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Monkey Pox: Need to focus on

Dr. Smita Chavhan¹, Dr. Harshal Pandve²

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Introduction

Monkeypox, commonly known as mpox, is an infectious disease that can cause painful rash, fever, swollen lymph nodes, headaches, back pain, and low energy. It is caused by the monkeypox virus (MPXV), which belongs to the Orthopoxvirus genus in the Poxviridae family. It is an encased double-stranded DNA virus. The virus has 2 distinct clades: Clade I, which includes subclades Ia and Ib, and clade II, which includes subclades IIa and IIb.

History

In 1958, two outbreaks of a disease resembling the pox in colonies of laboratory monkeys led to its first identification in Denmark and gave rise to the term "monkeypox." In 1970, reports of human cases were initially made in the Democratic Republic of the Congo (DRC). Clade IIb started a global outbreak in 2022 and is still ongoing in certain African nations. Clades Ia and Ib outbreaks are also becoming more widespread, impacting the Democratic Republic of the Congo as well as other African nations. Clade Ib has also been identified outside of Africa as of August 2024.

Epidemiology

In the past, outbreaks of mpox have mostly been documented in rural regions of Central and West Africa. However, the 2022 outbreak, which witnessed widespread transmission in non-endemic regions in Australia, Asia, the Americas, and Europe. Although the virus's natural reservoir is unknown, it can infect a variety of small mammals, including monkeys, squirrels, and other rodents.

All ages are susceptible to mpox, however small children and those with impaired immune systems are more vulnerable to serious illness. The 2022 outbreak was noteworthy because it mainly affected men who have sex with men (MSM), stressing the role of intimate contact in the transmission process.

The primary source of mpox infection in humans is contact with infected animals, including direct contact with their blood, bodily fluids, or lesions from bites or scratches, or during activities such as hunting, skinning, trapping, cooking, playing with carcasses or eating animals.

Human-to-Human Transmission by close physical contact (including skin-to-skin contact), with the lesions, respiratory droplets, or body fluids of an infected individual. The placenta may also be a route of transmission (congenital mpox). The

virus can also spread by coming into touch with tainted surfaces, clothing, and bedding.

Signs and symptoms of mpox often appear one week after exposure. A prodrome of fever, headache, muscle aches, and exhaustion typically marks the start of the illness. The emergence of a characteristic rash that goes through multiple stages. Distinguishing feature is lymphadenopathy. Clinical appearance of mpox alongwith laboratory confirmation by DNA polymerase chain reaction (PCR), antigen detection techniques and serology can also be used for diagnosis. Differentiating mpox from other sexually transmitted illnesses, scabies, herpes, measles, bacterial skin infections, chickenpox, and medication-associated allergies is crucial. Individuals with mpox should also be provided HIV testing. Diagnostic testing for additional illnesses such the varicella zoster virus (VZV), syphilis, and herpes should be taken into consideration.

Supportive care is crucial along with treating and preventing subsequent bacterial infections, adequate hydration and nutrition.

Although the majority of cases clear up without the need for medical intervention. Severe cases in vulnerable populations at risk include sequelae like encephalitis, respiratory distress, and subsequent bacterial infections.

Prevention and Control:

Preventing mpox involves a combination of measures:

1. **Vaccination:** High-risk people can benefit from the smallpox vaccine, which offers cross-protection against mpox.
 - a. **Pre-exposure prophylaxis** is recommended for high-risk groups like:
 - i. health care workers;
 - ii. people in the same household or close community as someone who has mpox, including children;
 - iii. people who have multiple sex partners, including MSM and
 - iv. sex workers of any gender and their clients.
 - b. **Post exposure prophylaxis:** The vaccination should be administered no later than 4 days following contact with an mpox patient. If the recipient has not shown any symptoms, the vaccination can be administered upto a maximum of 14 days.

2. **Health Education:** Public health education about the disease's transmission and the significance of avoiding contact with humans or animals that are afflicted.
3. **Isolation:** To stop the virus from spreading, infected people should be kept isolated.
4. **Hygiene Measures:** It is imperative to routinely wash hands and disinfect any contaminated surfaces.
5. **Public health interventions:** The primary strategies for halting the spread of mpox include contact tracing, surveillance, and public awareness campaigns.

Recent Trends

In the Democratic Republic of the Congo, there has also been a rise in mpox cases and fatalities since 2022. Between January 2022 and August 2024, more than 120 nations reported cases of mpox; of those, over 100,000 had laboratory confirmation and over 220 resulted in deaths.

The outbreak highlighted the possibility that mpox could expand outside of its traditional endemic locations because to elements including international travel, global interconnectedness, and behavioural shifts in people. As a result, the illness is receiving more attention on a global scale, and efforts to comprehend and stop its

spread are being made.

International organisations such as the World Health Organisation (WHO) have issued guidelines for containment and management in response to this, marking a serious public health reaction. Public awareness campaigns and rapid vaccination campaigns, especially those aimed at at-risk groups, are essential in containing the outbreak.

Conclusion

Mpox is a re-emerging disease of global public health concern. The zoonotic roots of mpox are what define its epidemiology, and recent outbreaks have shown a notable human-to-human transmission rate, especially in non-endemic areas.

Even though the effects are usually self-limiting, caution is still necessary because there is a chance for serious consequences, particularly in susceptible populations. It will take ongoing study, public health initiatives, and surveillance to stop and manage future outbreaks. The present worldwide outbreak has brought attention to the significance of international coordination in the fight against zoonotic diseases and the necessity for global health preparedness.



Padvidhar Sanshodhan Prakalp Anudan Award (2023) Abstract

Association between the use of electronic cigarettes and subsequent initiation of tobacco cigarettes in the youth population of a city – A retrospective cohort study.

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Background: Previous use of electronic cigarettes has shown to open a gateway for subsequent initiation of combustible cigarettes in the youths.

Objectives: This study aimed to estimate the incidence of initiating smoking of combustible cigarettes among the E-cigarette users and compare it with incidence in non-E-cigarette users in the age group of 16 to 25 years. Further, to assess the role of various factors which led to the initiation of smoking combustible cigarettes in E-cigarette users.

Design: A retrospective cohort study was conducted among youths from general population for a duration of 4 months.

Setting: Single city urban based population observational study.

Participants: Study population was selected as youths (age group of 16 to 25 years) who are willing to participate in a single city urban setting.

Results: Those who had previous E-cigarette exposure had 7.27 times the risk of subsequent initiation of combustible cigarettes than those who did not have previous E-cigarette exposure. (Relative risk = 7.27) We assessed for the role of various factors which led to the initiation of smoking combustible cigarettes in E-cigarette users and found that 'Curiosity' stood out as the factor reported by most (70.45%) of the participants. Followed by 'Adventure' (40.91%), 'Peer Pressure' (31.82%), 'Need for more nicotine' (29.55%) and lastly, 'Stressful life' (25%) acted as another reason.

Conclusions:

The incidence of initiating subsequent combustible cigarette use in E-cigarette users was higher than that in E-cigarette non-users.

Key words - E-cigarette, Subsequent combustible cigarette use

Editorial Article

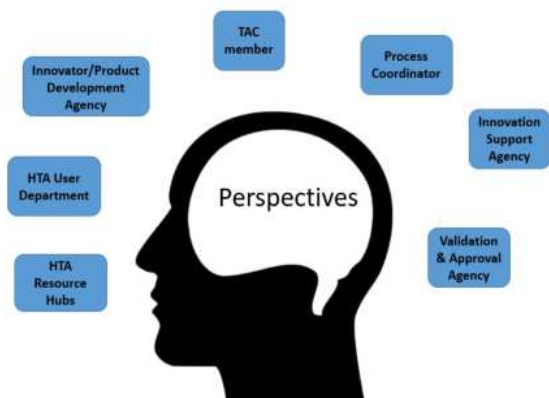
Role of Health Technology Assessment to aid Evidence Based Decision Making for procurement of New Technologies in Public Health System

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Introduction:

India's healthcare landscape is undergoing a rapid transformation driven by advancements in digital health, robotics, genomics, Artificial Intelligence (AI) and other point of care diagnostics. The COVID-19 pandemic has hastened the integration of digital health technologies, making telehealth, health apps, wearables, and other innovations central to healthcare. In addition there are a number of diagnostic devices which are Artificial Intelligence enabled.

A technology is called new and emerging if 1) Technology exists in western world, but have a make in India product for e.g Digital Health, Noninvasive Hemoglobinometers.



2) Indigenous technologies for local needs (POC tests, portable devices).

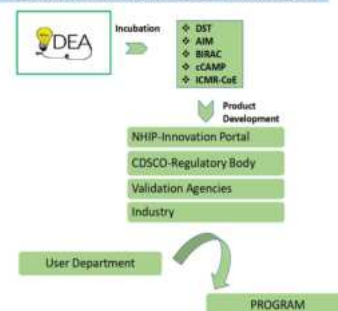
3) Technology is available but is repurposed to use it for another disease for e.g True Nat for Covid.

4) Technology exists but has value addition of additional component of a new technology (AI with Xray)

In India there is a very robust, supportive and evolving ecosystem to support new ideas and innovations with a lot of governmental and non-governmental players. Incubation hubs supported by Department of Science and Technology (DST), Atal Innovation Mission (AIM) under Niti Aayog, Biotechnology Industry Research Assistance Council (BIRAC), Centre for Cellular And

M o l e c u l a r Platforms (C-CAMP) supported by DBT, ICMR Centre of Excellence (ICMR-CoE) support development of novel ideas into products. New Innovations

Current Process of Innovative Technologies



received in National Health Innovation Portal with Technology Readiness Level (TRL) Stage 8 could be submitted for regulatory approval from CDSCO. Once this is done and the technology reaches TRL stage 9, the technology is in its final form and is ready for commercial deployment. It can be taken up by industry for mass scale manufacturing along-side large scale validation. As per National Health Innovation Portal, there are approximately 300 to 400 innovations in health sector annually. <https://www.nhinp.org/>

Many innovators approach the state and central ministries to advocate their products and influence their uptake into the public health system. At this stage it becomes very crucial for the decision makers to make evidence based decisions in procuring these products within the limited resource available. Below are some of the important aspects to consider before making such decisions:

1. Is the new technology addressing an important disease burden?
2. Is the product CDSCO approved?
3. Is there data on field based effectiveness or is it limited to limited controlled setting efficacy studies?
4. Is the data on efficacy/effectiveness compared to the gold standard?
5. How will the new technology address the current challenges experienced using the

- existing standard of care?
6. Would the new technology replace the existing standard of care or it could coexist?
 7. At what level of care would the new technology be useful-primary, secondary or tertiary?
 8. How acceptable and feasible would the new technology be with regards to standard of care?
 9. Whether it is cost-effective to integrate the new technology in the existing health system?
 10. What would be the budget impact to introduce such a technology within public health system?



While these innovations hold immense promise for improving healthcare outcomes and accessibility, if they do not fulfil point number 2--4 of the above criteria, they could be referred to the recently introduced Med Tech Mitra portal. This is an initiative by NITI Aayog, Indian Council of Medical Research in partnership with Central Drugs Standard Control Organization (CDSCO), to foster development of affordable and accessible indigenous Medical devices/ In-vitro diagnostics by providing strategic handholding support to MedTech innovators for clinical evaluation, regulatory facilitation and uptake of new products. MedTech Mitra will address the queries of the innovators and provide personalized guidance in a meeting at the earliest in consultation with the Regulator and other relevant stakeholders for providing strategic support. <https://medtechmitra.icmr.org.in/>

Many states and central Ministries are using innovative strategies to create conducive ecosystems to identify, support and collaborate with innovators for uptake of new and emerging technologies. Early this year, national consultations were organized by Ministry of

Health & Family Welfare to capture and share the best practices and innovations at various levels of health services delivery under National Health Mission. The consultations were attended by officials of Ministry of Health and Family Welfare (MoHFW), Govt. of India who were involved in providing technical support to states.

Some states like Gujarat have a vibrant strategy called GRIPS “Good Replicable and Innovation Practices Summit” which attracts innovators in health sector where fruitful exchange takes place between the program implementers of the public health system and the innovators to help them improve on the technologies or upscale it for wider use. It is again important to assess the stage of development of technology and whether it fulfils all requirements of its safety, effectiveness and feasibility. If not, then appropriate guidance needs to be provided to use the support of Med Tech Mitra for generating additional evidence or \seeking funding opportunities, seeking regulatory approvals or identifying an industry partner.

If these innovations are found appropriate to address a major public health problem or if it has potential to improve the quality and efficiency of a particular service delivery, the budget is next thing on the mind as to how to use the available limited resources such that it is cost-effective to integrate the given technology in the public health system and what would be the budget implications. This requires a robust Health Technology Assessment (HTA) framework to make evidence based decision based on its cost-effectiveness assessment before integrating it into the public health system which can also can provide a robust framework for price negotiation.

Health Technology Assessment is a systematic process for evaluating the impact of new technologies on healthcare delivery. It offers scientific solutions to complex problems and assists policy makers in making transparent and prudent decisions. It provides decision-makers with crucial evidence-based insights, guaranteeing that these advancements align with national healthcare objectives and optimize resource allocation. Furthermore, the increasing use of artificial intelligence (AI) and machine learning in healthcare has prompted HTA efforts to evaluate their clinical and economic

implications, including diagnostics, treatment planning, and predictive analytics. The transformative integration of robotics in healthcare presents innovative solutions, and HTA plays a critical role in evaluating their impact and value. In 2014, the World Health Assembly adopted a resolution on use of HTA for progress towards Universal Health Coverage (UHC).

Every new technology must be evaluated for its cost-effectiveness before making a decision on its integration into public health system. There is a need to generate demand by the concerned health authorities or departments to route such questions to the HTA In Dept. of Health Research MOHFW to address these topics of national importance through its extended HTA Resource Center network.

Despite a thriving environment for healthcare innovation, India faces significant challenges in mainstreaming HTA, particularly for new and emerging technologies.

Some key challenges are limited understanding of HTA, poor stakeholder sensitization & engagement, data inadequacies, poor inter-departmental communication and engagement and last but not the least health system readiness to integrate new technologies effectively such that it reaches the last mile for Universal Health Coverage. Despite evidence-based cost-effectiveness, challenges also exist in promoting the uptake of new technologies in schemes such as PMJAY/Insurance Schemes or on GEM portals.

To bridge this gap, a comprehensive strategy is needed. Following are some recommendation which have emerged through various consultative meetings and literature review:

- Raising awareness of how to make evidence based decisions including use of HTA to assess cost effectiveness and budget impact across various departments of the government, central and state health sectors and program managers
- Addressing data inadequacies by building collaborative networks with research bodies like the ICMR that can strengthen evidence generation and validation efforts.
- Building conducive HTA ecosystems at the state level is crucial. Mainstreaming budgets for HTA activities into state plans (PIP),

establishing cost-effective procurement mechanisms, and providing guidance on procuring new technologies will create a supportive environment.

- Ensure that technical specifications of generic products are listed on Government e-Marketplace (GEM) portals.
- Ensuring health system readiness for integrating new technologies by developing health System Readiness (HSR) tiers, similar to Technology Readiness Levels (TRL), to assess how such cost-effective technologies could be scaled up for successful program implementation with improved health outcomes.
- Fostering collaboration among various agencies involved in developing and adopting new technologies is a key factor in this whole process. Frequent interactions with various departments, common SOPs, and a centralized repository for emerging technologies with robust data storage mechanisms will enhance knowledge sharing and streamline technology development and uptake processes. Establishing standard guidelines for conducting HTAs on digital and AI innovations, facilitating international exchange programs, and prioritizing cost-effective interventions are crucial for robust HTA practices.
- Finally, promoting evidence-based uptake of new technologies within health insurance schemes such as PMJAY will incentivize their adoption.

Such coordinated efforts can result in influencing procurement of cost effective technologies, informed price negotiations, improved resource allocation resulting in universal coverage. This would finally impact the health of individuals by improved access to better quality technologies for diagnosis and disease management along with reduced out of pocket expenditure.

Some success stories on incorporation of HTA results such as use of Safety Engineered syringes for therapeutic care in India (One Syringe, Only one time) by states of Punjab, Andhra Pradesh and Odisha, integration of Automated Resuscitation Device (ARD) for neonatal resuscitation at a point of delivery in health system by Govt. of Telangana and the reduced prices of Sickle cell point of care

tests in the National Sickle Elimination program of Govt. of India are examples that demonstrate how HTA could save a large kitty for the government while integrating new and modern technologies for better health care management and Universal Health Coverage. More information could be obtained from DHR HTAIn website (<https://htain.dhr.gov.in/index.html>)

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Important Health Related Days, weeks, events in the month of April, May and June

Sr.No.	Day/Week/Event	Date	Theme for 2024
1.	National Doctors Day	1 st July	“Healing Hands, Caring Hearts”
2.	World Population Day	11 th July	“To Leave No One Behind, Count Everyone.”
3.	World Hepatitis Day	28 th July	“It’s time for action”
4.	World ORS day	29 th July	“Create Awareness about the Magic Mixture”
5.	World Breastfeeding Week	01- 07 August	“Closing the gap: Breastfeeding support for all.”
6.	World Organ Donation Day	13 th August	“Be the Reason for Someone’s Smile Today!”
7.	National Nutrition Week	01- 07 Sept.	“Invest in Yourself—Buy Nutrition.”
8.	World Suicide Prevention Day	10 th Sept.	“Changing the Narrative on Suicide”
9.	World Contraception Day	26 th Sept.	“The Power of Options,”
10.	World Rabies Day	28 th Sept.	“Breaking Rabies Boundaries”
11.	World Heart Day	29 th Sept.	“Use Heart for Action”

Perspective

Gaps in Organ Donation Awareness and Actual Implementation of Organ Retrieval and Transportation in Government Hospitals

Dr Amol Kinge¹, Dr Sarika Patil², Dr Vikrant Pagar³, Dr Sushant Chavan⁴

Background

The advancements in organ transplant technologies during the 1980s significantly improved health outcomes for individuals with organ failure. Initially focused on kidney transplants, successful procedures for liver, pancreas, and heart transplants were also developed. However, the availability of these organs remained limited due to low rates of cadaver donations and the difficulty of finding suitable donors among recipients' family members. This mismatch led to unethical practices, primarily affecting socio-economically disadvantaged groups coerced or deceived into selling their organs without legal recourse.¹⁻²

In India, the Transplantation of Human Organs and Tissues Act, 1994, regulates organ transplants and bans the commercial trade of organs and tissues. Despite this, illegal organ trade continued due to organ shortages, inefficient allocation, lack of infrastructure, and high costs, making transplants inaccessible to most of the population. Assessing the Act's effectiveness is crucial. To address these issues, the government introduced the Transplantation of Human Organs (Amendment) Bill, 2009, making key changes such as expanding the definition of 'near relative', including tissues under the Act's scope, mandating transplant coordinators, regulating organ donation to foreign nationals, allowing swap donations, and establishing Appropriate Authorities and National Network for organ and tissue storage.³⁻⁵

The Amendment Act of 2011, passed on September 27, 2011, and effective from January 2014, operationalizes these changes, providing procedural and technical guidance for transplantations while maintaining the basic framework.⁶⁻⁷

Road Traffic Accidents / Road crashes

Road crashes are a leading cause of death worldwide but are largely preventable. Annually, they cause 1.35 million deaths and 50 million injuries or disabilities. They are the primary cause

of death for children and young people aged 5-29. According to the WHO, 64% of road fatalities involve individuals under 50, with over half being pedestrians, cyclists, and motorcyclists.⁸

Despite having 60% of the world's vehicles, low- and middle-income countries account for 90% of all road fatalities. The economic impact is significant, including medical costs and lost productivity, consuming 3% of a country's GDP and potentially trapping households in poverty.

In 2021, India reported 153,972 deaths and 384,448 injuries from 412,432 road crashes, a 16% increase from 2020. About 84% of fatalities were among individuals aged 18-60, with the highest rate among two-wheeler riders. India's road network spans over 6.3 million kilometers, with crashes distributed across national highways (128,825), state highways (96,382), and other roads (187,225).⁸

In 2022, Maharashtra recorded 33,383 road crashes, resulting in 15,224 fatalities and 27,239 injuries. The state's road network covers 324,202 kilometers, including national highways (18,381 km), state highways (32,772 km), and other roads (273,049 km). Of the crashes, 9,417 occurred on national highways, 6,902 on state highways, and 17,064 on other roads.⁸

Opportunity for Organ Donation

Accidental deaths present a significant opportunity for organ donation, potentially saving the lives of patients in dire need. Accident victims often sustain injuries leading to brain death, a condition where the brain irreversibly ceases to function, even if the heart continues to beat with life support. Once brain death is declared, these individuals can become organ donors, providing vital organs like the heart, lungs, liver, kidneys, pancreas, and intestines. Accident victims are typically younger and healthier, meaning their organs are in better condition and more suitable for transplantation, increasing success rates and improving long-term outcomes for recipients.⁹

There is a chronic shortage of available organs, resulting in long waiting lists. Each donor can save

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up to eight lives and improve many more through tissue donation, such as corneas, skin, bone, and heart valves. This brings hope to patients and their families and offers solace to the donor's family, knowing their loved one's organs have saved lives. Highlighting the potential for organ donation from accident victims can increase public awareness and encourage more people to register as donors, leading to greater acceptance and support for organ donation.¹⁰

Steps Taken by the Government

The Government of India has launched the National Organ Transplant Programme (NOTP) to enhance organ donation and transplantation. This programme provides financial support for establishing State Organ and Tissue Transplant Organizations (SOTTOs), National, Regional, and State Biomaterial Centers, new organ transplant and retrieval facilities, and strengthening existing ones. It also includes provisions for transplant coordinators, maintenance of deceased donors, dignified funerals, and post-transplant immunosuppressant drugs for patients below the poverty line. Under this programme, the National Organ and Tissue Transplant Organisation (NOTTO) has been established in New Delhi, along with five Regional Organ and Tissue Transplant Organizations (ROTOs) and sixteen State Organ and Tissue Transplant Organizations (SOTTOs). Financial support is provided to states to establish biomaterial centers, with centers already set up in Chennai, Bihar, and Maharashtra.¹¹

NOTTO, ROTOs, and SOTTOs disseminate information about organ donation through a dedicated website (www.notto.gov.in) and a 24x7 call center (1800114770). Awareness and training activities include celebrating Indian Organ Donation Day, seminars, workshops, debates, sports events, walkathons, marathon participation, and street plays. Awareness is also promoted through advertisements in print media, audio-visual messages, and expert talks on television. A social media campaign, Jan Andolan, was conducted as part of the Amrit Mahotsav to celebrate India's 75th anniversary of independence, aiming to create organ donation awareness and encourage pledges.¹¹

STATISTICS

According to data provided by States and Union Territories to NOTTO, the total number of transplants has steadily increased from 4,990 in 2013 to 16,041 in 2022, despite a notable dip in 2020 due to the COVID-19 pandemic, followed by a sharp rise thereafter. Similarly, total living donor transplants have consistently risen from 4,153 in

2013 to 13,338 in 2022, with a similar dip in 2020 and subsequent recovery. Domino liver transplants, relatively rare until 2016, saw a notable increase to 9 transplants in 2022. The number of deceased donors has fluctuated, peaking at 941 in 2022 after a significant decline in 2020. Transplants from deceased donors followed this trend, rising from a low of 837 in 2013 to a high of 2,694 in 2022. Kidney transplants from deceased donors increased from 542 in 2013 to 1,541 in 2022, mirroring the overall pattern. Living donor kidney transplants rose from 3,495 in 2013 to 10,164 in 2022, reflecting growing acceptance and capability for these procedures. Deceased donor liver transplants varied over the years, peaking at 737 in 2022 from 240 in 2013. Living donor liver transplants saw significant growth, rising from 658 in 2013 to 3,174 in 2022. Overall, the data indicates substantial growth in both living and deceased donor transplants over the past decade, with fluctuations likely due to the global pandemic's impact on medical procedures.¹²

In terms of deceased organ donors, Telangana leads with 194 donors, followed by Tamil Nadu with 156, Karnataka with 151, Gujarat with 148, and Maharashtra with 105. For living donor transplants, Delhi NCR tops the list with 3,422 transplants, trailed by Tamil Nadu with 1,690, Kerala with 1,423, Maharashtra with 1,222, and West Bengal with 1,059. Regarding deceased donor transplants, Tamil Nadu ranks highest with 555 transplants, followed by Telangana with 524, Karnataka with 478, Gujarat with 398, and Maharashtra with 303. These charts highlight the top states contributing to organ donation and transplants, showing regional variations and significant contributions to the overall efforts in organ transplantation.¹²

AWARENESS STATUS ABOUT ORGAN DONATION

Recent studies have shed light on the awareness levels and willingness to participate in organ donation among different segments of society. As future decision-makers, students' perspectives are particularly significant.

A study conducted among arts, science, and commerce students in a metropolitan city revealed a baseline willingness for organ donation ranging from 46.47% to 52.17%. Remarkably, this willingness increased to 70% - 82.6% following awareness sessions, with notable improvements across all streams.¹³

In a medical college, a similar study indicated that 69% of healthcare professionals had baseline

awareness about organ donation.¹⁴ Another study among nursing students showed that 62.24% expressed willingness to donate organs after participating in awareness sessions.¹⁵

Furthermore, a study involving police officials demonstrated a significant increase in willingness to donate organs, with 72.2% expressing readiness after undergoing training.¹⁶

These studies underscore the importance of targeted awareness programs in enhancing the willingness and understanding of organ donation across different societal groups. The positive outcomes suggest that with continued education and outreach, the potential for organ donation can be significantly increased, saving more lives in the process.

GAP BETWEEN AWARENESS AND ACTUAL TRANSPLANTATION

Various researches have showed increased awareness and willingness among various strata of society in various parts in India. However actual implementation of Organ Retrieval and Transplantation in Government run hospitals is very poor except those in Metropolitan cities.¹⁷⁻¹⁸

A newspaper article highlighted the status of infrastructure in the rural health sector, noting its heavy reliance on government hospitals and a significant lack of infrastructure. Primary healthcare is often missing, making it difficult for people to even recognize their need for organ transplants. There are around 150,000 brain-dead patients annually, each capable of saving eight lives through organ donation. However, only 700-800 hospitals are authorized for transplants and donations. This gap necessitates not only increased awareness but also improved medical facilities.¹⁹

The article also emphasized that there is often no one in the ICU to speak with families about organ donation, resulting in a lack of support from the system and hospitals. Organ transplantation requires extensive resources, including medicines, instruments, donor procurement logistics, and the surgical procedure itself. Perioperative care, including intraoperative and postoperative care, is particularly challenging and demands specialized expertise for managing high-risk patients. The care continues even after the patient's discharge, adding to the complexity. And most importantly to manage this it needs trained manpower including superspecialists or trained specialists.

Addressing the Shortage of Superspecialists in Peripheral Government Medical Colleges

In his editorial, one author noted that a common belief about the low rate of DBD (Deceased Brain

Dead) in India is attributed to the lack of public awareness and, consequently, consent for donation. This belief has prompted various civil society organizations and some media outlets to champion the cause of organ donation awareness, with backing from government bodies. Nonetheless, there is minimal religious or community opposition in India to organ removal, and the communitarian spirit is notably strong. Therefore, when considering the primary obstacle to organ donation in India, it is evident that hospital motivation is the key issue.²⁰ The essential takeaway is the need to establish a dedicated core team, including an ICU counselor in addition to the transplant coordinator, and to hold regular review meetings to develop effective practices through experience in order to improve brain stem death diagnoses, counselling.

The shortage of superspecialist manpower trained in the retrieval and transplantation of various organs and tissues is a significant challenge in peripheral government-run medical colleges. To address this, it is crucial to train specialist doctors involved in these processes. The upgradation of infrastructure and equipment for organ retrieval and transplant can be facilitated through various schemes promoted by the Central and State Governments for upgrading existing government-run medical colleges.

Despite limited resources, government hospitals can feasibly start by registering for the retrieval of tissues such as corneas, skin, bones, and other tissues. This phased approach is easier to manage, and the necessary storage conditions can be established more readily. Implementing this strategy will ultimately reduce the burden on metropolitan government/municipality hospitals, where multiple organ transplantations are performed. As a result, cases of corneal blindness, burns, and orthopedic conditions requiring these tissues can be effectively managed within peripheral government-run hospitals. This will significantly reduce the burden of such treatable conditions in society.

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HEALTH IS WEALTH

It's your safe deposit
 Its your investment
 Health is your benefit
 At work n post retirement

So invest more
 To earn more
 To live happily
 And secure

Work for your muscles
 Work for bones
 Work for joints
 And heart as well

Eat for your liver
 Drink for the kidney
 Walk for the brain
 And run for the heart

Preserve all the senses
 No matter what expenses
 Smiles on your faces
 Laugh at your mistakes

Stay fit and fine
 Smiling all the time
 Just as God made
 Till you reach ninety nine

Dr. Rohini Patil
 Consultant Obstetrician & Gynaecologist,
 Mumbai

World Breastfeeding Week Special Article

Breastfeeding: A Powerful ally in combating Climate change

Dr. Pragati Rathod¹, Dr. Sarita Sharma²

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² Associate Professor, Dept. of Community Medicine, Government Medical College, Nagpur

World breastfeeding week (WBW) observed every year from 1st to 7th August is an initiative by the World Health Organisation in collaboration with UNICEF to raise awareness about the benefits of breastfeeding in the general public and to promote and support breastfeeding practices in the community^[1]. It recognises breastfeeding as a tool for safeguarding maternal and child health and thus plays a significant role in achievement of the sustainable development goals^[1, 2]. Throughout these seven days the medical fraternity worldwide organizes events that promote, protect and support breastfeeding, ensuring that mothers everywhere have the information, support, and resources they require to breastfeed successfully. The World Association for Breastfeeding Action (WABA) focuses on a specific theme each year which addresses key issues about breastfeeding, with an aim to educate the public, advocate policies, and encourage a breastfeeding-friendly culture globally.^[2,3]

The theme this year “Closing the Gap, Breastfeeding Support for All” emphasizes the need for inclusive and equitable support for all breastfeeding mothers, recognizing the diversity of their experiences and challenge^[3]. The campaign aims to highlight the crucial role that families, communities, and healthcare providers play in supporting breastfeeding mothers at every stage of their journey. The focus is also on addressing barriers, such as workplace challenges, that prevent mothers from breastfeeding successfully.^[3]

Despite the well known benefits of breastfeeding, not all mothers receive the support needed to initiate and continue breastfeeding. The focus of the theme this year is on efforts to provide equitable support to all mothers, irrespective of

their geographic location or socioeconomic position. This includes policy implementation supporting breastfeeding at workplaces, improving access to lactation consultants, and promoting public health strategies that normalize breastfeeding across diverse cultures. By closing these gaps, we can ensure that every mother has the opportunity to provide her child with the best start in life, while also contributing to the broader goals of health equity and sustainability.^[1,2,3]

As the world grapples with the escalating climate crisis, public health initiatives are increasingly identifying breastfeeding as a key strategy in the fight against climate change.

This article will prompt us to reflect on how breastfeeding, with its significant environmental advantages, can be integrated into public health policies as a crucial element of a broader climate action strategy.^[4]

The debate about the ever increasing global problem of climate change is mostly centered around transportation, energy sources and industry, but the role of breastfeeding which is a critical element of environmental sustainability is often overlooked.^[4,6] Breastfeeding is environment friendly as it doesn't require any packaging, transportation, or extra resources. Standing in stark contrast to formula feeding, which involves the production of formula powders, bottles, and sterilizing equipment, all of which contribute to environmental degradation, breastfeeding relies only on the mother's natural ability to produce milk. Improving exclusive breastfeeding rates can reduce the demand for formula feeds, in turn reducing energy consumption, greenhouse gas emissions and waste generation, contributing to a healthy community and a healthier planet.^[5]

Breast milk, a good source of antibodies and essential nutrients, builds a baby's immune system and provides protection against infections and diseases, including those aggravated by climate change. This natural immunity not only protects individual infants but also reduces the

burden on healthcare systems, making communities more resilient to the impacts of climate change.^[6]

Breastfeeding is also a promising solution during natural disasters. As we all know, the world is increasingly facing natural disasters like floods, landslides, etc. which are thought to be a result of the rapid climate change happening globally. During emergencies, when access to essentials like clean water, food, shelter, and medical supplies is often compromised, breastfeeding emerges as a reliable and safe source of nutrition for infants, who are among the most vulnerable populations. It is a life-saving practice that can protect infants from infections, and prevent malnutrition when other sources of food are unavailable or unsafe. Furthermore, breastfeeding reduces the dependency on formula, which requires water for preparation—a resource that may be scarce or contaminated during environmental disasters.^[7]

The global push for sustainable development cannot ignore the role of breastfeeding in achieving key health and environmental goals. The Sustainable Development Goals (SDGs) established by the United Nations recognize the importance of good health and well-being (Goal 3) and responsible consumption and production (Goal 12). Breastfeeding directly contributes to these goals by promoting infant health, reducing environmental impact, and fostering sustainable practices.^[8] Breastfeeding also supports gender equality (Goal 5) by empowering women to make informed choices about how they feed their children and ensuring they have the support needed to succeed. However, achieving these outcomes requires a coordinated effort across multiple sectors, including healthcare, education, labor, and environmental protection. Investing in breastfeeding promotion and support is not just a health intervention; it is a critical component of sustainable development.^[8,9] Governments, NGOs, and the private sector all have a role to play in creating environments that support breastfeeding, from implementing breastfeeding-friendly policies to raising awareness about its benefits. By prioritizing breastfeeding as a key strategy for health and sustainability, we can make meaningful progress toward achieving the SDGs

and securing a better future for all.

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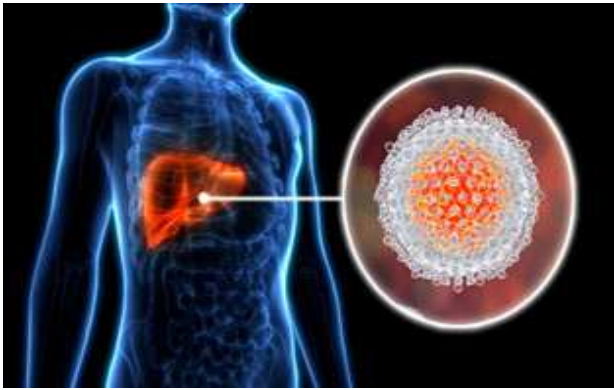
IPHA Maharashtra expresses gratitude towards UNICEF Maharashtra Field Office for providing financial assistance for printing & distribution of this Newsletter issue.

PG Corner

Recent Updates on Hepatitis C

Dr.Danya Jawahar¹, Dr.Nisha Relwani²

QUICK FACTS ABOUT HCV....(Hepatitis C Virus)



Hepatitis C is an inflammation of the liver caused by the Hepatitis C virus. The virus can cause both acute and chronic hepatitis, ranging in severity from a mild illness to a serious, lifelong illness including liver cirrhosis and cancer. Globally, an estimated 50 million people have chronic hepatitis C virus infection, with about 1.0 million new infections occurring per year(1) It is among the most common virus that infect the liver and it has been shown to be a major cause of parenterally transmitted Hepatitis.(2)

GEOGRAPHICAL DISTRIBUTION

Hepatitis C virus infection occurs in all WHO regions. The highest burden of disease is in the Eastern Mediterranean Region with 12 million people chronically infected. In the South-East Asia Region (9 million), European Region (9 million) and the Western Pacific Region (7 million) people are chronically infected. Eight million people are chronically infected in the African Region and 5 million the Region of the Americas.(1)

ROUTES OF TRANSMISSION

Hepatitis C virus is most commonly transmitted through exposure to infectious blood .This can occur through a)receipt of contaminated blood transfusions,blood products and organ transplants,b)Injections given with contaminated syringes and needle stick injuries in Health care settings c)Injection drug use d)being born to a Hepatitis C infected mother ,

Hepatitis C may be transmitted through sex with an infected person or sharing of personal items

contaminated with infectious blood ,but these routes are less common.(2)

SYMPTOMS

80% remains asymptomatic

When symptoms do appear, they may include: Fever ,Fatigue,Decreased appetite,Nausea & Vomiting,Abdominal pain,Dark urine,Grey colored faeces,Joint pain,Jaundice(2)

DIAGNOSIS

Testing for anti-HCV antibodies with a serological test identifies people who have been infected with the virus.

If the test is positive for anti-HCV antibodies, a nucleic acid test for HCV ribonucleic acid (RNA) is needed to confirm chronic infection and the need for treatment.

This test is important because about 30% of people infected with HCV spontaneously clear the infection by a strong immune response without the need for treatment.

Although no longer infected, they will still test positive for anti-HCV antibodies. This nucleic acid for HCV RNA can either be done in a lab or using a simple point-of-care machine in the clinic.

Innovative new test such as **HCV core antigen** are in the diagnostic pipeline and will enable a one-step diagnosis of active hepatitis C infection in the future.(1)

WHO Latest Update

The World Health Organization (WHO) has prequalified the first hepatitis C virus (HCV) self-test which can provide a critical support in expanding access to testing and diagnosis, accelerating global efforts to eliminate hepatitis C.

The product, called **OraQuick HCV self-test**, manufactured by OraSure Technologies, is an extension of the pre-qualified, OraQuick® HCV Rapid Antibody Test which was initially prequalified by WHO in 2017 for professional use.

The self-test version, specifically designed for use by lay users, provides individuals with a single kit containing the components that are needed to perform the self-test. (3)

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TREATMENT

The goal of treatment is to cure the disease and prevent long-term liver damage.

Antiviral medications, including sofosbuvir and daclatasvir, are used to treat hepatitis C. Treatment is always needed for chronic hepatitis C.

People with hepatitis C may also benefit from lifestyle changes, such as avoiding alcohol and maintaining a healthy weight.

WHO recommends therapy with pan-genotypic direct-acting antivirals (DAAs) for all adults, adolescents and children down to 3 years of age with chronic hepatitis C infection. The short-course oral, curative DAA treatment regimens has few if any side-effects. DAAs can cure most persons with HCV infection, and treatment duration is short (usually 12 to 24 weeks), depending on the absence or presence of cirrhosis.

In 2022, WHO included new recommendations for treatment of adolescents and children using the

same pangenotypic treatments used for adults.

The most widely used and low-cost pangenotypic DAA regimen is sofosbuvir and daclatasvir.

Access to HCV treatment is improving but remains limited. Of the 50 million people living with HCV infection globally in 2022, an estimated 36% people knew their diagnosis, and of those diagnosed with chronic HCV infection, around 20% (12.5 million) people had been treated with DAAs by the end of 2022.(1)

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Padvyuttar Sanshodhan Prakalp Anudan Abstract

Pattern and disposal of household biomedical waste in Urban Nagpur : a community-based assessment

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Introduction: Biomedical waste poses significant health and environmental risks if not managed properly. While hospitals are primary contributors, home-based healthcare practices are increasingly relevant, necessitating attention to household biomedical waste management. Despite existing regulations, studies on household biomedical waste in urban settings, especially in post-COVID-19 scenarios, are limited. Thus study was conducted to describe the biomedical waste disposal practices among urban households.

Methods: The community based cross-sectional study conducted in urban Nagpur from July 2023 to March 2024. A total of 240 households were sampled using cluster sampling, and one adult member from each household was interviewed. Data were collected on socio-demographic characteristics, types of biomedical waste generated, disposal methods, and willingness to segregate and return waste to health centers. Modified Kuppaswamy Classification was used to assess socio-economic status. Data was entered in Microsoft Excel and analyzed using STATA 14.0.

Results: The majority of participants were female (77.1%), Hindu (78.8%), and from nuclear families (54.6%). Sanitary pads/menstrual hygiene materials (84.2%), expired medicines (81.7%), swabs, bandages (57.1%) and used razor blades (56.3%) were the most common wastes generated. Most households (76.7%) segregated wet and dry recyclable waste but did not separate biomedical waste. Waste was primarily disposed of through municipal waste collection (98.3%), with minimal use of precautions (1.3%). While 64.2% expressed willingness to segregate biomedical waste, only 29.2% were willing to return it to health centers. 5

Conclusion: This study emphasizes the high prevalence of generation of household biomedical waste and its improper handling, suggesting the need for improved awareness and enforcement of proper waste management practices. Initiatives promoting waste segregation, education, and collaboration between stakeholders are essential. Tailored guidelines and educational campaigns, coupled with community engagement, can facilitate better household biomedical waste management, mitigating health and environmental risks.

Key words: Biomedical waste, household waste management, hazardous household waste, waste disposal practices

Book Review

At the Wheel of Research — An Exclusive Biography of Dr. Soumya Swaminathan" by Anuradha Mascarenhas

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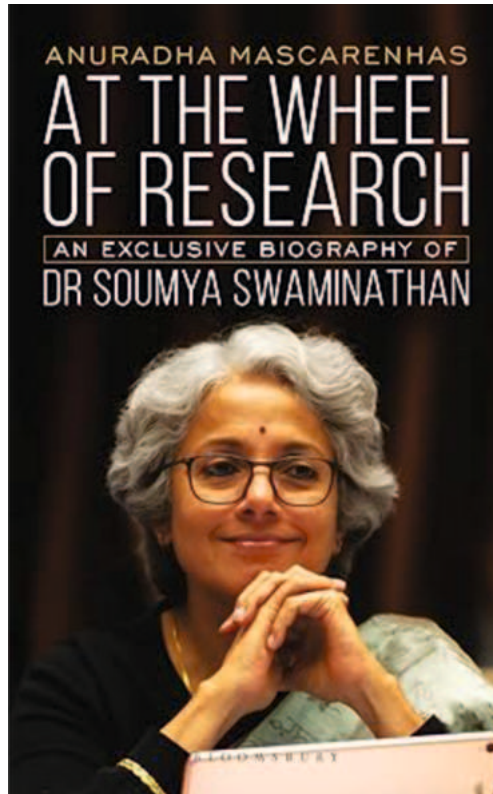
Anuradha Mascarenhas's "At the Wheel of Research — An Exclusive Biography of Dr. Soumya Swaminathan" is a comprehensive portrayal of one of the most influential figures in global health today. This biography not only sheds light on Dr. Swaminathan's remarkable career but also offers a glimpse into the challenges and triumphs that have shaped her journey.

The book begins by introducing Dr. Soumya Swaminathan, providing insights into her early life, educational background, and the influences that propelled her into the field of medical research. Mascarenhas traces Dr. Swaminathan's career from her work on tuberculosis and child health in India to her leadership roles at the World Health Organization (WHO), including her significant tenure as the organization's Chief Scientist.

Throughout the biography, Mascarenhas highlights Swaminathan's key contributions to medical science, particularly in the realms of infectious diseases and public health. The narrative also covers her role in the development and implementation of health policies that have had a global impact, particularly during the COVID-19 pandemic.

Mascarenhas excels in presenting Dr. Swaminathan's life story in a way that is both engaging and informative. The book is well-researched, drawing on various sources to provide a detailed account of her achievements and the obstacles she overcame. The author captures the essence of Dr. Swaminathan's dedication to her work, portraying her as a trailblazer in the male-dominated field of medical research.

The biography is particularly strong in its



depiction of Swaminathan's contributions to global health policy. It offers readers a clear understanding of how her research and leadership have influenced international health outcomes, particularly in the areas of infectious disease control and health equity.

"At the Wheel of Research" is an inspiring biography that highlights the extraordinary career of Dr. Soumya Swaminathan. It is a testament to her relentless pursuit of knowledge and her commitment to improving global health. For readers interested in medical research, public health, or the role of women in science, this book offers valuable insights and serves as a source of

inspiration.

Conclusion:

Anuradha Mascarenhas's biography of Dr. Soumya Swaminathan is a well-crafted and informative account of a pioneering scientist's life and work. While the book is rich in detail and provides a comprehensive overview of Swaminathan's professional achievements, it could have been enhanced by a more personal narrative. Nonetheless, it stands as a significant contribution to the literature on global health and the individuals who shape it.

■ ■ ■

Disclaimer

Views expressed by the Authors in this Newsletter are their own and not official view / stand of IPHA

**Indian Public Health Association Maharashtra State
Inter Medical College Quiz Competition 2024 Report**

"**IPHA Inter Medical College Public Health Quiz Competition:2024**" was planned for the undergraduate medical students of all the Medical Colleges in Maharashtra on **World Population Day 11th July 2024**, under the auspices of the Maharashtra State Branch of Indian Public Health Association.

The quiz was conducted initially as zonal round in five different zones in Maharashtra at Mumbai (Mumbai & Konkan Zone), Pune (Western Maharashtra Zone), Nashik (Northern Maharashtra Zone), Aurangabad (Marathwada Zone) & Yavatmal (Vidarbha Zone) on 27th June 2024 at 2pm.

All the Medical Colleges in respective zones were invited to participate in this Zonal Round. One team of 2 Students from each Medical College were accepted. Students participated were from MBBS Third Professional Year (6th / 7th semester / III M.B.B.S Part I).

Five teams were made eligible at Zonal round by conducting elimination round. The questions in the Quiz Competition were asked from all topics as per the Text Books of Community Medicine, Public Health related websites. Quiz material was provided by State Coordinator for each zonal round and state round.

Each student participated had been paid actual bus / train fare (sleeper class) for to and from journey and Rs. 200/- as D.A. at the zonal level by IPHA-Maharashtra Branch. At the zonal level, cash prizes of Rs. 1000/- to the winners and Rs. 500/- to the runners up team were awarded. All the participants were also awarded with a certificate of participation and winner and runner up certificate.

Final Round of IPHA MH State Inter Medical College Quiz 2024 was conducted amongst winners from five zones at Symbiosis Medical College for Women, Pune on 11th July 2024 at 2pm.

Cash prizes at the final round awarded were Rs. 2000/- to winners and Rs. 1000/- to runner up, by IPHA - Maharashtra in addition to their TA/DA. A Rolling Trophy donated by the Serum Institute of India Ltd., Pune in memory of Late Dr. Jal Mehta was awarded to the winners of final round. Every year, we receive funds from Serum Institute of India for the conduction of IPHA quiz. Similarly this year also we had received Rs. 75,000/- for the same.

Zonal and State round were conducted with due transparency and in the presence of eminent faculties as judges. These rounds were conducted under the direct supervision of the IPHA MH Committee members and State Coordinator.

"**IPHA Inter Medical College Public Health Quiz Competition: 2024**" was conducted under the guidance of IPHA MH Committee members and the team of State and Zonal Coordinators as below:

1. IPHA MH Committee **President, Dr. Prasad Waingankar**, Prof and Head, Dept of Community Medicine, MGM Medical College, Kamothe, Navi Mumbai.
2. IPHA MH Committee **Secretary, Dr. Deepak Khismatrao**, Regional Technical Specialist, Air borne Infection Control, FIND, India.
3. IPHA MH Committee **Treasurer, Dr Nandkumar Salunke**, Assistant Professor, Dept. of Community Medicine, B. J. Govt. Medical College, Pune.
4. **State Coordinator** for IPHA MH Quiz 2024, **Dr. Smita Santosh Chavhan**, Professor (Addl.), Dept of Community Medicine, HBT Medical College and Dr. R. N. Cooper Municipal General Hospital, Juhu, Mumbai.
5. **Zonal Coordinator** for IPHA MH Quiz 2024, **Western Maharashtra, Dr. Meghana Narendran**, Assistant Professor, Dept of Community Medicine Symbiosis Medical College for Women, Pune.
6. Zonal Coordinator for IPHA MH Quiz 2024, **Mumbai & Konkan, Dr. Deepika Sadavarte**, Assistant Professor, Dept of Community Medicine Seth GSM and KEM Hospital, Mumbai.
7. Zonal Coordinator for IPHA MH Quiz 2024, **Marathwada, Dr. Mahavir Nakel**, Assistant Professor, Dept of Community Medicine, GMC, Chh. Sambhajinagar (Aurangabad).
8. Zonal Coordinator for IPHA MH Quiz 2024, **Vidarbha, Dr. Vijay Dimple**, Associate Professor, Dept of Community Medicine, VNGMC, Yavatmal.
9. Zonal Coordinator for IPHA MH Quiz 2024, **North Maharashtra, Dr. Balaji Almale**, Professor and Head, Dept of Community Medicine, VPMC, Nashik.
10. Coordinator for the **Final round** IPHA MH Quiz 2024, **Dr. Amruta Barhate**, Associate Professor, Dept of Community Medicine Symbiosis Medical College for Women, Pune.

The details of winners of all above teams are as below:

Sr. No.	Zone	Details of participating institutes	Qualifying teams	Winner team	Runner Up team
1.	North Maharashtra	1. GMC, Dhule. 2. VPMC, Nashik. 3. GMC, Jalgaon. 4. Dr. Balasaheb Vikhe Patil RMC, Loni, Ahmednagar. 5. SMBT, Nashik. 6. ACPM Medical College, Dhule	1. GMC, Dhule. 2. VPMC, Nashik. 3. Dr. Balasaheb Vikhe Patil RMC, Loni, Ahmednagar. 4. SMBT, Nashik 5. ACPM Medical College, Dhule	ACPM Medical College, Dhule Ms. Ragini Nayak Mr. Devprasad Tandale	GMC, Dhule. Mr. Shah Rehan Mr. Mayur Shelar
2.	Western Maharashtra	1. GMC, Solhapur 2. B. J. GMC, Pune 3. Dr. D. Y. Patil MC, Pune 4. Bharat Ratna Atal Bihari Vajpayee MC, Pune 5. AFMC, Pune 6. Bharati Vidyapeeth MC, Pune 7. SMWC, Pune	1. GMC, Solhapur 2. B. J. GMC, Pune 3. Dr. D. Y. Patil MC, Pune 4. AFMC, Pune 5. Bharati Vidyapeeth MC, Pune	B. J. GMC, Pune. Ms. Anushka Dhoka Mr. Rusheel Gidwani	AFMC, Pune. Ms. Maddina Sai Sri Chushma Mr. Yash Duhan
3.	Marathwada	1. GMC, Chh. Sambhajanagar 2. GMC, Nanded 3. IIMSR Badnapur Jalna 4. MGM Medical College Chh. Sambhajanagar	1. GMC, Chh. Sambhajanagar 2. GMC, Nanded 3. IIMSR Badnapur Jalna 4. MGM Medical College Chh. Sambhajanagar	GMC, Nanded Ms. Sejal Yadav Ms. Anaya Kabra	GMC, Chh. Sambhajanagar Ms. Shatakshi Bora Ms. Jagruti Khandve
4.	Mumbai-Kokan	1. K J Somaiya MC, Mumbai 2. GMC, Alibaug 3. Grant MC & JJ Hosp, Mumbai 4. HBTMC, Mumbai 5. BKL Tasgaonkar MC, Mumbai	1. K J Somaiya MC, Mumbai 2. GMC, Alibaug 3. Grant MC & JJ Hosp, Mumbai 4. HBTMC, Mumbai 5. BKL Tasgaonkar MC, Mumbai	Grant MC & JJ Hosp, Mumbai Mr. Shivkumar Vishwakarma Mr. Aniruddha Bansal	K J Somaiya MC, Mumbai Ms. Jahnvi Bhagtani Ms. Khushi Jain
5.	Vidarbha	1. GMC, Nagpur 2. IGGMC, Nagpur 3. JNMC, Wardha 4. SVNGMC, Yavatmal 5. Dr PDMC, Amravati 6. GMC, Gondia 7. GMC, Chandrapur 8. GMC, Akola 9. MGIMS, Wardha	1. IGGMC, Nagpur 2. GMC, Akola 3. MGIMS, Wardha 4. GMC, Gondia 5. GMC, Chandrapur	GMC, Gondia Mr. Mihir Dharmadhikari Mr. Manish Jadhao	GMC, Chandrapur Ms. Ankita Pandey Ms. Kashifa Khan

The cooperation of all the Deans and Heads of dept of Community Medicine from each participating institute was immense and admirable. We are thankful for the same.

We appreciate participation of total 31 Medical College teams across Maharashtra out of which, 24 teams were qualified for the zonal rounds at respective zonal centres.

Five Winner teams from these five zones of Maharashtra attended final round of IPHA Stat Quiz 2024 at Symbiosis Medical College for Women, Pune on 11th July 2024 at 2pm.

The winners and runner up team of final round were:

1. Winner team:

B. J. GMC, Pune

Ms. Anushka Dhoka
Mr. Rusheel Gidwani

2. Runner up team:

GMC, Gondia

Mr. Mihir Dharmadhikari
Mr. Manish Jadhao

Final Round at Symbiosis Medical College for Women, Pune on 11th July 2024



Zonal Round of Mumbai Konkan Region at Sheth GSMC and KEMH, Mumbai



Zonal Round of Marathwada Region at GMC, Chh. Sambhajinagar (Aurangabad)



Zonal Round of Vidarbha Region at VNGMC, Yavatmal



Zonal Round of North Maharashtra Region at VPMC, Nashik



Zonal Round of Western Maharashtra at Symbiosis Medical College for Women, Pune



Padvidhar Sanshodhan Prakalp Anudan Award (2023) Abstract

Association of Gender Preference and Other Determinants with Mental Health: A Comparative Study in Rural and Urban Postpartum Women in Raigad district of Maharashtra

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Abstract:

Background: According to WHO, the postpartum period is the most crucial and yet, the most ignored phase during pregnancy; the maximum incidence of maternal and newborn deaths occur in this phase. In lower and middle income countries, this prevalence can be anywhere between 4.8%-25%. Postpartum mental health encompasses a broad spectrum of conditions, including maternal anxiety, postpartum blues, postpartum depression, and postpartum psychosis.

Objectives: 1) To assess the determinants of mental health of postpartum women. 2) To compare the mental health status of postpartum women in rural and urban areas. **Methodology:** Participants were selected by complete enumeration from postpartum women visiting for checkup at the Kalamboli maternity hospital. A pre-designed, pre-validated, pre-tested structured questionnaire was used for collection of sociodemographic and obstetric data. Edinburgh Postpartum Depression Scale (EPDS), the most commonly used screening tool for depressive symptoms in postpartum women and DASS 21, a screening tool developed in Australia for diagnosing poor mental health, were used in the study.

Results: The median EPDS Score was 4 indicating low levels of depression among the participants. Low educational and socioeconomic status, low age at marriage, marital and familial issues, problems with breastfeeding and familial pressure for male newborn were significantly linked to PPD. Additional factors associated with higher DASS 21 scores were professional occupation, male gender, high socioeconomic status, high screen time, and joint family model.

Conclusion and Recommendation: More resources need to be allocated for screening and capacity building in maternal mental health care in India.

Key words: Postpartum depression, mental health, rural women

APPEAL

The Indian Public Health Association (IPHA) existing since 1956 is a professional registered body (Society Act No. S/2809 of 1957 – 58) committed to promotion and advancement of public health and allied sciences in India, protection and promotion of health of the people of the country, and promotion of co-operation and fellowship among the members of the association. IPHA has local branches in almost all states of the country. Any professional graduate, MBBS or any equivalent degree recognized by any Indian university in Indian System of Medicine / Dentistry (BDS) / Engineering (BE) / Nursing (B Sc Nursing) / Veterinary (BV Sc & AH) are eligible to be ordinary & life member of the association after paying the necessary subscription. We, the executive committee members of IPHA – Maharashtra Branch sincerely appeal the eligible qualified individuals to become the life members of the organization and enhance our strength and visibility. Kindly visit National IPHA website, www.iphaonline.org to download the application form and for further official procedures of payment of membership fee. If you need any help in this regard please feel free to contact Secretary, IPHA – Maharashtra Branch on phone (022 - 2743 79 96 / 97) or on email - iphamaha@gmail.com

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