu		
7	Delhi	241	6859
8	Gujarat	03	08
9	Haryana	29	216
10	Himachal Pradesh	01	01
11	Jammu & Kashmir	04	22
12	Jharkhand	02	02
13	Karnataka	08	08
14	Kerala	07	07
15	Madhya Pradesh	18	32
16	Maharashtra	06	17
17	Manipur	01	06
18	Odisha	04	12
19	Puducherry	01	01
20	Punjab	11	19
21	Rajasthan	49	117
22	Tamil Nadu	17	17
23	Telangana	04	13
24	Uttar Pradesh	74	631
25	Uttarakhand	08	29
	Grand Total	502	8050

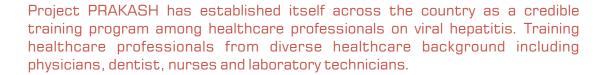
Over the years project PRAKASH has ensured to cater to healthcare professionals working in metropolitans to the one serving the community at distant terrains. We have tried to enhance the knowledge and behaviours of the healthcare community towards viral hepatitis across the nation.

In our efforts to reach out to multiple institutes and benefit maximum number of healthcare workers from our training programs, we have so far collaborated with 502 institutes of concern, training 8050 individuals, located at 25 different states and union territories of the country.

Being able to disseminate the expert knowledge to the targeted population at areas like Daman & Diu, Dadra & Nagar Haveli, have been one of the most

notable accomplishment of PRAKASH.

Also, in contrast for a city like Delhi with no dearth of opportunities in terms of training programs/webinars/ lectures/inservice education, project PRAKASH has garnered trust and affinity from the medical fraternity, which is well reflected from the fact that since the inception of the program, we have trained nearly 6884 professionals from 241 institutes.



## **KNOWLEDGE ENHANCEMENT**

Chief intent of any training encircles around significant upgradation in the knowledge of beneficiaries on the addressed scientific topics, which in terms of project PRAKASH is viral hepatitis. The training program has contributed towards empowering healthcare workers through knowledge enhancement.

NURSES ASSESSMENT			
Knowledge Based Questions	Pre-score	Post-score	% improvement post training
Hepatitis A is transmitted through?	2185 (48.8)	3237 (72.4)	23.60
What are the types of viral hepatitis known?	3446 (77)	4366 (97.6)	26.70
Acute Liver Failure especially in pregnant Women is caused in which Hepatitis virus?	1237 (27.6)	3712 (83)	55.40
Following are true about hepatitis A and E Except	1990 (44.5)	3572 (79.8)	35.30
Chronic viral hepatitis is hepatitis that lasts more than	2397 (53.6)	4271 (95.5)	41.90
Infection at what age can lead to maximum chance of chronicity for hepatitis B?	771 (17.2)	3449 (77.1)	59.90
To clean blood spills from an HBV infected person what should be used?	2948 (65.9)	4052 (90.6)	24.70
Following are true about HBV infection treatment	2309 (51.6)	3296 (73.7)	22.10
Following strategies can be used for preventing HBV infection EXCEPT	2871 (64.2)	3906 (87.3)	23.10
A child born to a HBV infected mother should receive	2304 (51.5)	3245 (72.5)	21.00
All of the following are TRUE about Hepatitis C EXCEPT	1159 (25.9)	2642 (59.1)	33.20
The following can be caused as a sequelae of HCV infection	2729 (61)	3891 (87)	42.58
Following are true about HCV infection EXCEPT	1772 (39.6)	3043 (68)	28.40
Following is NOT true about HCV treatment	2087 (46.6)	3663 (81.9)	35.30
The following statements are true EXCEPT	1657 (37)	3276 (73.2)	36.20
All of the following can be transmitted through infected blood EXCEPT	1730 (38.7)	2593 (58)	19.30

Hepatitis Induction Program Hepatitis B vaccine schedule in adults 143 (84) 166 (98) 14 Prophylaxis of Hepatitis B infection in 123 (72) 145 (85) 13 general population The following statements are true EXCEPT 124 (73) 165 (97) 20 Inhibitor civral hepatitis is hepatitis that lasts more than Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment? The prevalence of Hepatitis B in India is 88 (52) 154 (91) 39 Hepatitis A is transmitted through? 124 (73) 153 (90) 17 The most common genotype of hepatitis B in India is 10 (21) 110 (65) 44 In India is 10 (21) 126 (74) 148 (87) 13 Should receive Which of the following is DNA virus? 143 (84) 164 (96) 12 Following is NOT true about HCV treatment: 107 (63) 147 (86) 23 Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity? Which of the following serum markers is indicative of HBV vaccination? Following viruses can cause Hepatitis except? 109 (64) 133 (77) 22 The first virologic marker following acute infection with HBV is work of the following type of hepatitis is 93 (55) 131 (77) 22 The first virologic marker following acute infection with HBV is 12 Which of the following type of hepatitis is 93 (55) 131 (77) 22 The first virologic marker following acute infection with HBV is 12 Which of the following type of hepatitis is 93 (55) 131 (77) 22 The first virologic marker following acute infection with HBV is 12 The following needs to be done after a 135 (79) 155 (91) 12 Infectionly as a super or co-infection? 15 (62) 127 (75) 13	DOCTORS ASSESSMENT			
Hepatitis Induction Program  Hepatitis B vaccine schedule in adults 143 (84) 166 (98) 14  Prophylaxis of Hepatitis B infection in 123 (72) 145 (85) 13  general population  The following statements are true EXCEPT 124 (73) 148 (87) 14  Chronic viral hepatitis is hepatitis that lasts 131 (77) 165 (97) 20  more than  Which of the following is NOT a protease 80 (47) 124 (73) 26  inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is 88 (52) 154 (91) 39  Hepatitis A is transmitted through? 124 (73) 153 (90) 17  The most common genotype of hepatitis B in India is 10 (65) 44  in India is 10 (74) 110 (65) 12  A child born to a HBV infected mother 126 (74) 148 (87) 13  should receive 148 (87) 129  Which of the following is a DNA virus? 143 (84) 164 (96) 12  Following is NOT true about HCV treatment: 107 (63) 147 (86) 23  Infection with Hepatitis B virus at what age 24 (32) 142 (84) 52  can lead to maximum chance of chronicity? 109 (64) 146 (86) 22  The first virologic marker following acute infection with HBV is 109 (64) 133 (78) 14  infection with HBV is 109 (64) 133 (78) 14  which of the following type of hepatitis except? 109 (64) 133 (78) 14  infection with HBV is 109 (64) 133 (78) 14  infection with HBV is 109 (64) 133 (78) 14  infection with HBV is 109 (64) 135 (77) 22  more common among patients undergoing renal dialysis? 150 (62) 127 (75) 13  infection blood spills from an HBV infected person what should be used?	Knowledge Based Questions	Pre-score (n)	Post-score (n)	%
Hepatitis B vaccine schedule in adults  Prophylaxis of Hepatitis B infection in general population  The following statements are true EXCEPT  124 (73)  148 (87)  14 (73)  148 (87)  14 (74)  Chronic viral hepatitis is hepatitis that lasts more than  Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is  Repatitis A is transmitted through?  124 (73)  153 (90)  17  The most common genotype of hepatitis B in India is  Incubation period for Hepatitis B is  Incubation period for Hepatitis B is  Poly (58)  A child born to a HBV infected mother should receive  Which of the following is a DNA virus?  Hollowing is NOT true about HCV treatment:  107 (63)  147 (86)  23  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  109 (64)  1146 (86)  22  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a last (75)  Infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?		(%)	(%)	increase
Prophylaxis of Hepatitis B infection in general population  The following statements are true EXCEPT  124 (73)  148 (87)  14  Chronic viral hepatitis is hepatitis that lasts more than  Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is Hepatitis A is transmitted through?  124 (73)  153 (90)  17  The most common genotype of hepatitis B in India is Incubation period for Hepatitis B is India is Incubation period for Hepatitis B is A child born to a HBV infected mother should receive  Which of the following is a DNA virus?  Following is NOT true about HCV treatment: 107 (63)  147 (86)  23  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  109 (64)  146 (86)  22  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infection years of the patitis for the following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	Hepatitis Ind	uction Program		
general population The following statements are true EXCEPT 124 (73) 148 (87) 14 Chronic viral hepatitis is hepatitis that lasts more than  Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment? The prevalence of Hepatitis B in India is 88 (52) 154 (91) 39 Hepatitis A is transmitted through? 124 (73) 153 (90) 17 The most common genotype of hepatitis B in India is 10 (10 (65) 44 (11 (10 (10 (10 (10 (10 (10 (	Hepatitis B vaccine schedule in adults	143 (84)	166 (98)	14
The following statements are true EXCEPT 124 (73) 148 (87) 14  Chronic viral hepatitis is hepatitis that lasts more than  Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is 88 (52) 154 (91) 39  Hepatitis A is transmitted through? 124 (73) 153 (90) 17  The most common genotype of hepatitis B in India is 86 (21) 110 (65) 44  in India is 100 (65) 170 (6	Prophylaxis of Hepatitis B infection in	123 (72)	145 (85)	13
Chronic viral hepatitis is hepatitis that lasts more than  Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is 88 (52) 154 (91) 39  Hepatitis A is transmitted through? 124 (73) 153 (90) 17  The most common genotype of hepatitis B 36 (21) 110 (65) 44  in India is 110 (65) 44  in India is 126 (74) 148 (87) 13  A child born to a HBV infected mother 126 (74) 148 (87) 13  should receive 147 (86) 12  Following is NOT true about HCV treatment: 107 (63) 147 (86) 23  Infection with Hepatitis B virus at what age 25 (4 (32) 142 (84) 52  can lead to maximum chance of chronicity? 109 (64) 146 (86) 22  The first virologic marker following acute infection with HBV is 135 (79) 155 (91) 12  which of the following needs to be done after a infect only as a super or co-infection? 105 (62) 127 (75) 13  person what should be used?	general population			
more than  Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is  Hepatitis A is transmitted through?  The most common genotype of hepatitis B in India is  Incubation period for Hepatitis B is  Incubation in Heb in (62)  Infection with Heb is  Infection with Hebitis B is  Infection with Hebitis B is  Infection with Hebitis B is  I	The following statements are true EXCEPT	124 (73)	148 (87)	14
Which of the following is NOT a protease inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is  Hepatitis A is transmitted through?  The most common genotype of hepatitis B in India is  Incubation period for Hepatitis B is  A child born to a HBV infected mother  Which of the following is a DNA virus?  Following is NOT true about HCV treatment:  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The following type of hepatitis is  Which of the following type of hepatitis except?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected  124 (73)  124 (73)  124 (73)  124 (73)  124 (91)  39  140 (95)  141 (10 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  111 (65)  45  41  123  42 (84)  124 (84)  125  147 (86)  120 (71)  15  15  15  16  17  17  18  18  19  19  19  19  19  19  19  19	Chronic viral hepatitis is hepatitis that lasts	131 (77)	165 (97)	20
inhibitor that is used for Hepatitis C treatment?  The prevalence of Hepatitis B in India is  Hepatitis A is transmitted through?  The most common genotype of hepatitis B in India is  Incubation period for Hepatitis B is  A child born to a HBV infected mother  Which of the following is a DNA virus?  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following type of hepatitis is  Which of the following type of hepatitis is  Which of the following type of hepatitis is  Which of the following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?  124 (73)  154 (91)  150 (24)  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  111 (76)  12  13  141 (84)  164 (96)  12  12  142 (84)  52  142 (84)  52  154 (32)  142 (84)  52  155 (91)  15  16  17  17  18  18  19  19  10  10  10  10  10  10  10  10	more than			
The prevalence of Hepatitis B in India is  Hepatitis A is transmitted through?  The most common genotype of hepatitis B  In India is  Incubation period for Hepatitis B is  A child born to a HBV infected mother  Which of the following is a DNA virus?  The following viruses can cause Hepatitis except?  The first virologic marker following needs to be done after a person what should be used?  The prostore in India is  124 (73)  153 (90)  17  140 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  44  110 (65)  45  120 (74)  148 (87)  13  148 (87)  13  149 (86)  12  140 (86)  12  141 (84)  142 (84)  142 (84)  144 (86)  145 (86)  146 (86)  146 (86)  146 (86)  147 (86)  148 (87)  159 (158 (158 (158 (158 (158 (158 (158 (158	Which of the following is NOT a protease	80 (47)	124 (73)	26
Hepatitis A is transmitted through?  The most common genotype of hepatitis B in India is Incubation period for Hepatitis B is A child born to a HBV infected mother should receive  Which of the following is a DNA virus?  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?  124 (73) 110 (65) 110 (65) 110 (65) 110 (65) 110 (65) 110 (65) 110 (65) 110 (65) 110 (64) 1148 (87) 114 (84) 124 (84) 125 (84) 126 (74) 127 (75) 128 (71) 129 (64) 130 (72) 120 (71) 121 (75) 131 (77) 132 (75)	inhibitor that is used for Hepatitis C treatment?			
The most common genotype of hepatitis B in India is  Incubation period for Hepatitis B is  A child born to a HBV infected mother  Should receive  Which of the following is a DNA virus?  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infection?  To clean blood spills from an HBV infected person what should be used?  100 (62)  110 (65)  120 (71)  121 (74)  132 (74)  143 (84)  140 (86)  140 (	The prevalence of Hepatitis B in India is	88 (52)	154 (91)	39
in India is  Incubation period for Hepatitis B is  A child born to a HBV infected mother  Should receive  Which of the following is a DNA virus?  Following is NOT true about HCV treatment:  Infection with Hepatitis B virus at what age  can lead to maximum chance of chronicity?  Which of the following serum markers is  indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute  infection with HBV is  Which of the following type of hepatitis is  Which of the following type of hepatitis is  The following needs to be done after a  infect only as a super or co-infection?  To clean blood spills from an HBV infected  person what should be used?  126 (74)  148 (87)  149 (96)  12  147 (86)  23  147 (86)  23  140 (84)  52  120 (71)  15  15  109 (64)  133 (78)  14  14  14  15  15  15  15  15  15  15	Hepatitis A is transmitted through?	124 (73)	153 (90)	17
Incubation period for Hepatitis B is  A child born to a HBV infected mother  should receive  Which of the following is a DNA virus?  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following type of hepatitis is Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?  126 (74) 148 (87) 149 (86) 120 (74) 15 140 (86) 22 142 (84) 52 140 (84) 52 140 (86) 120 (71) 15 15 15 15 15 15 15 15 15 15 15 15 15	The most common genotype of hepatitis B	36 (21)	110 (65)	44
A child born to a HBV infected mother should receive	in India is			
Should receive  Which of the following is a DNA virus?  Following is NOT true about HCV treatment:  107 (63)  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	Incubation period for Hepatitis B is	99 (58)	137 (81)	23
Which of the following is a DNA virus?  Following is NOT true about HCV treatment:  107 (63)  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	A child born to a HBV infected mother	126 (74)	148 (87)	13
Following is NOT true about HCV treatment:  Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is where common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	should receive			
Infection with Hepatitis B virus at what age can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is which of the following acute and dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	Which of the following is a DNA virus?	143 (84)	164 (96)	12
can lead to maximum chance of chronicity?  Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is wore common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?  109 (64)  120 (71)  15  120 (71)  15  120 (71)  15  14  14  16(86)  22  17  19 (64)  133 (78)  14  14  15  15  17  17  18  19  19  10  10  10  10  10  10  10  10	Following is NOT true about HCV treatment:	107 (63)	147 (86)	23
Which of the following serum markers is indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	Infection with Hepatitis B virus at what age	54 (32)	142 (84)	52
indicative of HBV vaccination?  Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	can lead to maximum chance of chronicity?			
Following viruses can cause Hepatitis except?  The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	Which of the following serum markers is	95 (56)	120 (71)	15
The first virologic marker following acute infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	indicative of HBV vaccination?			
infection with HBV is  Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	Following viruses can cause Hepatitis except?	109 (64)	146 (86)	22
Which of the following type of hepatitis is more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	The first virologic marker following acute	109 (64)	133 (78)	14
more common among patients undergoing renal dialysis?  The following needs to be done after a infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	infection with HBV is			
renal dialysis?  The following needs to be done after a 135 (79) 155 (91) 12 infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	Which of the following type of hepatitis is	93 (55)	131 (77)	22
The following needs to be done after a 135 (79) 155 (91) 12 infect only as a super or co-infection?  To clean blood spills from an HBV infected person what should be used?	more common among patients undergoing			
infect only as a super or co-infection?  To clean blood spills from an HBV infected 105 (62) 127 (75) 13 person what should be used?	renal dialysis?			
To clean blood spills from an HBV infected 105 (62) 127 (75) 13 person what should be used?	The following needs to be done after a	135 (79)	155 (91)	12
person what should be used?	infect only as a super or co-infection?			
	To clean blood spills from an HBV infected	105 (62)	127 (75)	13
TI I I C II CO C I I I I TO (C)	person what should be used?			
The mechanism of action of Sofosbuvir is 53 (31) 99 (58) 27	The mechanism of action of Sofosbuvir is	53 (31)	99 (58)	27

Viral Hepatitis in Dentistry				
Knowledge Based Questions	Pre-score	Post-score	% improvement post training	
Hepatitis B is treatable but not curable while Hepatitis C is curable	162 (64.0)	222 (87.7)	23.7	
Foetor Hepaticus is typically what type of odour?	110 (43.5)	199 (78.7)	35.2	
Hyperbilirubinemia in adults is less likely to cause yellowish discoloration of	151 (59.7)	228 (90.1)	30.4	
Lichen Planus like lesions may not be seen in	122 (48.2)	202 (79.8)	31.6	
Which bio-marker is secreted by the liver and is elevated in periodontal disease?	150 (59.3)	205 (81.0)	21.7	
Which volatile organic compound is responsible for Fetor Hepaticus?	109 (43.1)	148 (58.5)	15.4	
At what serum levels of alanine transaminase, it is advised to discontinue all medications?	64 (25.3)	171 (67.6)	42.3	
Non-responder for Hepatitis B vaccine is defined as	88 (34.8)	180 (71.1)	36.3	

Data of 1,000 doctors was considered for analysis of pre & post test score. The percentage improvement in knowledge of the participants in each question ranged from 12% to 52%. the difference in the knowledge scores was found to be significant i.e. p-value < 0.001.

LT's ASSESSMENT			
Knowledge Based Questions	Pre-score (n)	Post-score (n)	%
	(%)	(%)	increase
Which of the following hepatitis viruses	106 (71)	126 (83)	12
are transmitted through contaminated			
food and water			
Which of the following is a DNA virus	112 (74)	138 (91)	17
What is the optimum temperature of room	72 (50)	99 (66)	16
while performing the ELISA.			
Sequence of different steps in PCR	72 (49)	102 (70)	21
Five types of hepatitis Viruses are	112 (77)	149 (99)	22
When do we add Substrate in ELISA	117 (80)	134 (89)	9
Mode of transmission of Hepatitis B Virus:	111 (74)	132 (87)	13
In sandwich ELISA what contains secondary	68 (48)	107 (72)	24
antibody			
What is the satellite virus along with HBV virus	34 (23)	82 (55)	32
Vaccine is available for:	123 (83)	137 (91)	8
In ELISA what does IS indicates:	119 (79)	139 (92)	13
What is GLP	105 (70)	133 (88)	18
In which colour bin you discard sharps	128 (85)	139 (92)	7
UV light has which colour	111 (76)	124 (83)	7
How many bio-safety levels exist?	73 (52)	126 (83)	31
What concentration of hypochlorite is used for	123 (84)	136 (90)	6
discard container			
Following are the personal protective	118 (79)	130 (86)	7
equipment's EXCEPT			
The following needs to be done after a needle	93 (64)	104 (69)	5
stick injury EXCEPT			
All of the following can be transmitted through	72 (48)	79 (54)	6
infected blood EXCEPT:			
The route of administration of HBV vaccine is	104 (70)	122 (81)	11

The program was attended by 170 laboratory technicians. The percentage improvement in knowledge level of participants post attending the program in each question ranged from 5% - 32%.

HEPATITIS UPDATE PROGRAM			
NURSES ASSESSMENT			
Knowledge Based Questions	Pre-score	Post score	% increase
How many types of viral hepatitis are known to	823 (71.3)	1117 (96.8)	25.50
cause infection in humans?			
COVID-19 can't be transmitted through:	763 (66.1)	1022 (88.6)	22.50
What is the time period between exposure to	499 (43.2)	1019 (88.3)	45.10
infection and the appearance of the first			
symptoms for COVID-19 & HBV respectively?			
Following strategies can be used for preventing	638 (55.3)	969 (84.0)	28.70
HBV infection EXCEPT:			
A child born to a HBV infected mother should receive	738 (64.0)	1053 (91.2)	27.20
Which is true regarding the lactating mother and	784 (67.9)	979 (84.8)	16.90
disease status?			
Which of the following is NOT the correct set of PPE?	810 (70.2)	1071 (92.8)	22.60
To clean blood spills from a viral hepatitis & COVID-19	786 (68.1)	1075 (93.2)	25.10
infected person what should be used?			
Masks and gloves used by HBV+ but COVID-19 -	621 (53.8)	785 (68.0)	14.20
patient should be disposed off as:			
Used gloves from a HCW treating a hepatitis and			
COVID-19 positive patient will be disposed off in:	522 (45.2)	1030 (89.3)	44.10
Along with COVID-19 testing what additional data			
should be available for a potential liver donor	665 (57.6)	923 (80.0)	22.40
Transplantation in COVID-19+ transplant candidates	302 (26.2)	640 (55.5)	29.30
Which of the following drugs used in management	356 (30.8)	822 (71.2)	40.40
of COVID-19 can reactivate the infection in chronic			
HBV patients:			
People with hepatitis may stay safe during COVID-19	738 (64.0)	908 (78.7)	14.70
crisis by following these precautions EXCEPT?			
Steps initiated by GoI to manage HCV patients in	401 (34.7)	762 (66.0)	31.30
India during COVID-19:			
Among which of the following who is most suitable	839 (72.7)	1000 (86.7)	14.00
for donating convalescent plasma:			
What precautions should not be re-emphasized	657 (56.9)	977 (84.7)	27.80
in children and adults to prevent food-borne			
viral hepatitis and COVID-19?			

The HUP training was attended by 1300 nursing professionals. The percentage improvement in knowledge level of participants ranged from 14% - 45.10%.

LT's ASSESSMENT			
Knowledge Based Questions	Pre-test	Post-test	% increase
What is the optimum temperature of room	47%	65%	18
while performing the ELISA.			
All of the following are correct about sample	47%	59%	12
collection in COVID-19 suspected patients,			
EXPECT:			
Sequence of different steps in PCR	76%	82%	6
When do we add substrate in ELISA:	71%	82%	12
In sandwich ELISA what contains secondary	53%	65%	12
antibody			
In ELISA what does IS indicates:	82%	88%	6
In which color bins metallic sharps are	53%	71%	18
discarded as per latest bio-medical waste			
management guidelines:			
In which color bins N95 masks are discarded	65%	71%	6
as per latest bio-medical waste management			
guidelines:			
What concentration of hypochlorite is used	82%	88%	6
for discard container			
The following needs to be done after a	65%	71%	6
needlestick injury EXPECT			
The route of administration of hepatitis B	65%	76%	12
vaccine is:			

The Hepatitis Update Program was conducted for laboratory professionals working in the department of virology, microbiology, and pathology including doctors and technicians. The above table indicates a minimum of 6% improvement in participant's knowledge post attending the program.

## IMPACT ASSESSMENT

A brief impact assessment survey (IAS) was circulated in a sub-population of the participants. The IAS aimed at assessing the change in the attitude and practice with respect to routine/clinical practice on viral hepatitis, post training.

**Status of vaccination:** Out of the total respondents, 82.4% (n=440) were vaccinated pretraining whereas of the remaining unvaccinated respondents, 76.6% (n=72) got themselves vaccinated post-training (Figure 1). In addition to the remaining 22 participants who haven't got themselves vaccinated, 90.9% (n=20) have showed willingness to get themselves vaccinated post training.

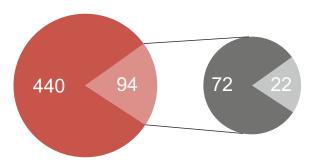
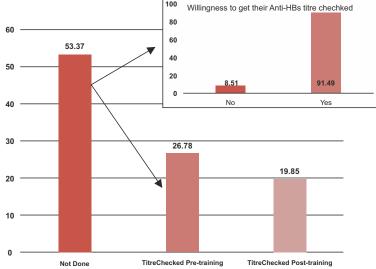


Figure 1: Vaccination status of HCW attending HIP training program

Checking the Anti-HBs Titre: Only 26.8 (n=143) HCWs got their Anti-HBs titre checked pre-training. After attending the training another 106 respondents got themselves assessed for Anti-HBs titre levels. A majority of 53.4% (n=285) didn't get their titre assessed, however among them 91.5% (n=258) have shown willingness to get their titre checked. There could have been several reasons for not getting the titre checked, for example high cost of the Anti-HBs titre being one of them.

Figure 2: Status of checking the Anti-HBs titre among HCWs



Change in clinical practice with respect to viral hepatitis: Approximately two-third (75.1%) of the respondents agreed to change in clinical practices with respect to viral hepatitis. The impact assessment survey indicated that 82% of the participants (n=438) initiated the use of Personal Protective Equipment's (PPEs) on a regular basis post attending training. It was found that 97.9% (n=523) respondents were following the injection safety protocols on a regular basis, post training. In addition, 79.8% (n=426) participants have started advising HBV and HCV patients and their family members about screening of viral hepatitis on regular basis. Approximately, 83% (n=443) participants started advising high risk patients and their relatives about the need of HBV vaccination on regular basis.

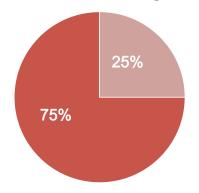


Figure 3: Percentage of participants who agreed change in clinical practice with respect to viral hepatitis

**Relevance of the training:** Approximately 98.3% (n=525) HCWs respondents felt the HIP training was relevant to their job responsibilities and approximately 91.6% of the respondents felt that the HIP training and the certificate helped them in their professional growth. Further, approximately 47.4% have already enrolled in Hepatitis Update program (HUP) to learn more about viral hepatitis.

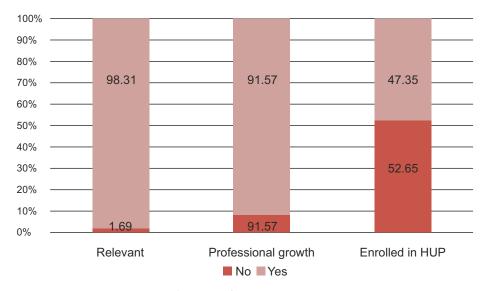


Figure 4: Relevance of HIP training among HCWs

## **DISTINGUISHED SPEAKERS**

Project PRAKASH has conducted all-inclusive and exclusive training programs on viral hepatitis for healthcare professionals. The program has covered topics like viral hepatitis in dentistry, pregnancy and advance testing's in viral hepatitis in some of its trainings making it one of a kind exclusive program in the country.

To deliver these highly scientific and subject oriented sessions the program has reached out to the expert faculties from some of the prestigious institutions working in the areas of viral hepatitis diagnosis, prevention and management from department of hepatology, surgery, paediatrics, transplant, gynaecology, dentistry, virology & nursing etc.

NAME	TITLE
Dr. S. K. Sarin	Director, ILBS, New Delhi
Dr. M. Siddharth	Dean, SUSDN, Sharda University
Dr. Shobha Broor	Head, Microbiology, SGT University
Dr. Anoop Saraya	Professor & Head, Gastroenterology, AIIMS
Dr. Kaushal Madan	Director of Gastroenterology & Hepatology, Max Hospital
Dr. Navin Kumar	Head, Clinical Microbiology & Infection Control, Manipal Hospital
Dr. Manju Puri	Director Professor & Unit Head, Obstetrics & Gynaecology, LHMC
Dr. Reena Yadav	Director Professor & Unit Head, Obstetrics & Gynaecology, LHMC
Dr. Ashok Kumar	Director Professor, Obstetrics & Gynaecology, MAMC
Dr. Ajay Logani	Professor & Head, DCD&E, CDER, AIIMS
Dr. Swati Sharma	HOD, Public Health Dentistry, SUSDN, Sharda University
Dr. Seema Alam	Professor, Paediatric Hepatology, ILBS
Dr. Manoj Kumar Sharma	Professor, Hepatology, ILBS
Dr. Praveen Kumar	Professor, Paediatrician, KSCH
Dr. Poonam Loomba	Professor, Microbiology, GB Pant Hospital

Dr. Ekta Gupta	Professor, Virology, ILBS
Dr. Sharda Patra	Professor, Obstetrics & Gynaecology, LHMC
Dr. Shalini Gupta	Associate Professor, Oral Medicine & Radiology, CDER, AIIMS
· ·	<u> </u>
Dr. Vikrant Mohanty	Associate Professor & Head, Public Health Dentistry, MAIDS
Dr. Ashok Chaudhary	Associate Professor, Hepatology, ILBS
Dr. Rakhi Maiwall	Associate Professor, Hepatology, ILBS
Dr. Ankur Jindal	Associate Professor, Hepatology, ILBS
Dr. Shvetank Sharma	Associate Professor, MMC, ILBS,
Dr. Piyush Kumar Sinha	Assistant Professor, LT & HPB Surgery, ILBS
Dr. Vikrant Sood	Associate Professor, Paediatric Hepatology, ILBS
Dr. V. Rajan	Assistant Professor, Hepatology, ILBS
Dr. Vinod Arora	Assistant Professor, Hepatology, ILBS
Dr. Archana Ramalingam	Assistant Professor, Epidemiology, ILBS
Dr. Reshu Agarwal	Assistant Professor, Virology, ILBS
Dr. Mohit Varshney	Assistant Professor, Psychiatry, ILBS
Dr. Vimlesh Purohit	National Professional Officer, HIV & Hepatitis, WHO, India
Dr. Mini George	Principal, College of Nursing, ILBS
Ms. Cicily Babu	Senior Nurse Manager, ILBS
Dr. Muthu Venkatachalam	Associate Professor, AIIMS
Ms. Madhavi Verma	Reader, College of Nursing, ILBS
Dr. Sabin Syed	Program Co-ordinator, ECHO, PRAKASH & LEAD, ILBS
Dr. Sapna Chauhan	Consultant, MoHFW, New Delhi
Ms. Sarita Ahwal	Lecturer, College of Nursing, ILBS

Ms. Tarika Sharma	Lecturer, College of Nursing, ILBS
Ms. Seena Babu	Nurse Educator, ILBS
Ms. P. Jamuna Rani	Assistant Manager (Nursing), ILBS
Ms. Bindu B. Nair	Assistant Manager (Nursing), ILBS
Mr. Sanjay Joshi	Assistant Manager (Nursing), ILBS
Ms. Shakila Angel	Infection Control, Nurse, ILBS
Ms. Dzuzieneiu Usou	Quality & Training, Nurse, ILBS
Ms. Suma Simon	Nurse, ILBS
Ms. Asha Varghese	Nurse, ILBS
Ms. Rosamma Xavior	Nurse, ILBS
Ms. Aayushi Rastogi	Ph.D. Scholar, Epidemiology, ILBS

## **INSTITUTIONS**

## National Participation

Being a comprehensive and distinctive training program on viral hepatitis for healthcare professionals, enabled the project PRAKASH to receive prodigious response nationwide. Thousands of participants from 502 healthcare institutes belonging to 25 states and union territories of the country, have so far been benefited from the undertaken project.

#### **Andhra Pradesh**

- · GITAM Institute of Nursing
- · Help Hospitals
- · Ramesh Hospital
- Sri Sathya Sai Institute of Higher Medical Sciences

#### Assam

- Haji Abdul Majid Memorial Nursing School
- Lokopriya Gopinath Bordoloi Regional Institute of Mental Health

#### Bihar

- All India Institute of Medical Sciences Patna
- Narayan Nursing College

#### Chandigarh

- Babe Ke Institute of Nursing
- Government Medical College & Hospital
- Post Graduate Institute of Medical Education & Research

#### Chhattisgarh

- Kabirdham Government Nursing College
- All India Institute of Medical Sciences, Raipur

#### Dadra & Nagar Haveli & Daman & Diu

Shri Vinoba Bhave College of Nursing

#### Delhi

- 1st Dwarka Lab
- Aakash Healthcare Super Speciality Hospital Private Limited
- · Aam Aadmi Mohalla Clinic
- Acharya Shree Bhikshu Government Hospital
- Action Cancer Hospital

- · Aggarwal Nursing Home
- Ahilya Bai College of Nursing
- · Akansha Institute of Nursing
- · All India Institute of Ayurveda
- All India Institute of Medical Sciences New Delhi
- Ambedkar Nagar Hospital
- · Antara Foundation
- Apollo Hospital
- Ariston Multi-Speciality Hospital
- · Army Hospital Research & Referral
- Aruna Asaf Ali Government Hospital
- Asha Deep Foundation
- Asha Kiran Homes/Complex (Dept. of Social Welfare, Delhi Govt.)
- Asian Hospital
- · Avantika hospital
- AVPH & Diabetic center
- Ayurvedic Dispensary (Majlis Park)
- Ayurvedic Panchkarma Hospital
- Ayushman Hospital
- Baba Haridass Institute of Nursing Education
- · Baba Saheb Ambedkar hospital
- Babu Jagjivan Ram Memorial Hospital
- Bal Kishan Memorial Hospital
- Balaji Nursing Home
- · Base Hospital Delhi Cantt
- Batra Hospital & Medical Research Centre
- Bhagat Chandra Hospital
- Bhagwan Mahavir Hospital
- Bhagwati Hospital
- Bharamshakti hospital
- Birla College of Nursing
- BLK Super Speciality Hospital
- Blood Bank Organization
- Burari Hospital
- Call Health Company
- Care 24
- Central Government Health Scheme Hospital
- Central Jail Hospital
- Centralized Ambulance Trauma Services (CATS)
- Ch. Brahm Prakash Ayurved Charak Sansthan
- Chacha Nehru Bal Chikitsalaya
- Charak Palika Hospital
- Chest Clinic & T B Hospital
- · Chief District Medical Office (South West Delhi)

- City Hospital
- City X Ray Scan & Clinic Pvt Ltd
- CRPF Hospital
- DAV College Managing Committee
- Deen Dayal Upadhyay Hospital
- · Deep Chand Bandhu Hospital
- Defense Institute of Physiology & Allied Science
- Delhi Health Secretariat
- · Delhi Heart & Lung Institute
- Delhi Jal Board Dispensary
- Delhi Pain Management Center
- Delhi Pharmaceutical Sciences and Research University
- Delhi State Cancer Institute
- Deshbandhu College
- Dharamshila Narayana Superspeciality Hospital
- DPS International (Health Department)
- Dr. Baba Saheb Ambedkar Medical College & Hospital
- Dr. Hedgewar Arogya Sansthan
- Dr. Khanna Pathcare
- Dr. Lal Path Labs
- Dr. N.C. Joshi Memorial Hospital
- Dr. Ram Manohar Lohia Hospital
- Dr. Shroff Charity Eye Hospital
- East Delhi Municipal Corporation Hospital
- ESIC Medical College and Hospital
- Eye Hospital Tara Netralya
- FHI 360
- · Fortis Escorts Heart Institute
- Fortis Hospital
- Galgotias University
- Ginni Devi Action School of Nursing
- Gobhania Hospital
- Govind Ballabh Pant Institute of Postgraduate Medical Education & Research
- Guru Gobind Singh Government Hospital
- Guru Gobind Singh Indraprastha University
- Guru Nanak Eye Center
- Guru Teg Bahadur Hospital
- Hakeem Abdul Hameed Centenary Hospital (Jamia Hamdard University)
- Happy Child College of Nursing
- Health and Family Welfare Training Centre
- Health Centre Cum Maternity Hospital
- Healthians
- Hindu Rao Hospital
- · Holy Family College of Nursing

- Holy Family Hospital
- · HPS Health Center
- Indian Spinal Injuries Centre
- Indira Gandhi National Open University Dispensary
- Indira IVF Hospital
- Indraprastha Apollo Hospital
- Institute of Human Behaviour and Allied Sciences
- · Institute of Liver and Biliary Sciences
- Institute of Public Health & Hygiene
- Ishan Hospital
- Ishwar Orthopaedic Hospital
- Jag Pravesh Chandra Hospital
- Jaipur Golden Hospital
- Janakpuri Super Speciality Hospital
- Janki Devi Memorial College
- · Jawaharlal Nehru University Health Centre
- Jeevan Anmol Hospital
- Jindal Hospital
- Johns Hopkins Program for International Education in Gynecology and Obstetrics
- K D Institute of Nursing
- Kailash Hospital
- Kalawati Saran Children's Hospital
- Kamla Nehru Maternity Home
- Karuna Hospital
- Kasturba Hospital
- Kayakalp Hospital
- Khetarapal Hospital
- · L. D. Hospital
- Lady Hardinge Medical College & Hospital
- · Lady Reading Health School
- Lakshmi Bai Batra College of Nursing
- Lal Bahadur Shastri Hospital
- · Lok Nayak Hospital
- M. R. Hospital
- Madhukar Rainbow Children's Hospital
- · Mahant Gurumukh Singh Hospital
- · Maharaja Agrasen hospital
- Maharishi Valmiki Hospital
- Majeedia Hospital
- Malik Radix Health Care
- Manipal Hospital
- Mata Chanan Devi hospital
- Maternity Home Chandiwala
- Maternity & Child Welfare Centre (Khyber Pass)

- Maternity Mother and Child Welfare Centre (Nand Nagri)
- Maulana Azad Institute of Dental Sciences
- Maulana Azad Medical College & Hospital
- Max Healthcare
- Max Institute of Health Education and Research College of Nursing
- Max Super Speciality Hospital
- MCU (Dept. of Social Welfare, Delhi Govt.) Avantika
- Médecins Sans Frontières (MSF)
- Meerabai Institute of Technology
- · Metro Hospital & Heart Institute
- MGS Super Speciality Hospital
- Military Hospital, Dimapur
- Mind Vriksha Poly Clinic
- Mira Model School
- · Mobile Health Scheme, Delhi Government
- Moolchand Hospital
- Mount Carmel School
- Mrs. Girdhari Lal Maternity Hospital
- Mudgal Hospital
- Municipal Corporation Delhi Dispensary
- Munirka Polyclinic & Maternity Home
- National Heart Institute
- National Institute of Health & Family Welfare
- National Institute of Tuberculosis & Respiratory Diseases
- Nav Kiran-I & II (Halfway/Longstay Home)
- Navjeevan Hospital
- Nayati Healthcare
- North Delhi Municipal Corporation Hospital
- North MCD Homoeopathic Health Department
- · Northern Railway Central Hospital
- Nova IVF Centre
- Onquest Laboratory Ltd.
- Orthonova Fracture Clinic
- Orthoplus Hospital
- Palika Maternity Hospital
- Panchsheel Hospital
- Pandit Madan Mohan Malviya Hospital
- Park Hospital
- Primary Urban Health Centre Dispensary (Shahbad)
- Pt. Deendayal Upadhyaya National Institute For Persons with Physical Disabilities
- Pt. Madan Mohan Malviya Hospital
- Pushpawati Singhania Hospital & Research Institute
- Rajan Babu Institute of Pulmonary Medicine and Tuberculosis
- Rajiv Gandhi Cancer Institute & Research Centre

- · Rajiv Gandhi Super Speciality Hospital
- Rajkumari Amrit Kaur College of Nursing
- · Ramakrishna Mission Medical Centre
- · Rao Tula Ram Memorial Hospital
- RLKC Hospital
- Rosewalk Healthcare A Luxury Hospital for Women
- Rosewood hospital
- Rufaida College of Nursing (Jamia Hamdard University)
- · Rural Health Training Centre
- · Sahib Singh Verma Polyclinic Bawana
- Sanjay Gandhi Memorial Hospital
- Sanjeevan Hospital
- Sant kripal school
- Sant Parmanand Hospital
- · Sant Parmanand School of Nursing
- Santom Hospital
- Sardar Vallabh Bhai Patel Hospital
- Saroj Hospital
- Satyawadi Raja Harish Chandra Hospital
- Satyawati College
- Save Sight Centre
- School Health Scheme, DGHS
- Sehgal Neo Hospital
- Shakuntla Nursing Home and Hospital
- Sharad Nursing Home
- Shri Dada Dev Matri Avum Shishu Chikitsalaya
- Shubham Hospital
- Sir Ganga Ram City Hospital
- Sitaram Bhartiya Institute of Science & Research
- Smt Sucheta Kriplani Hospital
- Solidarity and Action Against the HIV Infection in India (SAATHII)
- SOS Children's Villages of India (NGO)
- South Delhi Municipal Corporation Hospital
- Springer Healthcare
- SRG Speciality Hospital
- · St. Stephen's Hospital
- State Health Society, DGHS
- Sunder Lal Jain Hospital
- Sunrise Hospital
- Surya Kiran Hospital
- · Sushila School of Nursing
- Sushruta Trauma Centre
- Swami Dayanand Hospital
- Swasthik Hospital

- · Syadwad Institute of Higher Education
- Tara Sansthan
- Tech Mahindra Smart Academy for Healthcare
- The Leprosy Mission Community Hospital
- Tirath Ram Shah Charitable Hospital
- University College of Medical Sciences
- Vallabhbhai Patel Chest Institute
- Vardhman Mahavir Medical College & Safdarjung Hospital
- Ved Nursing College
- · Veer Savarkar Arogya Hospital
- Venketeshwar Hospital
- Vikas Hospital Pvt. Ltd.
- We Care Home Health Care
- World Health Organisation
- Zexus Air Services Private Limited

#### Gujarat

- Dr. M. K. Shah Medical College & Research Centre
- Gujarat Institute of Mental Health
- · Healthcare Global Enterprises Hospital

#### Haryana

- Amity College of Nursing
- · Artemis Hospital
- · Aryan Hospital
- Ashirvad Nursing Home
- · Bharat Institute of nursing
- Birender Singh College of Nursing
- Civil Hospital
- · Community Health Centre Badkhalsha
- · Community Health Centre Firozpur
- ESIC Dental College & Hospital
- ESIC Medical College & Hospital (Faridabad)
- · Government Civil Hospital Palwal
- K K Health Care
- Kalpana Chawla Government Medical College & Hospital
- Kalyani Hospital
- Maharishi Markandeshwar College of Nursing
- Manay Rachna Dental College
- Mangalam Hospital
- Medanta -The Medicity Hospital
- Military Hospital AMBALA

- Narayana Superspeciality Hospital
- · National Cancer Institute, AIIMS, Jhajjar
- Pandit Bhagwat Dayal Sharma Post Graduate Institute of Medical Sciences
- · Pathkind Diagnostic Private Limited
- · R. R. School And College of Nursing
- SGT Medical College Hospital & Research Institute
- Shree Guru Gobind Singh Tricentenary (SGT) University
- · Translational Health Science and Technology Institute
- World College of Medical Sciences

#### **Himachal Pradesh**

· Satyam College of Nursing

#### Jammu & Kashmir

- · Bibi Halima College of Nursing
- Jammu Government Medical College & Hospital
- · Bee Enn College of Nursing
- · Shri Mata Vaishno Devi College of Nursing

#### **Jharkhand**

- Namkum Military Hospital
- · Central Coalfields Limited

#### Karnataka

- Al-Qamar College Of Nursing
- District Civil Hospital Vijayapura
- Gulbarga Institute of Medical Sciences
- Krupanidhi College of Nursing
- Manipal College of Nursing
- MRMC Medical College
- · Pragathi College Of Nursing
- · Vydehi Institute of Nursing Sciences & Research Centre

#### Kerala

- Divisional Railway Hospital (Kerala)
- GG Hospital
- Government College of Nursing Alappuzha
- · Igraa International Hospital

- · JDT Islam College of Nursing
- N S Hospital

#### Madhya Pradesh

- All India Institute of Medical Sciences, Bhopal
- Assure Dental Care
- · Chirayu Nursing College
- Choitram Hospital
- Divisional Railway Hospital
- Index Institute of Dental Sciences
- · Jabalpur Hospital and Research Centre
- Jai Institute of Nursing & Research JINR
- LN Nursing College LNCT University
- Maharana Pratap College of Nursing Science
- · Modern Dental College
- People's College of Nursing & Research Centre (PCN&RC)
- Perfect 32 Dental Care
- Ramshree institute of medical science and superspeciality Hospital
- · Shri Sai Nath College of Nursing
- Smt. R.D. Gardi Nurses Training Center
- · Sri Sai Seva Trust, Indore
- The Academy of Nursing Sciences & Hospital

#### Maharashtra

- D. Y. Patil Medical College
- Dr. Vitthalrao Vikhe Patil Foundation College of Nursing
- King Edward (VII) Memorial (KEM) Hospital
- Railway Hospital (Bhusawal)
- Shri Siddhivinayak Ganapati Cancer Hospital
- Tata Memorial Hospital

#### Manipur

District Hospital Churachandpur

#### Odisha

- Kalinga Institute of Nursing Sciences
- MKCG Medical College & Hospital
- Sishubhawan Children's Hospital
- SUM Nursing College

#### **Puducherry**

• Mahatma Gandhi Medical College and Research Institute

#### Punjab

- Amar Professional College of Nursing
- Baba Moni Ji Maharaj College of Nursing
- · College of Nursing, Chitkara University
- Dayanand Medical College & Hospital
- · Desh Bhagat University Nursing College
- Homi Bhabha Cancer Hospital & Research Centre
- · National Dental College
- · Sant Baba Bhag Singh Institute of Nursing
- Shaheed Kartar Singh Sarabha College of Nursing
- · Shri Guru Ram Dass College of Nursing
- · Sri Sukmani Dental College & Hospital

#### Rajasthan

- All India Institute of Medical Sciences Jodhpur
- Bikaner Government District Hospital
- · Brijesh Banger Memorial Hospital
- City Hospital, Alwar
- Community Health Center Sedwa
- · Community Health Centre Suratgarh
- Dana Shivam Heart & Super speciality Hospital
- District Hospital Sirohi
- Dr. Mukesh Gupta Vajayanti Hospital
- Dr. Ram Dev Hospital
- Eternal Heart Care Center & Research Institute Pvt. Ltd.
- Geetanjali Medical College & Hospital
- · Government Primary Health Center, Jaipur
- Government College of Nursing Bikaner
- · Government Hospital Churu
- Govt. College of Nursing Jodhpur
- Guru Kripa Hospital
- Indian Railway Health services Bikaner
- Jhalawar Medical College
- JIET College of Nursing
- · Lagan shah memorial nursing

- · Liberty College of Nursing
- Mahatma Gandhi University of Medical Science & Technology
- Mai Khadija Institute of Nursing Sciences
- · K S Memorial College of Nursing
- Mahatma Gandhi Hospital, Jodhpur
- Manu Hospital
- · Mathura Das Mathur Hospital
- · Medipulse Hospital
- Metro Mas Hospital
- NIMS Medical College & Hospital
- Northern Western Division Railway Hospital
- Pacific Medical University
- PBM Hospital
- R&R Multispecialty Hospital
- · Ranthambhore College of Nursing
- Sardar Patel Medical College
- · Sawai Man Singh Medical (SMS) Medical College
- Shree Bangur Hospital
- Shri Ganganagar College Of Nursing
- Sikar Hospital And Research Institute
- · SN College of Nursing
- Swasthya Kalyan Blood Bank & Thalassaemia Research Centre
- Touch-On Sehat Home Care
- Upchar College of Nursing
- Vajayanti Hospital & Research Centre
- Vinayak College of Nursing
- Vinayaka Hospital
- Vyas College of Nursing

#### **Tamil Nadu**

- Apollo College of Nursing
- · Dambi Dollo University
- Government Hospital Villupuram
- · Jainee College of Nursing
- M A Chidambaram College of Nursing
- Madras Medical College
- Matha College of Nursing
- PSG College of Nursing
- Rani Meyyammai College of Nursing
- Sakthi hospital
- Shrinidhi College of Nursing
- Sree Sastha College of Nursing
- · Sri Narayani College of Nursing

- · Srinivasan College of Nursing
- · Thasiah College of Nursing
- Vinayaka Mission's Annapoorana College of Nursing
- Zion Hospital & Healthcare

#### Telangana

- · Jesus Mary Joseph College of Nursing
- KIMS Hospital
- Muslim Maternity and Children's Hospital
- TSRTC Hospital

#### **Uttar Pradesh**

- Agra District Hospital
- AICCEDS Nursing College
- · Auraiya Government Hospital
- · Community Health Centre Meerut
- D J College of Dental Sciences & Research
- · District Women's Hospital
- Gangasheel School of Nursing
- Ghaziabad District Hospital
- · IEC Group of Institutions
- Knee Hip & Dental Care
- Krishna Nursing and Paramedical Institute
- Krishna Super Speciality Hospital
- PDM Dental College
- Rohilkhand Hospital
- Santosh Medical College
- School of Dental Sciences, Sharda University
- Shree Bankey Bihari Dental College
- Teerthanker Mahaveer Hospital
- Uttar Pradesh University of Medical Sciences
- Vaidya Yagya Dutt Sharma Ayurvedic Mahavidyalaya
- Yashoda Hospital
- Yatharth Hospital
- 12 Air Force Hospital
- Amity University
- Amogha Nursing College
- Apex Hospital
- Aryavart Hospital
- Baba College of Nursing
- Balrampur Hospital
- Banaras Hindu University Hospital

- Chhatrapati Shivaji Subharti Hospital
- All India Children Care & Educational development Society Education Group
- COVID -19 Hospital, Bareilly
- ESIC Hospital, Sahibabad
- Government Medical College
- Guru Kripa Jagrati Hospital & Research Centre Pvt Ltd
- Hind Institute of Medical Sciences
- ITS Dental College
- Indraprastha Dental College & Hospital
- Institute of Dental Studies & Technologies
- Jawaharlal Nehru Medical College & Hospital (AMU)
- Kailash Hospital & Heart Institute
- · Kailash Institute of Nursing and Para-Medical Sciences
- Keshlata College of Nursing
- · KGMU, college of nursing
- King George's Medical University
- LLRM Medical College
- Mansarovar Global University
- Meerut Institute of Mental Health & Neuroscience
- · Metro College of Nursing
- Muzaffarnagar College of Nursing
- Nayati Medicity
- Nightingale Institute of Nursing
- Noida International University
- Northern Railway Health Unit
- Nursing College, Uttar Pradesh University of Medical Sciences
- Pilibhit District Hospital
- Prakash Institute of Physiotherapy, Rehabilitation & Allied Medical Science
- · Primary Health Centre, Pilakhni
- Rama College of Nursing , Rama University
- · Ramakrishna Mission Sevashrama School of Nursing
- · Rohilkhand College of Nursing
- Samarpan Institute of Nursing and Paramedical Sciences
- Sanjay Gandhi Postgraduate Institute of Medical Sciences
- Sarojini Naidu Medical College
- · Sanatan Dharm Degree College
- Sharda Hospital
- Shreya Hospital
- Super Speciality Paediatric Hospital & Post Graduate Teaching Institute
- Surbhi Hospital
- Surya Hospital
- Teerthanker Mahaveer University, College of Nursing
- Vivekananda College of Nursing
- Yatharth Nursing College And Paramedical Institute

#### Uttarakhand

- All India Institute of Medical Science Rishikesh
- Combined Medical Institute
- Doon Institute of Medical Science
- Himalayan College of Nursing
- Graphic Era College of Nursing
- Shri Guru Ram Rai Institute of Medical & Health College Of Nursing
- Shri Mahant Indiresh Hospital
- Swami Rama Himalayan Medical College & Hospital

## PRESENTATION OF FINDINGS

**Purpose:** One of the key objectives of project PRAKASH was to conduct baseline assessment of Knowledge, Attitude & Practice (KAP Study) of healthcare delivery system in management of viral hepatitis in the country. The intent of this study aimed at analyses of the existing capacity of HCWs in management of viral hepatitis, identification of gaps and to provide relevant solutions through upgradation of overall knowledge and practice skills of healthcare workers in management of viral hepatitis patients through all-inclusive training programs. Over a period of 3 years several online studies have been conducted under the project using survey monkey platform.

**Target Population:** In-service doctors, nurses, laboratory technicians & dental professionals attended viral hepatitis training programs under project PRAKASH.

Study Period: December 2017 - March 2021

#### The studies conducted aimed at analyses of:

- Pre-existing knowledge, attitude & practice of healthcare professionals in management of viral hepatitis patients.
- Change in participants knowledge in management of viral hepatitis post attending the training program.
- Change in participating healthcare workers attitude & practice after attending the program towards patient care, personal hygiene, use of PPE, family screening & counselling etc.
- Impact of viral hepatitis training in upgrading knowledge, attitude & practical skills of HCWs. Improvement in patient treatment, additional job responsibilities, better utilization of infection prevention and control practices etc.
- Quality of training through feedback assessment to analyze quality of sessions, speakers and content.

In addition to the above studies, participants were provided with additional scientific material to be used as ready reference material according to the targeted population. Module for nurses, doctors, dentists and LTs were all prepared separately and distributed during the trainings.

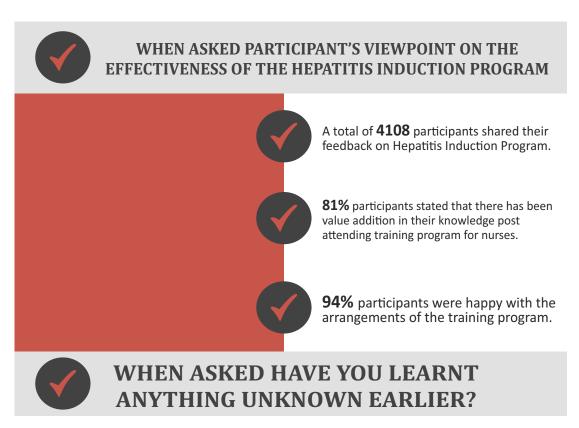
Following studies have been conducted under project PRAKASH and published with an aim to serve as a model of awareness and trainings for healthcare providers.

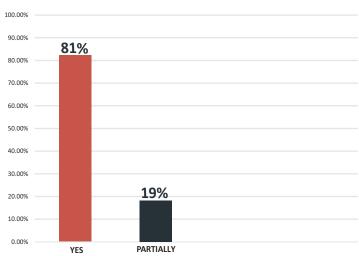
JOURNAL	PAPER TITLE
Journal of Family Medicine and Primary Care	Empowering In-service nurse in management of Viral hepatitis through Programed Approach to knowledge and Sensitization on Hepatitis (PRAKASH): An experience from a capacity building intiative
Plos One Journal	Capacity building of healthcare workers: Key step towards elimination of viral hepatitis in developing countries
Journal of Education, Society & Behavioral Sciences	Small Steps, Big Gains: Impact of Health Promotion in Combating Viral Hepatitis
International journal of Advances in Medicine	Physicians as viral hepatitis advocates: empowerment through education
Journal of Advances in Medicine & Medical Research	Viral hepatitis Training for Laboratory Workers: Addressing the Unaddressed
Indian Journal of Community Health	A brief insight on knowledge about Viral Hepatitis in Pregnancy among clinicians
Dental Research Journal	Training gaps and risk faactors analysis contributing to Hepatitis infections among early-age dental professionals in India
Indian Journal of Community Health	Viral Hepatitis in dentistry- An overlooked contributor to disease burden and occupational hazard in India
International Journal of Research in Medical Sciences	Hepatitis Update Program: need of the situation to comanage viral hepatitis and COVID-19





## PARTICIPANTS FEEDBACK

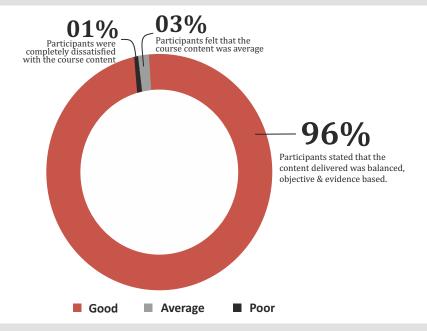




■ Participants learnt new concepts ■ Participants partially learnt new concepts



# WHEN ASKED HOW DO YOU RATE THE RELEVANCE OF THE TOPICS?





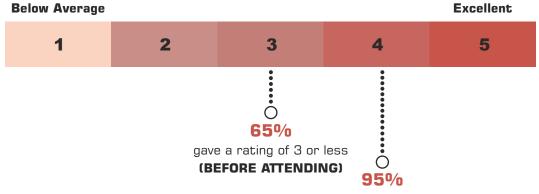
# WHEN ASKED HOW DO YOU RATE THE QUALITY OF THE SESSIONS?

	Overview & Epidemiology	Clinical Features	Management	Injection	Disinfection & Sterilization	Lab Diagnosis	Fibro scan	%
Good	3983	3942	3948	4032	3900	3948	3973	96
Average	86	129	117	55	166	126	105	3
Poor	38	37	42	21	42	34	28	1

Overall feedback suggests that the Hepatitis Induction Program has been successful in adding value to the existing knowledge of the nursing professionals in management of viral hepatitis. More than 90% participants stated that the program has achieved its stated aims & objectives.



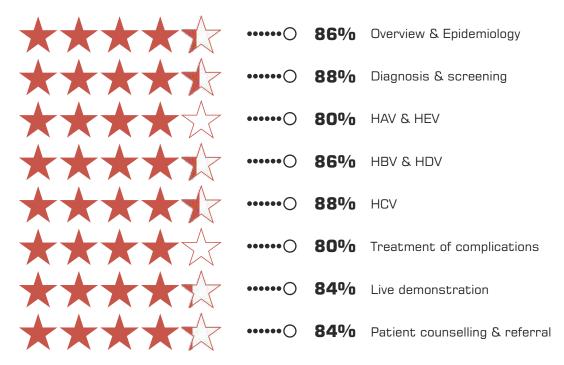
# ON SCALE OF 1 – 5, HOW WOULD YOU RATE YOUR CLINICAL CONFIDENCE & UP TO DATE KNOWLEDGE & PRACTICE IN MANAGEMENT OF VIRAL HEPATITIS



gave a rating of 4 and above (AFTER ATTENDING)

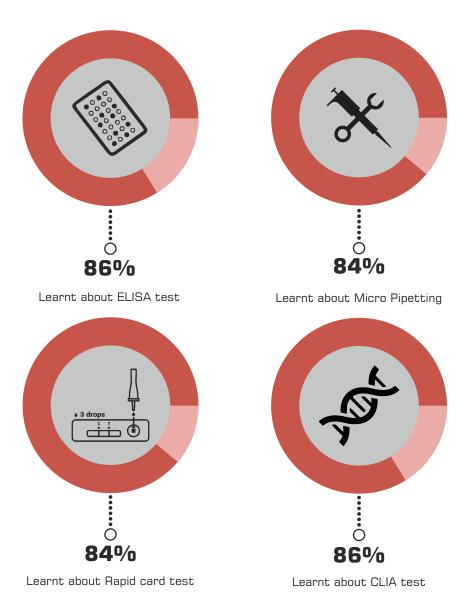


# RATE THE PROGRAM ON THE BASIS OF RELEVANCE, CONTENT DELIVERY & EVIDENCE BASED APPROACH





# HAVE YOU LEARNT ANYTHING NEW DURING LIVE DEMO SESSIONS OF VARIOUS TESTING PROCEDURES?



More than 80% participants have learnt about newer testing techniques in viral hepatitis including calibration of micro pipetting, CLIA, detailed instruction on PCR technique. Most of them felt the need of such courses for better implementation of newer techniques of testing in laboratories.

#### **PARTICIPANTS REVIEW**

# Ganga Gurung

I liked the whole program and would like to share that I am suffering from hepatomegaly. I attended the program to get more information and my participation was a great success. Thank you so much for initiating this excellent project and I want to suggest that all health workers like general duty assistants, nursing assistants should get knowledge through this program.

# Manju Lata

I have learnt about treatment regimen of viral hepatitis and came to know that hepatitis C is completely curable. Program will be more informative if you can include the disinfection of the equipment's used with hepatitis positive patients, waste material disposal of these patients and disinfection of OTs & ICU's after use and blood spill management guidelines. Thank you

# Avinash Thakur

Hepatitis Infection was a new topic for me as in laboratory services we do not get much trainings on these topics. These types of programmes should be implemented as residential programme. There should be detailed information along with processing unit in all types of testing procedures.

# Ashish Sharma

I have learnt about principals of RDT and calibration of micropipette and got a clarity of CLIA procedure in virology laboratory. This is a very good initiative to teach, educate and spread knowledge amongst healthcare workers about new laboratory technologies.

## Rapunga Rose PH

I had no idea about the availability of vaccines against hepatitis A before attending this training program. Please circulate about this valuable project PRAKASH to more people so that maximum health workers can benefitted from it.

# Manisha Sharma

Treatment regimen n vaccine schedule of hepatitis b and c was a new concept for me. It's really very beneficial class for nursing professionals and I learnt so many new things through various sessions. Thank u for making us participate in your knowledgeable n helpful induction program

# **Jyoti**

Fibro scan machine and procedure was a new concept for me and in-depth detail about hepatitis infection was very informative. Kindly make this program approachable for every working nursing professional and Delhi and other states and enrol them in implementation and outcome of teaching programs such as yours.

# Dr. Vipin Sharma

Latest treatment protocols and information regarding drugs was excellent. Such programs can be broadcasted in television for broader coverage so that more and more people can be educated. All the teaching material and take-home messages are highly informative.

# Shweta Sharma

I can now easily distinguish among all types of viral hepatitis after attending HIP training. I like the scientific sessions and arrangements done for the training. It is really appreciable and I have learnt new things related to viral hepatitis. Such kind of training helps us to learn in an effective way which can be implemented in our day to day practice.

#### **Sweetv**

Fibro scan procedure is something new that I have learnt in today's training. Everything seemed to be properly organised. Interaction with participants by speakers was an excellent opportunity to encourage equal participation from attending nursing officers. Everyone worked hand in hand together to bring out a successful program.

## PRAKASH IN NEWS

ग्रेटर नॉएडा:शारदा विश्वविधालय के स्कूल ऑफ़ डेंटल साइंस के सार्वजनिक स्वास्थ्य देत विकित्सा विभाग और इंस्टीट्यूट ऑफ लिवर एंड बिलियरी साइंसेज,नई दिल्ली के सहयोग से प्रोजेक्ट प्रकाश की सफलता के लिए "दंत चिकित्सा में वायरल हेपेटाइटिस" शीर्षक पर एक दिवसीय संगोध्डी का आयोजन

#### अलीप सिंघल

**ग्रेटर नॉर्बा**:शास्त्र विश्वविधालम् के स्कूल और बेंटल यानंत्र के सार्वजनिक स्वास्थ्य का विशिव्या विभाग और इंग्लीटक्ट ऑफ लिवर एंड बिलिक्स सहसेक मई फिली के राज्योग से परोजेक्ट परकात की सफलता के लिए "इंट विविश्वना में वायरल हेपेटाइटिस' शैर्वक पर एक दिवसीय संगोधी का आयोजन किया गया।

इस पंगोची में मुख्य अविधि गैटमहुद्ध नगर के मुख्य विकास अधिकारी, डॉ. अनुराग भागेद और इंस्टीइयूट ऑफ जिल्ह एंड बिलियरी साईतेल, नई दिल्ही परशासन के परमुख जो अधित अगरवात ने अपने अनुमकों से पूरा विकित्सको को सम्बोधित किया।

मध्य अतिथियों का रवागत सारदा विक्वविद्यालय के रक्ता ऑफ हेंटल सहस के जीन, हाँ, एम. सिद्धार्थ ने किया । शास्य विश्वविधालय के रखूल और वेडिकल साईन एंड रिक्त के पूरों, वर्ज़न चांसलर, हाँ, भी, वल, कोरिहोलू ने मुख्य अतिथियों को स्मृति विन्ह देकर सम्बन्धित किया। शासा विश्वविधालय के रखूल औफ बेंटल साईस के बीन, जॉ. एम. विद्धार्थ ने सभी को सम्बोधित करते हुए बहा कि वायरल हेपेटाइटिल लगभग हमेशा एक विशिष्ट हेमेटाईटिश वामरत के कारन होता है। ये तभी वामरत बीमरियों को जन्म देते हैं जो सनकी नैदानिक और रोग संबंधी विशेषकाओं में समान हैं और अवसार विषम या रपत्रीच्या है।

शस्य विश्वविधासय के रखूस और मेडिकस साईस एंड रिक्तों के परो. बाईक बांसलर, डॉ. पी. एल. कोरिहोल, ने बलमा कि वीरियजीटल परिवेटन में हंपेटाइटियानी के साथ संक्रमण के डोल्ट रका, तार और नासीफेरीजत शराय हैं। अंत किरमालक कम थे, हेमेटाइटिस-बी संकरमण की सबसे बड़ी एकाएसता ससूड़े के बाव में होती है। इसके अलावा, पीरियडॉटल बीधरी, रक्तास्त्राय की

गंभीरता, और खराब में किया रचन्यता को एक्सीबी के जोनेक्स के साथ जोता जाता है

गीतमबुद्ध नगर के मुख्य विकित्सा अधिकारी, हाँ. अनुराग भार्यय में कावण कि सभी डिस्पोर्जबल आहटम (जैसे, श्रेय, सोता, तार बेराक्कारार, मुखीटे, गाठन, चलताने) को एक अस्तर अवने में स्वा आना बाहिए। उपचार के बाद, इन वन्तुओं और सभी किम्मोजेबल कवरों को जैव-खतरनाक कचरे के लिए अधित दिस्तरिदेंसों का नालन करके इसका Page or thou once write i

इंग्टीटपुट ऑफ जियर एंड बिनियरी राइसेंस के सहस्स विज्ञान विभाग जी श्री. एकता मुता ने बताना कि एक दत बरबॉलय में, संबन्तमन कई नार्गों से हो सबना है, जिसमें रक्त, संविद्धक तराज प्रदायों पर अन्य सराज के जायां लीचे शंभक्षे शामिल हैं, दुवित जमकरतों, ऑपरेटिव जमकरण, या पर्यालक वरिकेट के कहा आवस्त्रत बंगाई- का मैतिहरू पा प्रवसन तरल प्रदार्थ के या तो ओटी बंद सिंटे या एसेसील में मीज्द्र वायजनित द्वित पदार्थी के लाय लंपके । हेमेटाइटिश युनिया भर में तीव्र और पुरानी पकृत संकरमण, सिरोरियम और प्रश्यमिक हेमेटोसेस्ट्रमा कार्सिनोमा का प्रमुख प्रेमक एजेट है। विषय स्थारूव संगठन से आये डॉ. विकारेड पुरोक्ति ने बलमा कि मंदि उपकार के दौरान मा बाद में रक्तक्राव की

संभावन है. तो परोधरोन्बिन समय (मीटी) और रक्तस्याव के रामम को मारे । हेमेटाइटिस जमावट को बदल सकता है इस्तिए तदनुसार संप्रधार बदले ।

शारद विश्वविद्यालय के सार्वजनिक स्वास्थ्य देश विकित्सा विभाग की विभागध्यक्ष हों. स्वारी हमों ने बताया कि देश विकित्सा में अधिकांस परिक्रमें को शेका जा सकता है, और रक्त संपन्नों के जोखिम को कम करने के लरीकों में मानक सावधानियों और इंजीनियरिंग नियंतरणी और कार्य अध्याप के शंखेंधणों का अधीन सामित है। इन दृष्टिकोगों ने हाल के क्यों के दौरान देत क्रिकिटसकों के बीच नमीर चोटों में कमी अभी है।

भंगोप्ती के अंत में विभागानक की रकति कर्म द्वारा धन्मवाद कापन किया गया ।

हाँ, अजित वृत्पार संस्थत कुलपीर और जनसम्पर्क अधिकारी सारत विश्वकित्रमध











## A CONTRACTOR OF TOWN, QUART, 12 WHIRE, 2020 कैपिटल ज़ोन

## वायरल हेपेटाइटिस एक विशिष्ट वायरस के कारण होता है : डॉ. एम सिद्धार्थ

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कार जिए के न्यून वर्ष स्थानक कार्यून के किस के हैं। सर्वेच प्रीतार, के प्रीतार प्रतिक प्रवाद, के प्रीतार प्रतिक के प्रवाद अधिकी के प्रवाद किस कार्यून किस कार्यून किस्मीयला के मुख्य और किस कार्यून के प्रतिक कार्यून क्षान के प्रतिक कार्यून के प्रतिक कार्यून कार्यून के प्रतिक कार्यून के प्रतिक कार्यून क्षान क्षान के प्रतिक कार्यून क्षान क्षान के स्थान के स्थान क्षान क्षान

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# WEDNESDAY, 12 FEBRUARY 2020

#### दांतों की बीमारी पर किया जागरूक



 एक्बीटी व्यूज, ग्रेमो । नांतज पर्क रिथत शारव प्रनिवरिति के रकत और डैटल सहस के सावेजनिक स्वास्थ्य देते विकित्सा विभाग और इंस्टिट्यूट ऑफ लिवर एंड बिलियरी साइसेज के सहयोग से मंपलकर को वंत विकित्सा में कायरल हेपेटाइटिस शीर्षक पर संबोध्या हुई। इस संगोधी में मुख्य अविधि सीएमओ खें.अनुराग भागेद और हरिटट्यूट ऑफ लिवर एंड बिलियमी साइलेज, नई विल्ली प्रशासन के प्रमुख डॉ.अनिल अववाल उपस्थित रहे। इस दौरान स्कूल ऑफ मेंडिकल राह्मा एंड रिसर्च के प्रे.वाह्म चामतर हो. पेएत कोरिहोल्, वी. विमलेश पुरोहित, संस्थान की स्वास्थ्य देत चिकित्सा विभाग की विभागाध्यक्ष हो स्वाति शर्मा प्राथमिक्त रहे।



# **NURSES TRAINING**



Registration of in-service nurses for Hepatitis Induction Program at ILBS.



Inauguration of HIP training on World Hepatitis Day by Ms. Rumana Hamied, Managing Trustee, CIPLA FOUNDATION



Special address to participants by Dr. S. K. Sarin, Director ILBS



Relay of scientific session by Ms. Cicily Babu on disinfection & sterilization in Viral Hepatitis.



Demonstration of 5 steps of hand-hygiene by a participant.



Live demonstration of safe injection practices



Certificate distribution to the participants



Group photo of in service nurses & project team with Dr. Anil Agarwal.



Group photo of nursing professionals from various hospitals along with project team outside APJ Abdul Kalam Auditorium, ILBS

# **DOCTORS TRAINING**



Inauguration of HIP training for doctors conducted by Dr. B. B. Rewari, WHO



Scientific session on newer treatment advances in viral hepatitis by Dr. S. K. Sarin.



Launch of scientific module on viral hepatitis by Dr. B. B. Rewari, WHO, India along with senior official & faculty from ILBS.



HIP training for doctors conducted at Dr. Baba Saheb Ambedkar Hospital, New Delhi



Session on identification and treatment of complication in viral hepatitis.



Viral Hepatitis in Dentistry training for dental professionals at Sharda School of Dental Sciences, Greater Noida



Live demonstration of hepatic hemo-dynamic laboratory by Dr. V. Rajan.



Live demonstration of Next Generation Sequencer to doctors attending Viral Hepatitis Testing training at ILBS.



Group photo with faculty from gynaecology department across Indian medical colleges attending viral hepatitis in pregnancy program at ILBS.



Inauguration of Viral Hepatitis in Dentistry training by Dr. Mahesh Verma, Vice Chancellor, Indraprastha University



Launch of scientific module on viral hepatitis for dental professionals by dignitaries.



Participants pledging to work towards elimination of viral hepatitis.



Pledge photo booth in viral hepatitis testing training for doctors.



Group photograph of participants and dignitaries during training.



Group photograph of participants attending HIP training.

# LT's TRAINING



Participants address by Dr. Ekta Gupta, Professor, Department of Virology, ILBS



Hands on training to laboratory technicians on micropipetting techniques and calibration.



Live demonstration of ELISA & CLIA in virology lab at ILBS.



Certificate distribution by Dr. Reshu Agarwal, Assistant Professor, Virology, ILBS



Group photograph of participants and dignitaries during training.



Group photograph of participants attending viral hepatitis diagnostic laboratory support program.

# **SCREENING & VACCINATION**



Titre testing of nursing professionals attending HIP training on World Hepatitis Day.



Camp at Airports Authority of India, Head Quarters,
New Delhi in collaboration with Empathy Campaign.



Viral Hepatitis screening & vaccination of dental professionals attended viral hepatitis in dentistry training at ILBS.



Viral Hepatitis screening & vaccination of dental professionals attended viral hepatitis in dentistry training at ILBS.



Camp at Delhi Metro Rail Bhawan, Head Quarters, New Delhi in collaboration with Empathy Campaign



Camp at Delhi Metro Rail Bhawan, Head Quarters, New Delhi in collaboration with Empathy Campaign

## **TEAMS**



Group photo of team for project completion report outside auditorium.



Project team, session experts, finance, IT & administration department along with Dr. Anil Agarwal.



Project team preparing for an upcoming training program under the project.

# **PROJECT PRAKASH**

#### INSTITUTE OF LIVER AND BILIARY SCIENCES

An Autonomous Society Under Govt. of NCT of Delhi

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