



IPHA MAHARASHTRA BRANCH

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Newsletter

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Contents

Health for All: WHD'23 P.01

Editorial: TB Free India P.02

State Conference Report P.04



Moving Towards Zero Leprosy P.11

Hepatitis.....A Silent Disease P.14

Abstracts – Winner PSPA 2021 P.19

Abstracts – Winner PSPA 2022 P.20

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Revisiting 'Health for All' (From WHO Website)

- ❖ Health For All envisions that all people have good health for a fulfilling life in a peaceful, prosperous, and sustainable world.
- ❖ The right to health is a basic human right. Everyone must have access to the health services they need when and where they need them without financial hardship.
- ❖ 30% of the global population is not able to access essential health services.
- ❖ Almost two billion people face catastrophic or impoverishing health spending, with significant inequalities affecting those in the most vulnerable settings.
- ❖ Universal health coverage (UHC) offers financial protection and access to quality essential services, lifts people out of poverty, promotes the well-being of families and communities, protects against public health crises, and moves us toward #HealthForAll.
- ❖ To make health for all a reality, we need: individuals and communities who have access to high quality health services so that they can take care of their own health and that of their families; skilled health workers providing quality, people-centred care; and policy-makers committed to investing in universal health coverage.
- ❖ Evidence shows that health systems powered by a primary health care (PHC) approach is the most effective and cost-effective way to bring services for health and well-being closer to people.
- ❖ COVID-19 set back every country's journey to #HealthForAll.

- ❖ COVID-19 and other health emergencies, overlapping humanitarian and climate crises, economic constraints, and war, have made every country's journey to #HealthForAll more urgent. Now is the time for leaders to take action to meet their universal health coverage commitments and for civil society to hold leaders accountable.
- ❖ Progress needs to be accelerated if health-related SDGs are to be met.
- ❖ Demand your right to access the health services you need without falling into financial hardship!

Padavidhar (UG) Sanshodhan Prakalp Anudan – 2023

IPHA Maharashtra State Branch is offering *Anudan* (grant), this year also. The grant amount is increased now to Rs. 10,000/- to each deserving research proposal of UG students, from Medical Colleges in State of Maharashtra with support from UNICEF Maharashtra Field Office.

- Research project proposal should be submitted through IPHA Maharashtra website on or before **31st May 2023**
- The proposals will be scrutinized by panel of experts and **five best projects** will be awarded **funding of Rs. 10,000/-** each. The list of accepted proposals will be communicated by end of June 2023.
- Students should prepare & complete project under guidance of **IPHA Member Community Medicine faculty**.
- Selected student should submit **Project Report** on or before **31st Dec 2023**.
- Please note: Research proposal should be accompanied by –
 1. Institution Ethics Committee (IEC) approval letter
 2. Forwarding letter from Head of Community Medicine Department

For Details Visit: www.iphamaha.org
Email wprasad67@gmail.com for query

TB Free India - Need for Pragmatic Optimism

Editorial

Dr. Sanjiv Wamanrao Kamble

Former Director of Health Services, Public Health Department, Government of Maharashtra

Tuberculosis, an age-old infectious disease continues to remain major public health problem in India.

Recently concluded National TB prevalence 2021 underlines significant prevalence of 316/lakh/year in India. More striking is > 65% of symptomatic ignore symptoms and do not seek care which points towards inadequate awareness about TB in community.

Dominant role played by private sector in overall health seeking is relevant for TB as well where about an equal number of patients are found to be seeking care in private sector. Tuberculosis being social disease with medical implications, social determinants like undernutrition, ill ventilation/overcrowding, addiction (Alcohol/Smoking) continues to fuel the epidemic.

Despite efforts to tackle biomedical component of disease through early diagnosis and prompt treatment, above mentioned social determinants provide opportune environment for TB bacilli to survive & thrive. Global TB report 2022 from World Health organization have pointed out that rate of decline of TB has been around 2% to 3% annually for around a decade. Moreover COVID 19 pandemic has reversed the gains of TB programme and has set the clock in reverse direction by at least 3 years.

Government under National TB Elimination programme has initiated many applauding efforts to expedite efforts for elimination of Tuberculosis. While we must appreciate an intent and leadership, we must also critically assess the status to improve it further.

Following the flow adopted by National Strategic Plan 2017 - 2025 adopted by NTEP, following is critical assessment of the status from public health perspective.

Detect:

- Passive case finding strategy have resulted in inordinate delay in diagnosing TB cases. It not only affects outcome of individual TB case contributing to morbidity and mortality of TB, it also contributes to continued TB transmission. It is applauding that NTEP has initiated active case finding (systematic screening for TB). But it needs to be precision public health tool. Identification of clinically &

socially vulnerable population and their parodic screening may be important.

- National TB prevalence 2021 has shown that around 40% of the cases diagnosed during survey were asymptomatic hence programme may need to deploy innovative tools like mobile hand-held X rays to screen population during ACF campaign. It may improve the yield & cost effectiveness of ACF campaigns.
- It is worth appreciating that around 5000 molecular diagnostic machines have been deployed by programme for more sensitive diagnosis of TB & MDR TB. But still around 20% of presumptive TB do have access for it and majority resort to smear microscopy which is less sensitive technology for diagnosis of TB.
- Programme may need to utilize molecular diagnostics made available during COVID times for TB programme. Moreover, programme may intensify efforts to deploy low cost, indigenous multi diagnostic molecular technologies at health facility level. Opportunity of Pradhan Mantri Ayushman Bharat health infrastructure mission may be capitalized for it. Block level public health surveillance units envisaged under ABPMABHIM may be capitalized to augment capacity of programme to augment case detection.
- Uninterrupted supply of lab consumables is crucial. Shortage of molecular diagnostics cartridges/chips due to disruption in logistic management are avoidable disasters.
- It is worth appreciating that > 200 districts do have NGO as an interface agency for providing TB services to patients in private sector. Programme may need to saturate appropriate mechanisms in all districts of the country. Moreover, issues pertaining to capacity of agency, their timely payment and data system access may also need to be sorted out on priority.

Treat:

- Programme needs a pat for rolling out newer shorter regimen for drug resistant TB. Use of new drugs like Bedaquiline & Delamanate is expected to improve the outcome and reduce the adverse drug reactions. Roll out of 12 dose regimens as TB preventive therapy may need to be rolled out in entire country and may need

to be made available. Programme may need to deploy other 4-month shorter regimen for less severe drug sensitive TB cases recently recommended by WHO.

- Though programme has been reporting very high success rate of > 85% consistently, programme may scrutinize data specially pertaining to favorable outcome. In view of challenges associated with management of adverse drug reactions in peripheral health facilities and no reconciliation being done between consumed drugs and patient's treatment duration, there is a need to establish data quality metrics & systems on all indicators specially to data pertaining to treatment outcome.

Prevent:

- Though WHO has recommended TB preventive treatment for all contacts of microbiologically confirmed TB cases, its implementation has been sketchy. In view of the complexity of operations of this scale in terms of numbers to be treated, involved logistic management and level of counselling & support mechanism, programme may need to augment system's capacity to cater this service.
- Concept of interface agency adopted for private sector engagement may need to be capitalized fully for TPT services for private sector patients. In country evidence on efficacy of TPT in Indian context may also be warranted.
- Air borne infection control- Though programme has undertaken air borne infection control practices in select TB facilities, it's expansion in all health facilities and general facilities require broader collaboration. It requires integrated efforts and involvement of general health system and other departments. It is important component of pandemic preparedness and helps in prevention of other respiratory illness. It is time that ministry of health in collaboration with Urban development ministry and other ministries develop and implement practical feasible comprehensive plan for slums/general setting to minimize transmission of respiratory ailments.

Build:

- Multi sectoral engagement- It is worth appreciating that GOI has instituted Multi sectoral engagement framework for TB and has formal collaboration with few ministries like railways, Women & child, Postal, Panchayat Raj but it's penetration at local level is still sub optimal.
- Programme may need expand its implementation through involvement of District Collector at district level and above.

- Advocacy, Communication & Social mobilization (ACSM) - It is an important component for generating demand and improve access to services. Involvement of district administrative machinery (Department of Publicity etc.) and involvement of digital and social media is extremely important and may be focus area for programme.
- Surveillance - NTEP has initiated innovative Sub National Certification mechanism under NTEP where over and above traditional national level surveillance of TB epidemic status, assessment is undertaken at district level as well. More than 100 districts are certified for estimated reduction in incidence by 20%/ 40%/ 60%/ 80% as compared to baseline of 2015. Though intention of programme is noble, this strategy is fraught with technical inconsistencies and operational fiasco.
- Great uncertainty in assessment of 2015 baseline at district level is major flaw.
- Resorting to only sputum test and not doing X ray for all eligible population for the sake of operational convenience seem major drawback of the strategy. Implementation of three years have shown many field implementation drawbacks in terms of inconsistent field survey and data analysis. Such hurried exercise and certification of districts is fraught with risk like Malaria where Malaria was announced to eliminated before being again termed as epidemic.

While urgency of showing results for attaining SDG related TB goals is understood, Government needs to understand difference between setting up of aspirational goals to garner momentum and hardcore evidence based epidemiological exercise.

It is important to move ahead without being deviated by unrealistic goals. The TB control is the first step towards TB elimination. Let's walk that step as first step first.

Sanshodhan Prakashan Anudan - 2023

IPHA Maharashtra State Branch is offering financial support, to deserving research proposals of undergraduate (**Padavidhar**) and postgraduate (**Padvyuttar**) students from Medical Colleges in Maharashtra.

5 Best Projects in each category will be awarded grant

Undergraduate Students – Rs. 10,000/-
Postgraduate Students – Rs. 15,000/-

LAST DATE of Application: 31st May 2023

For Applying Visit: www.iphamaha.org
Email wprasad67@gmail.com for any query

Report of 24th Annual Maharashtra State Joint Conference of IAPSM & IPHA: MHIAPSMIPHA CON 2023

Tackling the Burden of Non-Communicable Diseases: New Frontiers & Challenges

Report By: Organizing Chairperson Dr. Manasi Shekhar Padhyegurjar

The 24th Joint State Conference of Indian Association of Preventive & Social Medicine (IAPSM) Maharashtra Chapter and Indian Public Health Association (IPHA) Maharashtra State Branch, on the theme 'Tackling the Burden of Non-Communicable Diseases – New Frontiers And Challenges' was organized by the Department of Community Medicine of SMBT Institute of Medical Sciences and Research Centre, Dhamangaon, Nashik on 18th and 19th March 2023 with Pre-conference workshops on 17th March 23.



Incidence and prevalence of non-communicable diseases are changing health scenario of our country on all fronts i.e., disease burden, human resources mobilization and their capacity building, logistics management, scope for strengthening and updating health infrastructure at grass root level, palliative care and improving quality of life of senior citizens etc. Hence the theme of this conference 'Tackling the burden of Non-Communicable Diseases – New frontiers and challenges' was selected as it is apt at present post Covid 19 pandemic period reminding us to get back to normal status and respond to area specific, state specific and country specific priority health issues and respond appropriately.

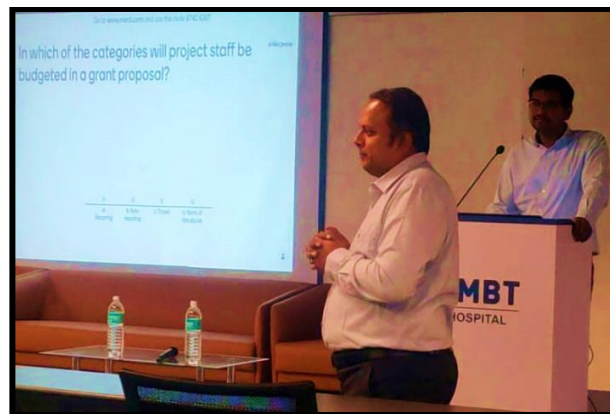
The two-day scientific event evoked creative discussion in various areas of public health priority. There was an enormous response from delegates from the state as well as outside the state with more than 200 registrations.

Maharashtra Medical Council granted four credit points for the conference and two credit points for each of the two preconference workshops.

Pre-Conference Workshops:

The first Pre-Conference Workshop was 'Grant Writing for Research Projects' which was conducted on 17th March by - Dr. Sanjay Mehendale, Director Research P. D. Hinduja Hospital, Ex Director National Institute of Epidemiology Chennai, Dr. Ganesh Kumar and Dr. Rizwan, Scientist from ICMR-NIE Chennai. It was a full day CME covering various topics like Introduction to the Grant

Writing Grant cycle and Common Errors in Grant Writing, Writing the Methods section including statistical considerations, Gantt Chart, References, Biographical Sketch, preparing budget and funding agencies. etc. The total participants were 50.



The second Pre-Conference Workshop was 'Patenting in Health Care' which was conducted by - Mr. Nilesh Pawaskar and his team from WeGo Library foundation. It was also a full day CME covering various topics like Building Patent Ecosystem in India, how to prepare patents, its Do's and Don'ts, how to monetize patents and Intellectual Property Rights (IPR) and National Intellectual Property Awareness Mission (NIPM) The total number of participants were 90.

Inauguration

The inaugural function was graced by the following dignitaries by their presence-

- Chief Guest, Lt. Gen. (Retd.) Dr. Madhuri Kanitkar PVSM, AVSM, VSM, Vice -Chancellor, MUHS Nashik
- Guest of Honour, Dr. Subhash Salunke, Former DGHS Maharashtra, and Deputy Director, WHO SEARO and country Representative Indonesia



- Dr Harshal Tambe, Managing Trustee, SMBT Sevabhavi Trust
- Dr Meenal Mohgaonkar, Dean, SMBT IMS&RC, Nashik
- Dr Gajanan D Velhal, President, IPHA Maharashtra State Branch
- Dr Lalit Sankhe, President, IAPSM Maharashtra State Chapter
- Dr Prasad Waingankar, Secretary, IPHA Maharashtra State Branch
- Dr Purushottam Giri, Secretary, IAPSM Maharashtra State Chapter
- Dr Manasi Shekhar Padhyegurjar, Organizing Chairperson
- Dr Shekhar Padhyegurjar, Organizing Secretary
- Dr Shyam Ashtekar, Academic Coordinator



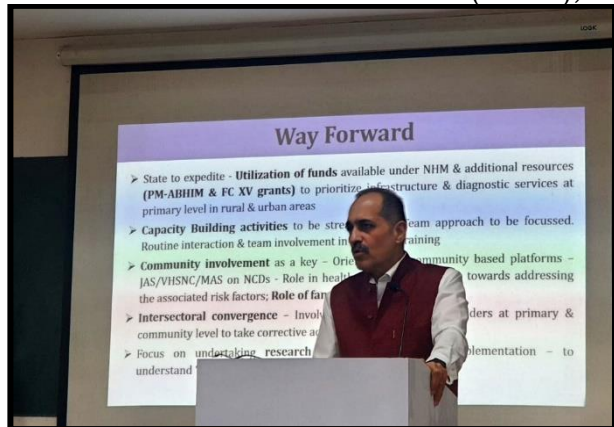
After lamp lighting, Souvenir of the conference was released by the dignitaries. This was followed by enlightening speeches by the Chief Guest, Guest of Honour and other dignitaries. All the dignitaries were welcomed with Mementos, floral bouquet and presented with Community Medicine UG Workbooks designed by Dr Shyam Ashtekar and faculty of Dept of CM SMBT IMS RC. Dr Vaishali Mali Nikam & Mrs. Durga Mahale were the masters of ceremony for this event. The inaugural programme concluded with National Anthem.



Dr. Rutuja Pundkar and Dr Sujata Muneshwar from PIMS Loni were the masters of ceremony for the Conference for the two-day event.

Key Note Address

Maj. Gen. (Prof.) Atul Kotwal, SM, VSM (Retd.) Director NHSRC, New Delhi was the keynote speaker for the event, where he lucidly explained the primary health care approach to control of NCDs, He highlighted several efforts of GOI for prevention and control of NCDs, Comprehensive Primary Health Care (CPHC),



Ayushman Bharat etc., mainly building a bridge between health care and medical colleges to work on HWCs. He gave a comprehensive Overview of Indian NCDs Scenario.

Padma Shri Dr. D. N. Pai Memorial Oration (IAPSM)

It was rendered by Air Vice Marshal Dr. Rajvir Bhalwar, Dean Dr. Balasaheb Vikhe Patil Rural Medical College, Loni on the topic- 'Metabolic Syndrome: The Indian Public Health Perspective.' He highlighted that in our country, various epidemiological studies undertaken across the country have consistently shown a high prevalence, which is likely to be as much as one-quarter of the adult population, with increasing age and female gender being at higher risk and therefore become a priority issue for both, the public health providers as well as for the clinicians in our country,



and needs concerted, all-round efforts for its prevention, early detection, management, and research. Against this background, the various public health measures for prevention and control of Metabolic Syndrome were suggested in this oration.

Padma Shri Dr. Suhaschandra V. Mapuskar Memorial Oration (IPHA)

It was rendered by Prof Dr. Sanjay Zodpey, President, Public Health Foundation of India, New Delhi on the topic- ‘Cross-sectoral Linkages and Transdisciplinary Approaches in Public Health.’ He highlighted the need for creating public health policies and planning actions that are aligned to realities require multi-sectoral actions.



Optimal public health strategies should be able to cut across conventional silos, such as disease or organ specific approaches, towards trans-disciplinary approaches that provide multiple levers for action. He reminded that Comprehensive responses to the challenges need multiple sectors such as health, agriculture, finance, social & developmental, legal, research, media to work in concert with each other and devise policies that synergistically address the multiple disease determinants.

Plenary Session-1 was delivered by Dr. Pramila Menon Consultant UNICEF & Associate Professor, Dept. of Pediatrics, D. Y. Patil Medical College Pune on the topic of Childhood Obesity: Problem, Diagnosis and Approaches. She highlighted the problem of childhood obesity particularly in school children, underlying reasons and risks, its assessment, interventions and possible solutions.

Plenary Session-2 was delivered by Dr Archana Patil, Former Director of Health Services, Mumbai Maharashtra on the topic NPCDCS progress in Maharashtra. She detailed the programme components in details with special reference to the conditions prevailing and the progress of the programme as a whole in the state of Maharashtra.



Plenary Session-3 was delivered by Dr Savita Shardul, State TB Office, Mumbai, Maharashtra on the topic ‘Updates in NTEP’. She described various changes that have come across in diagnosis and management of Tuberculosis in recent years.



Short Scientific Session-1 was delivered by Dr. Girish Tillu, Assistant Professor, School of Health Sciences, Savitribai Phule Pune



University on the topic NCDs and AYUSH where he highlighted the importance of AYUSH in NCDs. The potential role of AYUSH system of medicine in the management of various Non communicable Diseases were explained.

Short Scientific Session-2 was delivered by Dr. Shruti Atul Prabhu, Head, Public Health, Sri Sathya Sai Sanjeevani Hospital, Raipur, Chhattisgarh on the topic ‘Compassionate Healthcare: A Novel Model for Universal Health Coverage’. As an answer to the age-old challenge of ‘How do we improve Health Care delivery in rural areas?’ She presented her model of

Compassionate Health Care. She highlighted that how quality care can be provided with free-of-cost service to patients, hospital management in resource limited settings and contribution to 6 out of the 17 Sustainable Development Goals - in keeping with conference theme.



Day 1 Concluded with General Body Meetings of both IPHA and IAPSM Maharashtra State Chapters and a grand banquet dinner at Hotel Grand Rio, Lekha Nagar, Nashik.

Parallel Scientific Sessions for Oral and Poster Presentations were held both days.



Day 2 – 19th March 2023

Dr. P.S.N. Reddy Oration (IAPSM)

It was rendered by Dr. Balkrishna Adsul Dean, NIMS Medical College, and Research Centre Jaipur on the topic of ‘Comprehensive Management of Covid -19 Pandemic at BMC run Seven Hills Dedicated Covid Hospital, Mumbai.’ He highlighted the state of art of management



of covid 19 cases at the Seven Hills hospitals with proper planning, infrastructure despite many challenges.

Dr. D. K. Ramadwar Memorial Oration (IAPSM)

It was rendered by Dr. Arvind Gaikwad Associate Professor, Department of Community Medicine, Govt. Medical College, Chhatrapati Sambhajnagar about



the topic of ‘Journey of establishing the first State Cancer Institute in Maharashtra’. He highlighted the importance of growing burden of NCDs

specially cancers, steps taken by the Government in establishing the institute, Hospital Infrastructure and facilities, Population served, post-graduation seats, Up-gradation as State Cancer Institute and future plans.

Dr. Mrunalini Pathak Memorial Oration (IAPSM)

It was rendered by Dr. Sanjay Deshpande Professor & Head, Department of Community Medicine, Datta Meghe Medical College, Nagpur on the topic 'Role of Family and Parents in Sexuality Education'. He highlighted about Sexuality Education - Learning about the cognitive, emotional, social, interactive and physical aspect of sexuality and Economic, legal, political, religious or other cultural factors that decide individual choices regarding sexual and reproductive health.

Padma Bhushan Dr. Banoo Coyaji Memorial Oration (IPHA)

It was rendered by Dr. Bahubali Nagaonkar, Chief Medical Consultant, State Health Assurance Society, Maharashtra on the topic 'Mahatma Phule Jan Arogya Yojana (MPJAY): Important Issues'. He described in detail about the Integrated MJPJAY and AB-PMJAY – A PPP



model with ideal Characteristics which include Capacity building, Advocacy, Accreditation, Regulation, Demand Generation, Governance, Vigilance, Monitoring, Avoidance of Duplication, Support, Cost of Treatment, Incentives, Documentation, SOPs, Involvement, and its best practices.

Plenary Session-4 was originally planned with Dr Jagannath Dixit on role of 2 meals and exercise lifestyle but he could not come due to some unforeseeable reason. Therefore, the session was conducted by Dr. Shyam Ashtekar, Department of Community Medicine, SMBT IMS&RC, Nashik on the topic of 'Rollback Diabetes

with 2 OMEX Lifestyle'. He explained regarding 2 OMEX (2 only meals and exercise) lifestyle, which is based on the principle that "If insulin level in body increases it causes obesity, insulin resistance and type 2 diabetes. He shared various success stories of the above lifestyle. A recently published IJCM paper was discussed, describing role of the 2 OMEX lifestyle on HbA1c, weight loss and reduced medication as compared to conventional management.

Plenary Session-5 was delivered by Dr Sheetal Ghorpade, Rubiscape / Intellimet, Pune on the topic of 'Data Science in Health'. She highlighted the need for data science in every domain is clear, and platforms like Rubiscape are essential to enabling this. She described AI, ML (Machine learning), Deep Learning, Neural network concepts and how they can improve analysis and development in health.



With its end-to-end capabilities, support for both on-premises and cloud-based deployment, and proven track record of delivering effective and efficient solutions, Rubiscape is well positioned to help businesses harness the power of data science and stay ahead of the competition.

Short Scientific Session-3 was delivered by Dr. Shirish Patwardhan, MD, Consultant & Director, Sai Seva Wellness, Pune on the topic of 'Reducing Abdominal Girth for NCD control'. He highlighted the importance of managing waist sizes. Smart & Safe Abdominal Girth criteria was explained. He reminded that the concept of abdominal girth reduction is a unique blend of Science & Spirituality! To make it sustainable life long, understand the principle and develop your own technique. It is the thinking-software that has to change through silence and reflection. The concept has been tried & tested across the country since 2012. It has been experienced by doctors & non doctors with good results.

Paper & Poster Presentation Awards at Conference

Prize	Name of the Winner	Institutional Affiliation	Title of Paper
Dr Khergaonkar Prize (IAPSM/Urban Public Health)	Dr Keerthana C	Rajiv Gandhi Medical College, Thane	Assessment Of Awareness and Screening of Breast Cancer Among Women in Urban Area- A Cross-Sectional Study.
Dr M V Kulkarni Prize (IAPSM/Maternal and Child Health)	Dr Akhil R Nair	SMBT Institute of Medical Sciences and Research Centre, Nashik	Study To Assess the Compliance of Pregnant Females to Two Different Preparations of Oral Iron in The Management of Anaemia in Pregnancy in Selected Districts Of Madhya Pradesh.
Dr. Vijaya Bhalerao Prize (IAPSM/School Health)	Dr Priya Kulkarni	Symbiosis Medical College for Women, Pune.	Predictors of Low Emotional Intelligence among adolescents: A school based cross sectional study in Pune Municipal Corporation.
Dr. Saroj Jha Prize (IAPSM/Health Education/ Gender Issues)	Dr Diana Thomas	Centre for enquiry into health and allied themes (CEHAT)	Gendering Healthcare: Situational Analysis of Clinical Practices in Five Medical Colleges of Maharashtra
Dr. Sonaji Jogdand Prize (IAPSM/Occupational/ Environmental Health)	Dr. Ravindra Lilake	Seth GS Medical College & KEM Hospital, Parel Mumbai	Occupational Injuries and Associated Factors Among Building Construction Workers in Mumbai: A Cross-Sectional Study
Dr Sharangdhar Kanhere Prize (IAPSM/Community Based Intervention/ Use of Appropriate Technology)	Dr Shruti Atul Prabhu	Sri Sathya Sai Sanjeevani Hospital, Nava Raipur, Chhattisgarh.	Community Based Validation & Use of A Novel Tool for Screening Paediatric Heart Defects in A Tribal Setting
Best paper on Conference Theme (Organizer)	Dr Gibin George	Jawaharlal Nehru Medical College, KAHER, Belagavi.	Prevalence Of Osteoporosis and Osteopenia Among Inmates of a Destitute Centre in Belagavi, Karnataka
Best Poster Prize – 1 (IPHA)	Dr Lokhande Shital Rameshwar	Grant Government Medical College & Sir JJ group of Hospital, Mumbai	A Cross Sectional Study to Assess Socioeconomic Determinants of Self-Reported Multimorbidity Among Urban Population Aged 45 Years and Above in Metropolitan City
Best Poster Prize – 2 (IPHA)	Dr Anand Bhide	Dr. Balasaheb Vikhe Patil Rural Medical College, Loni	A Mixed Type of Cross-Sectional Study to Assess Loneliness, Coping Mechanisms and General Wellbeing and Their Correlation in Adolescent Orphans Residing in Orphanages of Western-Maharashtra
Best Poster on Conference theme (Organizer)	Dr Akhil R	Dr D Y Patil Medical College, Pimpri, Pune	Lifestyle Modifications and Blood Glucose Level- A Field Study on Urban Slum Population

Short Scientific Session-4 was delivered by Dr Subita Patil, Associate Professor and Physician, Department of Preventive Oncology, Tata Memorial Centre, Mumbai on 'A perspective on Onco-Public health and the role of Tata Memorial Hospital'. She explained in detail the perspectives and growing need of onco-public health approaches and the role of TMCH in such instances.

Panel discussion on Workbooks, Family visits and CBME was chaired by Dr Gajanan Velhal and Dr Prasad Waingankar



Participants were Dr Deepak Phalke, Dr Shyam Ashtekar, Dr Violet Pinto, where fruitful discussions on CBME basis curriculum, family visits and its importance in medical education along with the new pattern of workbooks were carried out with active involvement of the chairs. Also discussed was the concept of 'A Mind Map of Community Medicine Tree,' which is ideated by Dr Shyam Ashtekar and was appreciated by the audience. Session was attended by delegates in large numbers.



Valedictory function was rendered by the organizing chairperson Dr Manasi Shekhar Padhyegurjar. All the prize winners were felicitated at the hands of senior faculty and delegates. Dr Meenal Mohgaonkar, Dean SMBT IMS &RC thanked and appreciated IAPSM, IPHA, Organizing Committee and the dignitaries. MOCs Dr Rutuja Pundkar and Dr Sujata Muneshwar were felicitated by Dean. The vote of thanks for the conference was delivered by Dr Shekhar Padhyegurjar, where he thanked all those who strived hard to make this conference a grand success.



Moving Towards Zero Leprosy

Dr. Kalpalata A. Bhaisare¹, Dr. Gajanan Velhal², Dr. Narendra Madekar³

¹Associate Professor, ²Professor & Head, ³Professor,
Department of Community Medicine, BKL Walawalkar Rural Medical College, Sawarde, Chiplun, District - Ratnagiri

Leprosy (Kushtha) is one of the oldest diseases known to mankind [1]. Many people around the world continue to suffer from this curable disease due to lack of access to basic medical care and continued stigma surrounding the illness [2]. It is a chronic infectious disease caused by type of acid-fast bacteria, *Mycobacterium leprae*. The disease predominantly affects the skin and peripheral nerves, mucosa of the upper respiratory tract, and the eyes. If left untreated, the disease may cause progressive and permanent disabilities. Leprosy is curable and treatment in the early stages can prevent disability [3].

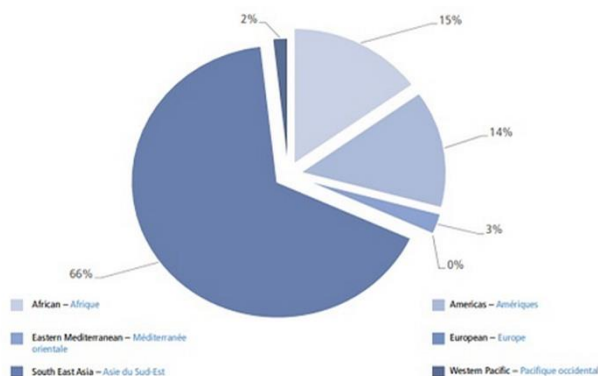
World Leprosy Day is observed on the last Sunday of January each year. The 70th World Leprosy Day, celebrated recently on 29th January 2023, with the theme "Act Now. End Leprosy". This year also is the 150th anniversary of discovery of *M. leprae*. *Mycobacterium leprae* was discovered by the Norwegian physician Gerhard Armauer Hansen on February 28, 1873 hence it is also called as Hansen's disease. [4] Before discovery of *M. leprae*, leprosy was considered as a divine punishment or a curse and a lot of stigma and discrimination was attached to this disease. WHO classifies leprosy among the group of 20+ Neglected Tropical Diseases. The SDG 3 includes commitment to end the epidemic of neglected tropical diseases, including leprosy. UN member states pledged 'leave no one behind' and 'endeavor to reach the furthest behind first' [5].

leprosy [4]. Prolonged, close contact over months with someone with untreated leprosy is needed to catch the disease [3]. The disease manifests itself in two polar forms, namely the lepromatous leprosy and tuberculoid leprosy, lying at the two ends of a long spectrum of the disease. Leprosy may manifest clinically as: hypopigmented patches, partial or total loss of cutaneous sensation in the affected areas (the earliest sensation to be affected is usually light touch), presence of thickened nerves, and presence of acid-fast bacilli in the skin or nasal smears. The signs of advanced disease are presence of nodules or lumps especially in the skin of the face and ears, plantar ulcers, loss of fingers or toes, nasal depression, foot-drop, claw toes and other deformities. The Multibacillary cases (lepromatous and borderline lepromatous cases) are the most important source of infection in the community [4].

The diagnosis of leprosy is done clinically. Laboratory-based services may be required in cases that are difficult to diagnose. The leprosy cases are classified into two types for treatment purposes: Paucibacillary (PB) case and Multibacillary (MB) case. The currently recommended treatment regimen consists of three drugs: dapsone, rifampicin and clofazimine. The combination is referred to as multi-drug therapy (MDT). The duration of treatment is six months for PB and 12 months for MB cases. MDT kills the pathogen and cures the patient. WHO has been providing MDT free of cost. Free MDT was initially funded by The Nippon Foundation and since 2000 it is being donated through an agreement with Novartis. [3]

The burden of Hansen's Disease: Leprosy is reported from all the six WHO Regions; the majority of annual new case detections are from South-East Asia. Around 200,000 people were diagnosed with leprosy each year before COVID-19, this number has fallen by 30% because of disruptions caused by the pandemic to leprosy programmes. During 2021, 140594 new cases were reported globally, for a case detection rate of 17.83 per million population. The rate of detection of new cases increased by 10.2% as compared with 2020 (128405). New cases accounted for 66.5% of cases in SEAR, followed by 15.1% in AFR and 14.1% AMR the

Figure 1 New case detection 2021, by WHO Region
Figure 1 Détection de nouveaux cas en 2021, par région OMS



It is common in communities where overcrowding & poverty coexists. The disease is transmitted through droplets from the nose and mouth [3]. The bacilli can also exit through ulcerated or broken skin of bacteriologically positive cases of

proportions of new cases in EMR and WPR were low, at 2.6% and 1.8%, respectively. Of the 143 countries that reported, 36 reported 0 new cases, 58 reported <100 new cases, 36 reported 101–1000 new cases, and 10 countries reported 1001–10 000 new cases. Brazil, India and Indonesia continued to report more than 10 000 new cases each [6].

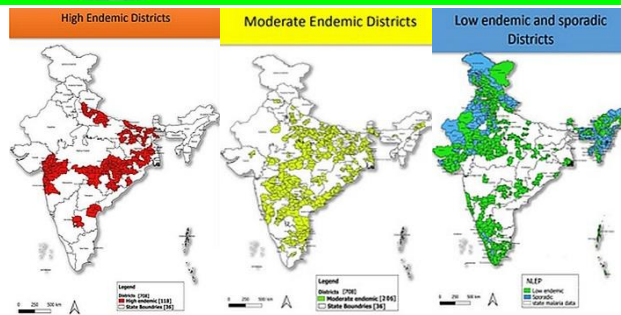
New cases in children indicate recent transmission, and 9052 new child cases were reported globally, with a corresponding rate of 4.5 per million child population. Of these, 62.6% were in SEAR (10.9 per million child population). The 23 global priority countries for leprosy are Angola, Brazil, Comoros, Côte d'Ivoire, Democratic Republic of the Congo, Egypt, Ethiopia, India, Indonesia, Kiribati, Madagascar, Micronesia, Mozambique, Myanmar, Nepal, Nigeria, Philippines, Somalia, South Sudan, Sri Lanka, Sudan, United Republic of Tanzania. New cases of leprosy have shown a decreasing trend in India; 133717 in 2011 to 75394 in 2021 but still cases are highest in India followed by Brazil (18318) and Indonesia (10976).

New leprosy cases with G2D in 23 global priority countries, India has highest case detected with G2D (1863) followed by Brazil (1737). Leprosy reactions were reported by 40 countries, and 11 967 patients were treated for type-1 reaction and 4594 for type-2 reaction. Adverse drug reactions to rifampicin were reported in 4 patients, and 51 countries reported that 3201 patients had relapsed after completion of MDT, with the most in Brazil (1212), followed by India (510). Since the introduction of multidrug therapy (MDT), the registered prevalence has decreased substantially, from more than 5 million cases in the 1980s to 133802 cases in 2021[6].

Current situation of Leprosy India:

Despite advances in all spheres of medical science, leprosy continues to be a public health challenge in countries like India [1]. National Leprosy Control Programme (NLCP) was launched by the Govt. of India in 1954- 55. Multi Drug Therapy (MDT) came into wide use from 1982, and the National Leprosy Eradication Programme was introduced in 1983.

The strategy of NLEP was based on controlling the disease through reduction in the quantum of infection in the population and reduction in infective source, thus breaking the chain of disease transmission. India achieved the goal set by the National Health Policy, 2002 of elimination of leprosy as a public health



problem, defined as less than 1 case per 10,000 population, at the National level in December 2005, with World Bank assistance [7].

Despite the above successes, the fact remains that India continues to account for 60% of new cases reported globally each year and is among the 23 “global priority countries”. In India, the National Leprosy Eradication Programme (NLEP) is the centrally sponsored health scheme of the Ministry of Health and Family Welfare [1].

Objectives of NLEP are as follows:

- To reduce Prevalence rate less than 1/10,000 population at sub national and district level.
- To reduce Grade II disability % < 1 among new cases at National level
- To reduce Grade II disability cases < 1 case per million population at National level.
- Zero disabilities among new Child cases.
- Zero stigma and discrimination against persons affected by leprosy.

In the year 2017, ASHA Based Surveillance for Leprosy Suspects (ABSULS), Sparsh Leprosy Awareness Campaigns & Introduction of NIKUSTH - A real time leprosy reporting software across India was done. In 2019, External Evaluation of NLEP was done by World Health Organization, Convergence of leprosy screening component with Comprehensive Primary Health Care programme of Ayushman Bharat, to screen 30+ years population at HWCs & with Rashtriya Bal Swasthya Karyakram (RBSK) to screen children (0-18 years) at Anganwadi Centers and Govt. schools was done. In year 2020, leprosy screening component of NLEP converged with Rashtriya Kishore Swasthya Karyakram (RKSK) to screen teen age group (13-19 yrs.) at Adolescent Friendly Clinics [7].

Challenges to zero leprosy:

Disease mainly affects people in resource-limited countries, especially those who live in crowded conditions. Due to the continued stigma against people with

Hansen's disease, they may not seek help when first symptoms appear, causing delay in diagnosis and development of disabilities. People living with leprosy-related disabilities in many countries are shunned, denied basic human rights, Girls and women affected by Hansen's disease face the added issue of gender and social discrimination, which may also delay detection of the disease. [2]

The Global Leprosy Strategy 2021–2030 was developed as constituent of the Neglected Tropical Disease road map 2021–2030. The Strategy calls for a vision of zero leprosy: zero infection and disease, zero disability, zero stigma and discrimination and the elimination of leprosy (defined as interruption of transmission) as its goal. & it has four major pillars:

- (i) implement integrated, country-owned zero leprosy road maps in all endemic countries;
- (ii) scale up leprosy prevention alongside integrated active case detection;
- (iii) manage leprosy and its complications and prevent new disability; and
- (iv) combat stigma and ensure human rights are respected. Interruption of transmission and elimination of disease are at the core of the Strategy.

Strategy calls for accelerating action to reach the goal of zero leprosy, in line with the Sustainable Development Goals.

The global child case detection rate in 2021 was 4.5; the target is to reduce the rate to 0.8 per million children by 2030. Analysis of new case detection rates showed that 14 countries have reported 0 child cases for the past 5 consecutive years and can be considered for verification of interruption of transmission. For the prevention of leprosy, with the consent of the index case, WHO recommends tracing household contacts along with neighborhood and social contacts of each patient, accompanied by administration of a single dose of rifampicin as preventive chemotherapy.

Interruption of transmission in a country or a subnational area is defined as no local transmission of *M. leprae*, evidenced by zero new autochthonous cases among children ≤15 years for at least 5 consecutive years. Elimination of leprosy is achieved when a country or a subnational area reports zero new autochthonous leprosy cases for at least 3 consecutive years after interruption of transmission. After elimination has been verified by WHO, the country begins post elimination surveillance for ≥10 years. Registered prevalence is a useful proxy indicator of the disease burden as it reflects the number of active leprosy cases

diagnosed with the disease and receiving treatment with MDT at a given point in time. The prevalence rate is defined as the number of cases registered for MDT treatment among the population in which the cases have occurred, again at a given point in time. Screening of contacts and chemoprophylaxis with single-dose rifampicin were recommended as a crucial step to break the chain of transmission

Strategies which will help us to reach a goal of zero leprosy are active Case Detection & Regular Surveillance both in rural and urban areas, Household contact survey for early detection of cases, Convergence of leprosy screening under RBSK, RKSK and under Ayushman Bharat – CPHC, Timely referral and complete treatment, Post treatment surveillance, Disability prevention and Medical Rehabilitation, Community awareness, Stigma reduction by IEC. Contact tracing is done and Post Exposure Prophylaxis (PEP) is given with administration of a single dose of rifampicin as preventive chemotherapy. Reaction management, provision of Microcellular Rubber (MCR) footwear, Aids & Appliances, self-care kits etc. done under disability prevention & medical rehabilitation. [8]

Together we can reach the goal of zero leprosy.

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HEPATITIS: A Silent Disease.....Roadmap for 2030

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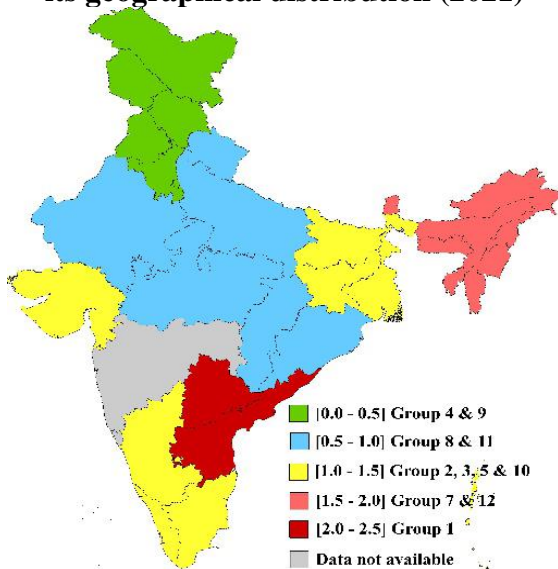
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BURDEN OF CHRONIC HEPATITIS

Hepatitis is an inflammation of the liver that is caused by a variety of infectious viruses like A, B, C, D and E and noninfectious agents causing variety of health problems, some of which can be fatal. All viruses cause liver disease but they differ in modes of transmission, severity of the illness, geographical distribution and prevention methods. Viral hepatitis is responsible for an estimated 1.34 million fatalities annually, a number that is comparable to the deaths caused by HIV/AIDS, TB, and malaria. For India also, viral hepatitis is a cause for major health care burden and is now equated as a threat comparable to the “big three” communicable diseases – HIV/AIDS, malaria and tuberculosis.

Among all viruses, types B and C lead to chronic disease in millions of people and together are the most common cause of liver cirrhosis, liver cancer and viral hepatitis-related deaths. Among all deaths attributed to viral hepatitis, 96% were due to HBV (48%) and HCV (47%) alone.

Fig 1: Seroprevalence of Hepatitis B and its geographical distribution (2021)

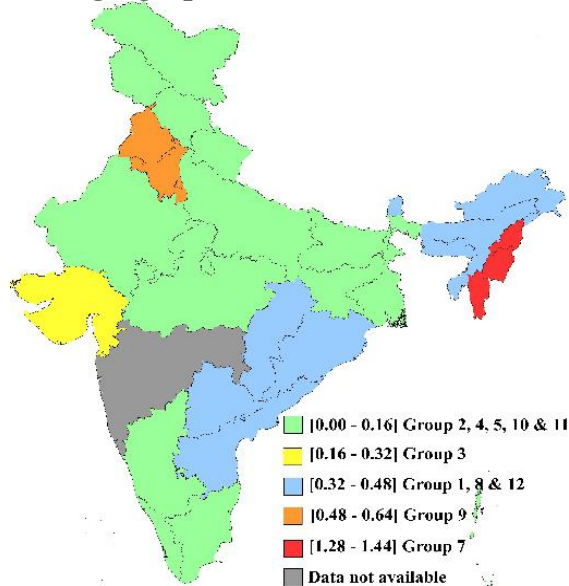


Globally, there are more than 2 billion people with HBV infection & 240 million are chronic carrier of virus. HBV alone causes around 7,00,000 deaths per year. While HCV infects around 3-4 million people per year. It also causes around 7,00,000 deaths per year. (1,2,3) Based on

the prevalence of Hepatitis B surface antigen, different areas of the world are classified as high ($\geq 8\%$), intermediate (2-7%) or low HBV endemicity.

India falls under the category of intermediate endemicity zone (average of 4%). In India, Hepatitis B infection in the general population ranges from 1.1% to 12.2% and for Hepatitis C it ranges from 0.09-15%. The average prevalence of hepatitis B is 3-4%. According to some regional research, in India, approximately

Fig 2: Seroprevalence of Hepatitis C and its geographical distribution (2021)



40 million people are chronically infected with Hepatitis B and 6-12 million people with Hepatitis C. Chronic HBV infection accounts for 40% of Hepato-cellular Carcinoma (HCC) and 20-30% cases of cirrhosis in India. Chronic HCV infection accounts for 12-32% of HCC and 12-20% of cirrhosis. The top 10 states with the highest burden of hepatitis B and C are states in East and South India. (4, 5)

A ROAD MAP FOR 2030 by WHO

Despite of the such a high and comparable burden of the viral hepatitis, policies to lessen the effects have lagged behind as compared to other main communicable illnesses. The Sustainable Development Goals committed to eradicating viral hepatitis by 2030 along with other epidemics of HIV/AIDS,

tuberculosis, malaria, and other neglected tropical diseases. In May 2016, World Health Assembly adopted the first 'Global Health Sector Strategy on viral hepatitis (GHSS)'. The strategy highlights the critical role of Universal Health Coverage. The GHSS established a target of a 90% reduction in new infections of HBV and HCV and a 65% decrease in viral hepatitis-related mortality by 2030 compared to 2015 baseline to eradicate viral hepatitis. The strategy mainly focuses on HBV & HCV and proposes to increase the coverage of prevention and to scale up testing and treatment. (1,2,6)

The key interventions of GHSS are:

Prevention Interventions	1. Three-dose hepatitis B vaccine for infants
	2. Prevention of HBV mother-to-child transmission using hepatitis B birth dose or other approaches.
	3. Blood safety and injection safety, including use of engineered devices.
	4. Harm reduction for persons who use drugs.
Treatment Interventions	5. Diagnosis of HBV and HCV
	6. Treatment of HBV and HCV

Vaccination and prevention of HBV mother-to-child transmission

Due to non-availability any specific treatment, prevention is the important measure to reduce the burden of Hepatitis B. In 2015, the global coverage of 3rd dose infant HBV vaccination was 82%, which is close to the target of 90% HBV vaccine coverage by 2030. According to the latest data, 87% of infants had received the three doses of HBV vaccination in the first year of their life (6). The completed schedule of vaccine induces protective antibody levels in more than 95% of infants, children & young adults. The duration of protection is lifelong. But, there are many countries in the European Union who have not included the HBV vaccination into their routine immunization schedule. There is a dire need to speed up HBV vaccination and reach every child for vaccination, to save the future generations from HBV. (7,8)

Mother to child transmission of HBV is an important factor for its high prevalence in China and SE Asia. This can

be best prevented by the timely administration of HBV birth dose vaccine (within 24 h of birth). In 2015, only 38% of children received the birth dose of HBV vaccine within 24 hours while the target is to administer the timely HBV vaccine to 90% of children. According to the latest data, only 46% of infants were administered the birth dose of HBV vaccine in a timely manner. (1, 4)

In adults, routine pre-exposure vaccination should be considered for high-risk group people. The usual dose schedule is 0-1-6 months. The high-risk persons for whom the vaccination is recommended are persons with high-risk sexual behaviour, partners and household contacts of HBsAg-positive persons, injecting drug users, person who frequently require blood or blood products, recipients of solid organ transplantation, those at occupational risk of HBV infection, including health care workers as well as for international travellers to HBV endemic countries. (2)

Blood safety and injection safety (WHO)

Infection prevention by improving blood safety & instituting universal safe injection practices are core intervention in CHSS. In 2015, 39 countries were not routinely screening all blood donations for transfusion transmitted infections and around 89% of donated blood underwent a quality control check. WHO recommended that 100% of donated blood should be screened for HBV, HCV, HIV & syphilis. There is a strong need to improve injection safety and also reduce the use of unnecessary injections, especially in the low and middle-income countries (LMICs). (6) If one sustains a needle stick and the source (patient) is an infected one, the risk of transmission of HIV, HBV and HCV per exposure is 0.3%, 37-62% and 1.8% per exposure respectively. Health personnel should be alerted to the importance of adequate sterilization of all instruments and to the practice of simple hygienic measures. (9)

Harm reduction for persons who use drugs

WHO & World Bank estimates that globally there are more than 11 million people who inject drugs (PWID) - 1.4 million PWID are living with HIV, 5.5 million with Hepatitis C and 1.2 million with both HIV & HCV. Further an estimated 23-39% of new HCV infections occur among people who currently inject drugs. Harm reduction refers to policies, programmes and practices that aims to minimize the negative health, social and legal impacts associated with drug use, drug policies and

drug laws. Harm reduction does not promote or encourage drug use but helps people make healthier choices for themselves. Harm reduction recognizes that there will always be some people who will use drugs, and some people who may be unwilling or unable to stop using drugs. Some of the harm reduction policies include provision of drug consumption rooms (also called overdose prevention centres or supervised consumption sites) where drugs can be consumed under supervision, needle & syringes distribution & Opioid Substitution Therapy (OST) program, housing and employment initiatives, psychosocial support and the provision of information on safer drug use. But globally, its coverage is very low & a lot of financial effort is needed to reach the 2030 target of harm reduction. (1)

Diagnosis and treatment of HBV and HCV

Worldwide, only 11% of HBV and HCV cases are diagnosed which is just a tip of iceberg. The target in GHSS is to diagnose 90% of HBV and HCV positive cases by 2030. (6) Observing the miserable condition of hepatitis diagnosis, World Hepatitis Alliance has started an initiative named “Find the Missing Millions”, in 2018 to find the millions of undiagnosed people living with viral hepatitis. Find the Missing Millions – is a three-year global awareness-raising and advocacy campaign aimed at tackling the main barriers to diagnosis by putting civil society organizations and the affected community at the heart of the solution. Main barriers to diagnosis are lack of public knowledge of the disease, lack of knowledge of the disease amongst healthcare professionals, lack of easily accessible testing, stigma and discrimination & the out-of-pocket costs to the patient. (10)

WHO recommend use of existing facility services (antenatal clinics, refugee or migrant clinics, HIV & TB clinics, NCD clinics) and community-based testing and screening programs. Focused testing approach should be adopted in population with high seroprevalence, history of exposure, high risk behaviour (PWID, prisoners, MSM, Sex workers, PLWHA, family members, all pregnant & health workers. (1)

Presently, only few number of hepatitis B and C patients are receiving treatment. According to Global Hepatitis Report 2017, 1.7 million HBV and 1.1 million HCV patients were on treatment in the year 2015 while in 2016, 1.76 million additional HCV patients received treatment and the cumulative 2015-2016 HCV

treatment number reached 3 million. WHO has recommended the use of antiviral drugs- tenofovir & entecavir in HBV infections. Hepatitis C treatment is based on therapy with interferons, ribavirin & recently developed direct-antiviral agents (DAA). But these medicines are very expensive in many high-and middle-income countries. Many countries reduced the price, but the drug pricing is still a problem in many developing countries.

In 2015, WHO, for the first time, launched ‘Guideline for the prevention, care & treatment of persons living with chronic hepatitis B infection’. The recommendations are-

1. Promote the use of simple, non-invasive diagnostic tests to assess the stage of liver disease and eligibility for treatment
2. Prioritize treatment for those with most advanced liver disease
3. Recommend the preferred use of the nucleotide analogues with a high barrier to drug resistance. (2,6)

Table 1: Service coverage indicators for the core interventions of GHSS (1)

Interventions	Indicator	2015 baseline	Targets	
			2020	2030
1 Hepatitis B vaccination	HEPB3 coverage	84%	90%	90%
2 HBV PMTCT*	HEP vaccine birth dose coverage	39%	50%	90%
3 Blood safety	Donations screened with quality assurance	89%	95%	100%
	Proportion of unsafe injections	5%	0%	0%
4 Harm reduction	Syringes & needles distributed/PWID/year	27	200	300
5 Testing services	% HBV-infected diagnosed	9%	30%	90%
	% HCV-infected diagnosed	20%	30%	90%
6 Treatment	% diagnosed with HBV on treatment	8% ^a	- ^b	80% ^c
	% diagnosed with HCV started on treatment	7% ^a	- ^b	80% ^c

WHO'S ELIMINATION STRATEGY

WHO defines elimination of Hepatitis as: ‘30% reduction in new cases of chronic viral hepatitis B and C infections by 2020, 90% reduction by 2030 and 10% reduction in viral hepatitis B and C deaths by 2020, 65% reduction by 2030; as compared to 2015 as baseline’. WHO has developed the interim guidance for countries and other stakeholders seeking validation of elimination of viral hepatitis as a public health problem, with a specific focus on HBV and hepatitis HCV during a joint symposium “Viral Hepatitis Elimination – Assessing the progress in 2021” at the EASL International Liver Congress 2021. Under this, countries should pursue elimination of both viral hepatitis B and C together and they may choose to apply separately for one of four certification options:

Option A: Elimination of mother-to-child transmission (EMTCT) of HBV (as part of triple elimination of HIV, syphilis and HBV, or HIV/HBV).

- Option B: HCV as a public health problem
- Option C: HBV as a public health problem (including HBV EMTCT)
- Option D: Elimination of both HBV and HCV together as a public health problem.

The main impact indicators and targets for measuring elimination are:

1. $\leq 0.1\%$ HBsAg prevalence in aged 5 years or less
2. An absolute annual HCV incidence of ≤ 5 per 100000 persons and of ≤ 2 per 100 people who inject drugs (PWID)
3. An HBV and HCV-related annual mortality rate of ≤ 4 and ≤ 2 per 100000 persons, respectively (combined HBV/HCV ≤ 6 per 100 000 persons). (10,11,12)

NATIONAL VIRAL HEPATITIS CONTROL PROGRAM IN INDIA (NVHCP)

India is committed to eliminate viral hepatitis B and C and control other virus induced hepatitis. On the occasion of World Hepatitis Day on 28th July 2018, the Ministry of Health and Family Welfare, Government of India launched the NVHCP with the aim of;

1. To combat and eliminate Hepatitis B and C by 2030
2. Significantly reduce infection, morbidity and mortality associated with Hepatitis B and C
3. Reduce the risk, morbidity and mortality due to Hepatitis A and E.

The program was launched along with the release of its operational guidelines, national laboratory guidelines for viral hepatitis testing, and national guidelines for the diagnosis and management of viral hepatitis.

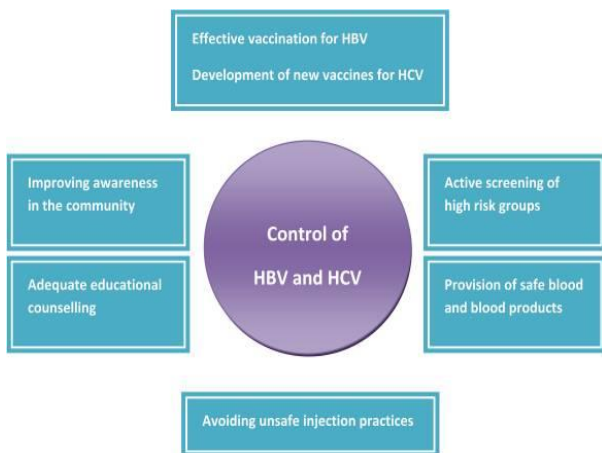


Fig 3: Key Components of NVHCP

The program has also “Viral Hepatitis Information and Management System”, in order to maintain a registry of persons affected with viral hepatitis and its sequelae. On 24th February 2019, MOHFW

released Technical Guidelines for Diagnosis and Management of Hepatitis B and National Action Plan-Combating Viral Hepatitis. A national helpline number for viral hepatitis (1800-11-6666) was also launched. India has succeeded in enrolling 50,000 patients in treatment since the NVHCP was introduced. The program adopted an integrated approach and collaborated with other programs and schemes to provide a promotive, preventive, and curative package of services for individuals suffering from viral hepatitis. Under the ‘Training of Trainers’ initiative of the program, 800 experts were trained on diagnosis and management of viral hepatitis and NVHCP-MIS. (2,3,5)

CHALLENGES and RECOMMENDATIONS

1. Since the program is using preexisting healthcare infrastructure, there is a dire need to strengthen the health care systems in different LMICs. The designated treatment center should be provided with rapid diagnostic kits for screening, machinery required for lab investigation, drugs, and a well-developed Health Management Information System (HMIS) portal.
2. The major obstacle to eliminate hepatitis by 2030 is lack of financial resources. There is also a strong need to provide funds to The Global Alliance for Vaccines and immunization to support the HBV birth dose vaccination scheme.
3. Hepatitis elimination needs strong financial and political commitment, support from civil societies, and support from pharmaceutical and medical companies around the globe.
4. To enhance service delivery, new telemedicine, interactive tele-education, and surveillance tracking methods for hepatitis are also required.
5. The path for 2030 and beyond will undoubtedly be implementation research, so the following decade should concentrate on those important research fields that were previously mentioned.
6. Linking research, clinical practice, and health policy will be crucial for accelerating the development and delivery of strategies identified for viral hepatitis elimination, with the assistance of national hepatitis programs and ministries of health.

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Padvyuttar (PG) Sanshodhan Prakalp Anudan - 2023

The post graduate students of Community Medicine/ Public Health have to learn the research methodology and conduct the research activity and submit dissertation/ thesis to obtain postgraduate degree. Many students develop interest in research during the process and wish to conduct more research studies during their post graduate period. One of the obstacles in conducting good quality research, especially for a student, is lack of funding. As a response to this need, Indian Public Health Association, Maharashtra Branch had started a scheme in 2021, 'Padvyuttar Sanshodhan Prakalp Anudan', offering financial support to deserving research proposals from post-graduate students of Public Health / Community Medicine from Medical Colleges located in Maharashtra State. This will help in the long run, in development of good Public Health researchers.

Eligibility

1. Applicant should be a post graduate student of Community Medicine OR Masters in Public Health OR Community Nursing OR Community Dentistry
2. Either the applicant or Guide of the applicant should be member of Indian Public Health Association.
3. Research study proposed should be community based original research and should be distinctly different from student's dissertation topic.

Guidelines for submission of research proposal

- Topic of research project should contribute to Public Health knowledge base. The student should be the Principal Investigator and Guide should be Co-Investigator. ONE teacher can guide only ONE student and ONE student can submit only ONE research proposal. Only the students from Colleges of Maharashtra can apply.
- The project proposal should be submitted through IPHA Maharashtra website only, on or before **31st May 2023**. The proposal will be scrutinized by panel of experts and the acceptance of proposal will be communicated by end of June 2023.
- The FIVE best projects will be awarded funding of Rs. 15,000/- each.
- Selected Student should complete project and submit the report before 31st March 24.
- For Details Visit: www.iphamaha.org
- Email wprasad67@gmail.com for any query

Research Study Abstracts of Winners of IPHA Maharashtra Branch Scheme Padavidhar Sanshodhan Prakalp Anudan for M.B., B.S. Students from Medical Colleges of Maharashtra

2021: Paras Ravindra Waghmare* – Government Medical College, Nagpur
Cognitive dysfunction in type 2 Diabetes Mellitus among hospitalized patients, Central India - A cross sectional study

Background: Cognitive dysfunction is an emerging public health problem in the type 2 Diabetes patients. It results in numerous hurdles in day-to-day life activities. In spite of all so many ill effects on the health of individual, cognitive dysfunction (NCD) is not considered a well-known complication. Objectives of the study were - 1. To study the cognitive dysfunction in hospitalized type 2 Diabetics and 2. To assess the influence of possible factors for it. **Methods:** Cross sectional study was conducted over a period of 4 months in the hospitalized diabetes patients at the hospital attached to a medical college. Data collection was carried out by face-to-face interviews with help of pre-designed and pre-structured proforma which also included the MMSE scale to assess cognitive dysfunction. Statistical analysis was done using open epi. **Results:** Out of the 119 study participants, 65(54.62%) were male and 54(45.37%) were female patients. Mean age of patients who participated in the survey was 60.85 years (SD \pm 9.44). It was found that 8.4% of participants have severe cognitive impairment, 52.94% have mild cognitive impairment. The influence of gender, age and duration of diabetes on cognitive dysfunction was found not significant on using chi square test. **Conclusion:** Cognitive dysfunction though of a mild nature is a common occurrence in hospitalized patients of type 2 diabetes mellitus. Though the influence of various factors studied was not proven statistically significant, regular check on cognitive impairment is desirable in type 2 diabetes mellitus patients so that it can be detected at an earlier stage.

* Guide: [Dr. Ujwala Ukey](#), Associate Professor, Community Medicine, Government Medical College, Nagpur

2021: Swathi Pillai* – K J Somaiya Medical College and Research Centre, Mumbai
Assessment of India's Maternity Benefit Schemes

Background: With launch of programs like Janani Suraksha Yojana (JSY), Janani Shishu Suraksha Karyakram (JSSK) and Pradhan Mantri Matritva Vandana Yojana (PMMVY) under the National Rural Health Mission, India has seen a major increase in institutional deliveries. This study aims to understand the uptake of the said schemes in the setup of an urban slum in Mumbai. Further, it intends to highlight the factors affecting the receipt and document the challenges faced. **Methods:** A community based cross sectional study was undertaken in urban slums of Vidyavihar East, Mumbai. A consecutive sampling of 78 women having children less than 3 years were interviewed. Data was collected by pre-structured questionnaire following which descriptive analysis was done using Microsoft Excel. **Results:** The 65.38% of women were aware about the schemes. However, the benefit of schemes was availed by only 15.38% women owing to lack of quality care, cumbersome and extensive administrative work and delay in releasing money for the scheme from the government. **Conclusion:** Maternity benefit programs like JSY, JSSK and PMMVY led to a high rate of institutional delivery, but the monetary incentive was not availed by most of the beneficiaries. It is therefore important to tackle these hurdles so that beneficiaries get cash benefit on time. This will enable further uptake of the scheme by mothers.

* Guide: [Dr. Padmavathi Dyavarishetty](#), Professor & Head, Community Medicine, K. J. Somaiya Medical College

2021: Ishita Lanjewar* – Seth G S Medical College & KEM Hospital, Mumbai
Is there a 'Peltzman effect' after getting vaccinated with COVID-19 vaccine?

Background: COVID-19 vaccine introduction had globally led to drastic decrease in adherence to preventive safety measures which resulted in increased COVID cases post-vaccination. The aim of the present study was to assess the practice of COVID Appropriate Behaviour post-vaccination and to assess Peltzman effect. **Methods:** A descriptive cross-sectional study was conducted in the COVID vaccination center of tertiary care institute from April - July 22 on randomly selected 400 study participants from vaccination records. Telephonic interviews were conducted. Data were analyzed by using SPSS Version 21. **Results:** The mean age was 35 \pm 13 years with proportion of male & female being 57.3% and 42.8% respectively. The 98% were not following all Covid appropriate behaviour (CAB). The 82.8% were not following the three most important CAB viz. maintaining physical distance while meeting people, wearing mask at all times in public and workplace and washing hands thoroughly with soap or sanitizer. Amongst those who had incorrect knowledge of COVID vaccine immunity regarding immediate immunity in them, 86% were not following 3 most important CAB versus those who had correct knowledge of COVID vaccine immunity, in them only 65.5% were not following the 3 most important CAB. This difference was found statistically significant. There was statistically significant difference in perceived safety before and after Covid 19 vaccine. Association of gender, whether working or not, presence of chronic morbidities, health care or frontline worker were not found statistically significant with practice of 3 most important CAB. There was positive correlation between each CAB with perceived probability of getting COVID-19 & self-efficacy. **Conclusion:** Those who felt having perceived benefits after getting Covid 19 vaccine were found to be not following Covid appropriate behavior. Thus, Peltzman effect was seen after getting COVID vaccine.

* Guide: [Dr Rupali Sabale](#), Assistant Professor, Community Medicine, Seth GS Medical College & KEM Hospital, Mumbai

Research Study Abstracts of Winners of IPHA Maharashtra Branch Scheme Padavidhar Sanshodhan Prakaalp Anudan for M.B., B.S. Students from Medical Colleges of Maharashtra

2022: Manali Sarkar* -MGM Medical College, Navi Mumbai
Magnitude and Determinants of Low-Birth-Weight Babies in an Urban Tertiary Care Level Hospital, Raigad District.

Background: The birth weight of a baby measured within 1 hour of birth is critical to gauge the future health of the baby through infancy, childhood and adulthood. There have been multiple factors which have been implicated to cause Low birth weight (LBW). Most of them are preventable and can be ameliorated through Government programmes. Hence this study proposes to bring forth the magnitude as well as the causes of LBW.

Methods: Over a period of two months (August and September 2022), a Descriptive hospital-based cross-sectional study was carried out. Data was collected using a predesigned, pretested, semi-structured questionnaire through a personal interview and was tabulated in Microsoft Excel and analyzed using OpenEpi.

Results: Magnitude of LBW babies was found to be 22.17%. Socio-economic status, maternal anaemia, short stature, pre-pregnancy BMI of the mother, and non-consumption of egg (protein) was found to be significant determinants of LBW babies. LBW babies were also found to be at risk of ICU stays than their normal weight counterparts. **Conclusion:** The causes of LBW are multifactorial in nature and are mostly preventable through awareness among the mothers and their family.

* Guide: Dr. Sunila Sanjeev Ernam, Associate Professor, Community Medicine, MGM Medical College, Navi Mumbai.

2022: Jaiprakash Gurav* - Armed Forces Medical College, Pune
Impact of Health Education on the Knowledge and Attitude about Prevention of Cancer Cervix and HPV Vaccine among Mothers of Adolescent girls: An Interventional Study

Background: Most cases of cervical cancer are due to human papillomavirus (HPV) infection, a virus transmitted through sexual contact. It is preventable by HPV vaccination in adolescents and screening in sexually active women. Increasing awareness about preventive measures is a key step. **Methods:** An interventional study was conducted amongst mothers of adolescent school girls in an urban school in Western Maharashtra. Total 342 mothers of girls from classes 6 to 10 were selected for participating. The knowledge and attitude about cervical cancer and its preventive measures were assessed pre and post-intervention. The intervention was in the form of health education through health talks, educational videos and reading material. **Results:** The participants' mean age was 41.11 years (SD±8.02). The knowledge about risk factors and preventive measures for cervical cancer improved significantly post-intervention. Only 33.04% of respondents had heard about cervical cancer prior to intervention, followed by 10.23% who had heard of HPV vaccine, 6.14% had heard of Pap smear test, and just 3.80% of the study population knew age range for HPV vaccination. Following intervention, 96.70% of females were aware of age range for vaccination, 97.36% now have knowledge of Pap smear test, and 92.69% had heard of the HPV vaccine, 78.3% said they wanted to know more about Cervical cancer and its preventive measures in pre-intervention phase and 95.7% said they have learned more about Cervical cancer from health education post-intervention. **Conclusion:** The awareness level about this disease and its preventive measures is low among adolescent girls and sexually active women in our country even though a safe and effective vaccine is available for the prevention of cervical cancer. This study was a step towards increasing the awareness about it.

* Guide: Dr. (Col) Swati Bajaj, Professor, Community Medicine, Armed Forces Medical College, Pune.

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