IPHA MAHARASHTRA BRANCH Newsletter

Volume 15 Issue 03: JUL – SEP 2023

Editor

Dr. Prasad Waingankar

Assistant Editor

Dr. Sarika Patil

Contents:

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

IPHA Maharashtra Secretariat

Department of Community Medicine,
Mahatma Gandhi Mission Medical College,
Kamothe, Navi Mumbai – 410209
Tel: 022-2743 79 96/97
Mobile: 9920446233, 9324714313
Email: iphamahabranch@rediffmail.com
Web: www.iphamaha.org

Public Health Management Cadre Development: Need of Healthy Future

Public health management plays a crucial role in ensuring the effective functioning of healthcare systems. In India, a diverse and populous country, the need for a skilled and very well-equipped public health management cadre is more critical than ever, the fact that underlined by Corona Pandemic.

India, with its vast population and diverse healthcare landscape, faces numerous challenges in ensuring the delivery of quality healthcare services to its citizens. A key aspect of addressing these challenges is the development of a robust public health management cadre. The cadre is responsible for planning, implementing, and evaluating public health policies and programs, making it an essential component of the healthcare system.

Historically, India's healthcare system has undergone significant transformations. The Bhore Committee Report of 1946 laid the foundation for the country's public health infrastructure, emphasizing the need for preventive and promotive healthcare. However, over the years, the focus shifted towards curative services, leading to an imbalance in the healthcare system. Recognizing this, the National Health Policy aimed to reorient the system towards primary healthcare and preventive measures with active involvement of traditional health systems AYUSH.

Despite these policy initiatives, the development of a specialized public health management cadre has been slow and uneven across the country. The lack of a dedicated workforce trained in public health management has hindered the effective implementation of health policies and programs. The current cadre comprises individuals from diverse backgrounds, including medicine, administration, and public health, resulting in a lack of standardized training and expertise. Several challenges impede the effective development of a public health management cadre in India:

- Limited Training Infrastructure
- Inadequate Recruitment and Retention Policies
- Interdisciplinary Approach
- Resource Constraints

Opportunities for Improvement:
Addressing these challenges potential opportunities are:

- Enhancing Training Infrastructure: Investing in the establishment and strengthening of institutions dedicated to public health management training is essential.
- Developing Standardized Curriculum: A standardized curriculum that encompasses the diverse aspects of public health management is crucial. This should include topics such as epidemiology, health policy analysis, program evaluation, and leadership skills.
- Revamping Recruitment and Retention Policies: It is imperative to formulate clear and attractive recruitment and retention policies. This includes offering competitive salaries, career progression opportunities, and ensuring job security. Recognizing and rewarding excellence can further motivate.
- Interdisciplinary Collaboration: Fostering collaboration between healthcare, administration, and social science disciplines is essential for holistic understanding of public health challenges.
- Utilizing Technology: Upgrading technological skills is the need of time for better handling of public health challenges.
- Public-Private Partnerships: More involvement of Private sector not just playing secondary role but as a partner filling the gaps needs to be given thought.

Drawing inspiration from successful international models and incorporating best practices can further contribute to the evolution and success of the public health management cadre, ensuring a healthier future for the nation.

-Dr Prasad Waingankar

EMPOWERING PUBLIC HEALTH THROUGH TECHNOLOGY

Editorial

Dr. Mrunal Pimparkar
Professor, Community Medicine &
Medical Education Unit (MEU) Co-ordinator, MGM Medical College, Navi Mumbai

In recent years remarkable technical innovations have emerged in health care. From telemedicine connecting patients with healthcare providers across vast distances to Artificial intelligence-driven data analytics predicting and managing health trends, the influence of technology is reshaping the future of public health and healthcare accessibility & delivery. Technology is revolutionizing public health in various ways:

1. Telemedicine:

Telemedicine has made health care more accessible, enabling remote consultations and monitoring. Medical imaging, video consultations, remote medical diagnosis and evaluations, tele-treatment, and medication management are some of examples of telemedicine.

Success stories of telemedicine services in India: include mammography services at Sir Ganga Ram Hospital, Oncology at Regional Cancer Center, Trivandrum; surgical services at SGPGI, Lucknow. Telemedicine vans enabling doctors in remote places connect to any telemedicine-enabled medical hospital and super specialty hospital for expert opinion. Private hospitals like Narayana Hrudayalaya, Apollo Telemedicine Enterprises, Asia Heart Foundation, Escorts Heart Institute, Amrita Institute of Medical Sciences, and Aravind Eye Care also use appropriate and updated technology for effective patient care.

Telemedicine in Public health: In the recent years, the Ministry of Health, Government of India has taken up projects like Integrated Disease Surveillance Project, National Cancer Network (ONCONET), National Rural Telemedicine Network, National Medical College Network, and the Digital Medical Library Network. Telemedicine helps to assist in scheduling and tracking Vaccination programs, ensuring that children receive the appropriate vaccines. Telehealth platforms are used to provide counselling and support for individuals with substance use disorders, mental health care services, prenatal and postnatal care for women in remote areas, Triage in times of natural disasters or emergencies, support the elderly, School-based Telehealth clinics providing children timely medical care without needing to leave school premises etc.

Telemedicine during COVID-19 pandemic: The implementation of virtual care was hastened nationwide during the coronavirus (COVID-19) outbreak. Telemedicine made a substantial contribution to cope with the current pandemic of Covid-19 in several ways:

- Telehealth: Patients could receive prescriptions & medication management through telehealth.
- Mental health: It provided psychological support to patients and their family members without getting exposed to the infection, offering counselling and therapy services online.
- Access to Health care: Especially for those who couldn't visit clinics due to lockdowns, travel restrictions, social distancing. Telemedicine served as a safe and effective alternative to in-person care for individuals with conditions like bronchial asthma, hypertension, and diabetes mellitus, who were particularly susceptible to COVID-19, and medication compliance and disease optimization were important ways to mitigate severity.
- Helped in reducing the burden on the tertiary hospitals by providing diagnosis and treatment to patients in their own geographical location and reducing chances of patient's exposure due to hospital visits.
- Helped in providing training to the care providers of sick and disabled children and elderly.
- Screening and Triage: directing individuals to appropriate levels of care and reducing burden on emergency rooms.
- Monitoring and follow-up of COVID-19 patients, tracking their symptoms and vital signs and providing timely interventions.
- Educating the public about preventive measures and vaccination

Challenges in Telemedicine and Telehealth:

- Ensuring the privacy and security of sensitive health data
- Many medical conditions require in-person consultation & examination, raising concerns about safety and quality of care in telehealth for such cases.

- Limited digital literacy especially in older populations and underserved communities.,
- Technical issues like poor internet connectivity, digital illiteracy, technical glitches can affect the effectiveness of telehealth.

These examples illustrate the diverse applications of telemedicine in public health, thereby paved the way for a more digital and resilient healthcare system in the future. Furthermore, its wider acceptance and implementation will help us prepare better for any future pandemics. However, it cannot replace in-person consultation or emergency medicine.

2. Artificial Intelligence (AI):

Implementation in the healthcare sector:

For India, where there is acute shortage of doctors, Artificial intelligence is likely to prove essential. Artificial Intelligence (AI) has the potential to transform healthcare in various ways. It can turn large amounts of patient data into actionable information, improve public health surveillance, accelerate health responses, and produce leaner, faster and more targeted research and development. AI applications being developed and deployed in India include algorithms that analyze chest x-rays and other radiology images, read ECGs and spot abnormal patterns, automatically scan pathology slides and assess fundus photographs for signs of retinopathy.

Recent examples of AI implementation in India's healthcare sector:

- COPD diagnosis and management: AI-based solutions have been developed to aid in the diagnosis of COPD. These include early warning systems that use specialized spirometer along with advanced analytical tools to identify symptoms and provide insights about COPD. An AI-powered inhaler is one of the solutions to track the patient's compliance to the prescribed medication and to monitor the correct drug delivery technique. Advanced Computational Fluid Dynamics tools are also being used to visualize lung parameters.
- Tuberculosis (TB) diagnosis: The Central TB Division of the MoHFW is exploring opportunities in applying AI for the country's fight against tuberculosis. The national TB program, which is intended to be AI-ready, aims to support the identification of disease clusters/hotspots and vulnerability mapping through cluster analysis, devise newer methods of diagnosis and screening, providing decision support to caregivers.
- Cancer screening: With around one million new cases being diagnosed every year, India is expected to witness the challenge of a shortage of experienced oncopathologists. In future, AI could assist pathologists in making quality diagnosis. However, this would require high quality pathology datasets. A national-level repository of curated pathology is being developed by the NITI Aayog. Another initiative to develop a cancer imaging biobank based on AI-based radiomics principles is also being discussed.
- Diabetic retinopathy screening: NITI Aayog is working on a pilot project with Microsoft and Forus Health to explore the use of AI for early detection of diabetic retinopathy (DR). The objective is to develop an AI algorithm for the detection of signs of DR in diabetic patients and to scientifically validate the algorithm to be used as a screening tool in primary care.
- Public health surveillance: Remote monitoring systems like the Indore 311 mobile app launched by Madhya Pradesh has been used to track asymptomatic patients and generate alerts when suspected patients break home isolation regulations.

Thus, innovative and sustainable AI technology has the potential to greatly improve healthcare outcomes in India.

3. Technology-Based Interventions to Improve Vaccination:

IT in health care has already begun to demonstrate great potential to transform how vaccine delivery is supported and to substantially improve vaccination coverage. Technology plays a crucial role in vaccination management in several ways:

- Use of Electronic Health Record (EHR) System to Improve Vaccination Coverage: EHRs and databases are used to record vaccine administration, EHR alerts of missing or delayed vaccinations, tracking patients in need of vaccines, identify patients who are delayed, facilitate ordering and coding of multiple vaccines.
- Vaccine Tracking and Monitoring: Barcoding and tracking systems are used to monitor the movement of vaccine shipments, ensuring they reach their destinations and are not tampered

with during transit. Temperature monitoring systems ensure vaccines are stored at the correct temperature.

- Sending automated reminders: to patients for vaccine appointments and follow - up doses, reducing the risk of missed vaccinations and reduces waiting times.
- Digital vaccine certificates: can be used to verify individual's vaccination status, facilitating travel and entry to certain places.
- Digital reporting systems: enable healthcare providers to report adverse events or vaccine reactions contributing to vaccine safety monitoring.
- In case of outbreaks or emergencies: technology assists in rapidly identifying at-risk populations, distributing vaccines, and coordinating response efforts.
- Advances in Vaccine Technology: The introduction of genetic engineering has fuelled rapid advances in vaccine technology and is now leading to the entry of new vaccines for benefit of population. Technology aids in vaccine research, development, and clinical trials, expediting the creation of new vaccines and treatments.
- Data Analytics: Data analytics tools are used to analyze vaccine coverage, identify areas with low vaccination rates, and develop targeted interventions.

Thus, utilizing health information technology has helped to improve vaccine communication and coverage.

Success stories of use of technology in vaccination programs in India:

- CoWIN Portal: was instrumental in managing and tracking COVID-19 vaccinations in India. It allowed individuals to register for vaccines, schedule appointments, and receive digital certificates upon vaccination.
- Aarogya Setu App: The Aarogya Setu mobile app was widely used for contact tracing, self-assessment, and information dissemination during the COVID-19 pandemic. It also provided information about vaccination centers and allowed users to book appointments.
- eVIN (Electronic Vaccine Intelligence Network): eVIN is an innovative technology that digitizes vaccine stocks and monitors the temperature of vaccines in real-time. It has significantly improved vaccine distribution and management, especially in rural areas.
- Mobile Vaccination Units: India implemented mobile vaccination units equipped with refrigeration, GPS tracking, and biometric verification. These units reached remote and underserved areas, ensuring equitable access to vaccines.

4.Use of Technology in developing Health Apps and health care devices:

Wearable devices like fitness trackers and smartwatches promote preventive health measures and disease management. Wearable fitness bands allow users to easily track metrics such as total steps taken, heart rate, amount and quality of sleep each night which help individuals better identify, track and achieve their own health and fitness goals.

India has seen a proliferation of health apps catering to various healthcare needs. These health apps cater to a range of healthcare needs, from finding doctors and ordering medicines to accessing telemedicine services and maintaining overall wellness. Some examples of health apps in India: Practo, Medlife, 1mg, Netmeds, PharmEasy, Portea etc.

5. Use of Technology in fostering global cooperation in health research and response:

Digital platforms enable the sharing of research findings, clinical data, and epidemiological information across borders, facilitating collaboration among researchers and healthcare professionals worldwide. Technology allows for the creation of global research networks and consortia, Virtual Conferences and Webinars, bringing together experts from different countries to work on common health challenges, facilitate knowledge exchange and the pooling of resources.

Conclusion:

The use of technology in public health is immense. It helps to improve healthcare access, patient outcomes, and overall well-being. However, we must acknowledge the challenges that come with this digital transformation, such as addressing the digital divide, privacy concerns, and maintaining the human touch in healthcare. Also, it is essential to ensure that the benefits of these innovations are accessible to all. Striking a balance between technological innovation and equitable healthcare delivery remains a priority.

Dilemmas of 'New Mothers' About Breastfeeding!

Dr. Kamaxi Bhate
BPNI Member & Ex-Professor, Community Medicine, Seth G. S. Medical College & KEM Hospital Mumbai

All animals naturally breastfeed their babies, then why do human mothers face a dilemma?

One of our senior colleagues used to make fun of us and say - "Why do you have this Breastfeeding (BF) awareness week? Why do you want to waste your time in teaching mothers, what they should naturally know? These modern girls don't want to breastfeed because they don't want to spoil their figure. In villages no one teaches women, and still those mothers know how to feed and what to do!"

But this is not always true. As per NFHS-5, in our country early initiation of BF (within one hour after birth) is only 45%, exclusive BF (up to six months, only mother's milk and not even water) is 65%, and timely introduction of complementary feeding is as low as 50%. That means, late initiation of BF, less exclusive BF and too early or too late starting of complementary feeding, all three can lead to malnutrition in infants. The percentage of all these three parameters is much lower in rural India than in urban areas. So kindly do not believe that in rural areas percentage of BF is higher and mothers naturally know about breastfeeding.

Why initiation & exclusive BF rates so low?

Most of the mothers who want feed their babies, have been wanting to know more about it, or those who have queries to ask due to conflicting advice given to the new mothers. Let us see what queries women have? So, we can know why initiation & exclusive BF rate so low in India.

When to Start BF?

As soon as possible within one hour of childbirth, baby needs to be put to the mother's breast. Baby needs to be cleaned after birth just with a dry cloth and then put the baby to mother's breast even while other obstetric procedures are going on. Not because baby is hungry, but because the baby is very alert during this hour and to make use of two, newborn reflexes of baby for successful initiation- Rooting reflex and Suckling reflex.

Rooting reflex means any touch of finger or nipple of the breast on any part of the face or cheek of the new bourn, the baby opens its mouth wide. This is the time the new mother can offer the breast to the baby. That will establish latching and Suckling. **Start as soon as possible within one hour, Use the Golden Hour!**

What is a good latching of the baby to the breast?

It is the position of baby's mouth at the breast of the mother. While baby opens its mouth wide in golden hour, most of the areola of the breast, more of the lower portion of areola can be in the mouth of the baby. Baby's lower lip turns outwards, babies chin touching the breast, this is a good latching. This helps baby suckle the breast effectively. The baby having a good latch is able to press areola of the breast against the hard pallet with the help of lover jaw and is able draw milk in the mouth with the help of the tongue movements This is called effective suckling. Good latching can help in effective suckling! Baby uses her tongue, lower jaw and hard pallet for suckling. Good latching even helps baby in effective suckling in later life for exclusive BF.

"I can't see any milk coming out from my breast, how will my baby get satisfied?"

This is the new mother's worry. Even if mother is very motivated to breastfeed the baby and is even mentally prepared for feeding colostrum but when she sees only few drops of brownish, yellowish sticky secretions coming out of her nipples for many hours, she gets worried and thinks, 'This couldn't be enough for the newborn!' Colostrum, the thick yellowish milk mothers produce just after birth, is the ideal nourishment for a newborn full of nutrients and rich in antibodies, it is also the baby's first vaccine.

What is the importance of Golden hour?

The first one hour after birth of the baby is called the Golden Hour. Baby is most active and awake. The newborn reflexes of the baby, the rooting reflex helps baby open the mouth wide and grasp the areola along with the nipple, if baby is put to the breast, in this first Golden Hour the baby can suckle on the areola for colostrum. If baby is not put to the breast in this hour, the newborn baby will go to sleep after one or two hours. Baby sleeps

for three to four hours and when wakes up is hungry. Though the colostrum is present in the breast; since baby has not learnt effective suckling in the Golden Hour, does not get colostrum. Baby hauls with hunger, and the relatives start taunting the new mother for not having the breast milk. The relatives trouble the nursing staff *ayabai* and staff for mother not having milk, they quickly suggest all sorts of feeds like sugar water, honey, or tin milk.

What is Bedding In?

Keeping the baby and the mother, not only in the same room, which was called Rooming In, but keeping the baby with the mother, in her bed is called bedding in.

Is it safe to keep the newborn baby and the mother in the same bed?

Newborn baby is most safe when put in the same bed with the mother, this makes the mother stress free, as the baby is just next to her. The baby gets warmth from the mother. First 12 to 15 days after birth, the baby needs to be woken up every two hours and put to the breast, that means (10 to 12 times in 24 hours.) This is because the baby keeps sleeping in the early neonatal period even though hungry, hence first twelve days it is important to wake up the babies and put them to breast every two hours. Unwrap the babies to wake them and feed them. Feed newborn more often, this will increase milk production.

If the baby is next to the mother, in the same bed, it is easy for mother to put the baby to the breast even in lying down position during the day or night. Night feeds are very important. By putting the baby in the same bed helps mother, observe the baby cues. The baby cues are movements of the lips, suckling of fingers, rolling of eyes, movements of limbs, these are some of the early signs of hunger the babies show. The very last baby cues are crying! Before the baby cries, she should be breastfed, because crying makes the baby irritable and doesn't latch well. This leads to less effective suckling, and such babies loose calories. Thus, keeping the baby in the same bed helps mother feed baby easily, the baby gets colostrum which is full of necessary nutrients, antibodies and repeated breastfeeding creates bonding between the newborn and the new mother. This in turn helps mother get lot of matured milk.

If baby is kept in the same bed as the mother, will mother roll over her baby?

Mother is most cautious about baby's safety. She can never roll over the baby. We want the new mothers to be feeding their babies every two hours, day and night. We can't expect mother to sit up and feed the baby all these hours. Feeding while lying down and can give mother good rest. While mother feeds the baby lying in in the bed, and while feeding the baby turns to the mother, there is good skin to skin contact between the mother and the baby **this increases milk production**.

Night feeds are very important as studies have shown that breastfeeding women's prolactin levels are significantly higher at night, particularly in the wee hours of the morning. Babies often want to nurse at night simply because, there is more milk at night!

Mothers are advised by relatives, nursing staff, other staff of the hospital or sometimes even by doctors to sit up and feed the baby to avoid choking in baby. If she is sitting up and feeding, it is important for mother to take a good back rest while feeding in sitting position to avoid back ache.

Will baby get choked if fed by mothers while lying down?

No, babies do not get chocked while BF even if the mother is in lying down position while feeding. This is simply because whether mother is sitting up and feeding or lying down and feeding, baby's position doesn't change, babies are in any case in transverse position, in either way while feeding. Hence mother lying down feeding the baby will not cause choking. **But conflicting advice given by health personals can cause dilemmas in the mind of mother.**

Why All Mothers Should Learn Expressing the Breastmilk?

It is important for new mothers to learn expressing the breast milks even though there is no engorgement – in case the baby is ill and can't suckle well, lot of milk gets left in the breast itself leading to engorgement of the breast.

In case of low-birth-weight babies, due to lack of effective suckling, the milk gets collected in the breast. Collected milk needs to be taken out manually to prevent engorgement of breasts. Manual removal of the milk will help continue milk production.

Expressed breastmilk can be fed to the newborn baby with the help of tiny plastic cup or glass cup. Before manually expressing the milk, mother needs to bring the milk in the breast under areola very gently. This is done by mother with the help of four fingers movements on the breast, slowly directing milk towards the milk ducts under the areola. To express milk from the breast, index finger and thumb are used in small C position to press at areola from all sides to take out the milk from the breast.

In the initial days after giving birth, many new mothers also struggle to learn how to breastfeed. Both mothers and babies need to practice breastfeeding over time. Early initiation solves half the problem, with the use of newborn reflexes baby learns latching and suckling. Effective latching and repeated suckling will help baby get required colostrum from mother's breast. Even that small quantity is enough for the baby for first three days. Uneventful initiation is the beginning of the successful exclusive breastfeeding till baby completes six months.

What is Exclusive Breastfeeding?

Feeding the baby only mother's milk not even water for the first six months is called exclusive BF. As the baby is growing, mother feels that her milk may not be enough for the baby, because the baby may not look as chubby as seen in the picture on baby food tin or baby is passing stool once in 3-4 days or the baby is passing stool 5-6 times in a day. The mother is either been wrongly advised that she should start some top milk to prevent baby going hungry or tin food during that period. These conflicting advises add the dilemmas in mother's mind.

Is there a simple test that can be used to check if only mother's milk is enough for the baby?

Yes, watch for three parameters, this is in case of exclusively Breastfed babies only.

The baby gains weight about 15 gm/day or about 450 gm/month when milk is adequate. Simplest way to remember is baby weight doubles that of birth weight at the end of six months, triples at the end one year. Second parameter is baby passes urine at least six times in twenty-four hours. Thirdly baby passes yellow and soft stools. Passing stools once in 5-6 days or 5-6 times in a day in exclusively breast-fed six months baby, is normal.

What is demand Feeding?

Demand feeding is, feeding the baby when she demands! 15 days after birth the baby need not be woken up for feeding.

How do babies demand breastmilk?

Babies demand by showing baby cues or crying. It need not have any timetable. Making use of baby cues is beneficial.

What are the benefits of Breastfeeding?

Benefits to the baby –

Just the right amount of nutrients in the right proportions. There are over 200 components in mother's milk. It has the live cells, fat, carbohydrates, proteins, vitamins, minerals in right amount. Less fat than most other mammals, and more lactose than other mammals. Less risk of illness such as: Ear infections, pneumonia, Crohn's disease and other bowel illnesses, stomach flu and other intestinal illnesses, childhood cancers, diabetes, arthritis, allergies, asthma and eczema.

Breast milk protects a baby's gut lining from viruses and provides immune protection to the baby. Breastfed babies have been found to have less constipation or diarrhea than formula fed babies. Breast fed Babies are introduced to different flavors and tastes of food via the mother 's milk, making a child more likely to want to try these foods later in life.

Breastfeeding also gives better dental health, increased visual acuity, decreased duration and intensity of illnesses, less allergies, better health & less risk of illnesses.

Further, breastfeeding is associated with an IQ increase of a child by 3 to 4 points.

Is Breastfeeding the baby, beneficial to the mother also?

Yes, mother is also benefited by breastfeeding her baby.

Psychological benefits to mother Skin to skin contact creates, attachment, bonding, security, fulfilment of basic needs, relationship. BF leads to easier post-delivery weight loss in mothers. BF decreases the risk of ailments in mother, prevents PPH, breast cancer, osteoporosis, ovarian cancer.

BF is convenient for mother while travelling and even at night. Breastmilk is always available. No warming or washing, sterilizing of bottles is required, no heating water or milk so, reduces lot drudgery for the mother.

Is mother's milk enough in case of Twins?

If the birth weight of both the babies is up to 2Kg. and do not require special care and treatment, the babies can be fed only on mother's milk.

The milk production from the mother's breast depends on the demand. As twin babies will suckle more the production of the milk will get stimulated. The important thing is both the babies should be fed together in football position. This will help milk production and let down reflex. Feeding both the babies together helps in letting the weaker baby also suckle well. At the end of suckling sessions, mother need to pump the milk out with help breast pumps. so that milk production is maintained.

This should be part of mothercraft clinic during antenatal period. Not only for mothers but all those relatives who are decision makers. It is important to use dolls to demonstrate the positions of the baby and the mother.

Which is the best time to teach mothers about BF?

Very early in life may be in adolescent period! While they learn about growing up, menstruation, contraception, conception, mother care and eventually breastfeeding. Any ways all this should be part of boys' training also!

What about the cleaning and washing of the breasts before feeding?

The skin of breast and areola is very delicate. Repeated washing or wiping of breast can cause dryness of skin at the areola. This can lead to cracked nipples, which becomes very painful, it interferes with feeding the baby. Cracked nipples can get infected, milk may remain stagnant in the breast leading to engorgements and breast abscess. It is not necessary to wash the breast every time before feeding, usual bath is enough.

Give Mothers Constant Support!

Successful breastfeeding procedures call for supportive surroundings and expert instruction. Mothers need support from their partners, families, healthcare professionals, employers to give their babies the best possible start in life!

This much and more information cannot be part any ANC visits and much less possible after childbirth. After the baby is born each mother and babies immediate requirement is different. There aren't mother support groups, counselors everywhere. But for promoting early initiation, exclusive breastfeeding, continuing breastfeeding along with timely introduction of complementary feeding, new mothers should be having help and information all the time, any time of the day and night!

We the members of **Mumbai Breastfeeding Promotion Committee, BPNI (Maharashtra) and Patient Education Centre of KEM Hospital** created pictorial information in three languages (English Marathi and Hindi). TCS very kindly helped us create a very mother friendly android app called ShishuPoshan. This app can be easily downloaded free of cost from the play store. This app is helpful for not only to the new mothers, but also for nursing staff, doctors and even for the relatives.

The young parents who want the information about BF and childcare in English is available on the app and the same information is also available Hindi and Marathi for the relatives who do not understand English. This app has become very popular amongst the Anganwadi workers to tell all ANC mothers to download it for continuous support & information. It is easy for the mothers to understand as the information is in simple language & pictorial. **Download ShishuPoshan!**

ShishuPoshan

Millets: Testament to the Anthropocene

Dr. Omkar Rajkumar Shete
Junior Resident, Department of Community Medicine, KIMS, Karad

Introduction

Modern agriculture has primarily relied on genetically modified crops, but the scientific community has rekindled its fascination with ancient grains like millets. These underutilized cereals, with origins rooted in the Poaceae family, boast an extensive history, deep cultural significance, and remarkable nutritional attributes. This article seeks to unravel the botanical, evolutionary, and cultural facets of millets, accompanied by an exploration of their genetic diversity and historical relevance in agricultural contexts.

Botanical and Evolutionary Aspects of Millets

Millets, categorized as C4 grasses within the Poaceae family, trace their evolutionary lineage to Africa and Asia. Archaeological evidence dates the inception of millet cultivation to approximately 7000 BCE in China, demonstrating human adaptability to diverse climatic zones. Recent excavations have unearthed millet grains in ancient sites across continents, underscoring their pivotal role in early civilizations. Millets, with their exceptional resilience, have contributed to sustenance from the Indus Valley to the Nile Delta, accentuating their indispensable role in human development.

Cultural Significance

Millets have become an integral part of diverse cuisines worldwide, interwoven with cultural rituals, folklore, and artistic expressions. In India, various regional cuisines feature finger millet (Eleusine coracana) and pearl millet (Pennisetum glaucum) as staple cereals. In Africa, sorghum (Sorghum bicolor) and pearl millet are dietary cornerstones and economic powerhouses. Beyond dietary sustenance, millets actively participate in religious ceremonies, festivities, and community cohesion.

Millets in India

In India, millets have left an indelible mark on its cultural heritage. Millets have been an integral part of our diet for centuries. In addition to a plethora of health benefits, millets are also good for the environment with low water & input requirement. With the aim to create awareness and increase production & consumption of millets, United Nations, at the behest of the Government of India, declared 2023 the International Year Millets. Distinct regions boast unique millet-based dishes, each reflecting local ecological niches and traditions:

- Ragi (Finger Millet): Celebrated for its nutritional prowess, ragi is a gluten-free cereal prominently featured in several South Indian states, particularly Karnataka. Its high calcium, iron, and dietary fiber content contribute to its nutritive appeal.
- Bajra (Pearl Millet): Flourishing in arid and semi-arid regions, bajra serves as a vital grain in states like Rajasthan, Gujarat, and Haryana. It provides a rich source of carbohydrates, magnesium, and phosphorus.
- Jowar (Sorghum): Highly versatile, jowar is a significant millet in India, notably in Maharashtra, Karnataka, and Telangana. Its high fibre and antioxidant content make it an ideal choice for weight management and blood sugar regulation.
- Varagu (Kodo Millet): Known as "Varagu" in Tamil, Varai or Bhagar in Marathi, is commonly grown and consumed in Southern India, especially in Tamil Nadu and Andhra Pradesh and in some regions of western ghats. It promises a plethora of health benefits. It is gluten-free and rich in dietary fiber, making it an excellent choice for digestive health. This millet also contains essential minerals such as calcium, iron, and magnesium, making it a good choice for bone health and overall well-being. Varagu can be used to make dishes like varagu rice, varagu upma, and varagu dosa, offering a healthy alternative to traditional rice-based dishes and is often consumed on occasion of religious fasts in Hindu religion.

Nutritional values: (per 100 gm raw millets)

Millet	Protein gm	Fat gm	Mineral gm	Crude Fibre	Carbs gm	Energy Kcal	Ca µg	P µg	Fe Mg
Bajra	11.6	5.0	2.3	1.2	67.5	361	42	296	8.0
Italian Millet	12.3	4.3	3.3	8.0	60.9	331	31	290	2.8
Jowar	10.4	1.9	1.6	1.6	72.6	349	25	222	4.1
Porso (Panivaragu)	12.5	1.1	1.9	2.2	70.4	341	14	206	0.8
Ragi	7.3	1.3	2.7	3.6	72.0	328	334	283	3.9
Samai (small)	7.7	4.5	1.5	7.6	67.0	341	17	220	9.3
Sanwa (Barnyard)	6.2	2.2	4.4	9.8	65.5	307	20	280	5.0
Kodo (Varagu)	8.3	1.4	2.6	9.0	65.9	309	27	188	0.5

Millets in Africa

Across Africa, sorghum and pearl millet remain dietary staples. These cereals contribute significantly to sustenance and economic development:

- Sorghum: Known as "jowar" in some Indian regions, sorghum boasts a long history in African agriculture. Its drought tolerance renders it essential for food security in many African nations.
- Pearl Millet: Parallel to its role in India, pearl millet sustains arid and semi-arid regions of Africa. It is a valuable element of the African diet, providing essential protein and dietary fiber.

Nutritional Profile

A detailed scrutiny of millets' nutritional composition unveils their scientific allure. These gluten-free cereals are rich in dietary fiber, essential B-complex vitamins, and minerals, including iron, magnesium, and phosphorus. Their antioxidant content positions them as low-calorie superfoods with potential anti-aging properties. Millets' low glycemic index holds promise for blood sugar management especially in diabetic patients and fitness enthusiast. Such miraculous superpowers of millets pave their way into the recommendation lists of expert dieticians.

Health Benefits

Millets contribute to health in multifaceted ways:

a. Weight Management: Millets, with their high dietary fiber along with low carb content, promote satiety, potentially curbing overall calorie consumption - a boon for weight management in an era of rising obesity concerns.
b. Cardiovascular Health: The magnesium content in millets regulates blood pressure and cardiac rhythm, offering a preventive measure against heart diseases.
c. Plant-Based Protein Source: Millets serve as a valuable source of plant-based protein, addressing the dietary needs of vegetarians and vegans.
d. Antioxidant Properties: Millets' abundance of antioxidants confers protection against oxidative stress, reducing the risk of chronic ailments such as cancer and protects their staple consumers from early ageing and hazards of free radical injuries at cellular levels.

Nutrigenomics

Advancements in the field of nutrigenomics have illuminated the potential of millets to modulate gene expression associated with metabolic health. Nutrigenomics, the scientific exploration of how specific dietary nutrients interact with genetic material, influencing various metabolic pathways and physiological processes, has identified millets, given their diverse nutrient composition, as subjects of interest within this burgeoning discipline. Researchers are actively investigating how the constituent nutrients in millets, encompassing dietary fiber, vitamins, minerals, and antioxidants, can interact with an individual's genetic makeup. Notably, certain genetic variations can impact the efficiency of carbohydrate metabolism, and millets, characterized by their low glycemic index, may offer advantages to individuals with specific genetic predispositions linked to blood sugar regulation.

Furthermore, the antioxidant content in millets, featuring compounds like phenolic acids and flavonoids, may have a role in modulating gene expression connected with oxidative stress and inflammation. These bioactive compounds hold the potential to confer protection against chronic illnesses, including cancer, by influencing specific genes governing cell growth and repair. As nutrigenomics continues to evolve as a field of study, it promises to enable the customization of dietary recommendations based on an individual's genetic constitution. This personalized approach to nutrition stands to revolutionize dietary decision-making, potentially optimizing health outcomes and the prevention of diseases.

Culinary Utilization

Millets offer a wide spectrum of culinary possibilities, from fluffy pancakes to crisp dosas, Savory porridges, and grain bowls. Varied cooking techniques enhance millets' unique attributes. Boiling, steaming, and simmering yield fluffy grains for side dishes or pilafs, while roasting accentuates their nutty flavor, ideal for granolas, protein bars, muesli, and snacks.

i. **Millet Pancakes**: Millet pancakes, a global breakfast favorite, amalgamate delectability with nutrition. Ground millet flour mixed with water, milk, or yogurt yields a versatile batter. Cooked to a golden hue, they can be garnished with fruits, nuts, or yogurt.

ii. **Millet Dosas**: In South India, millet dosas are cherished for breakfast. These thin, crisp crepes, crafted from millet flour, rice flour, and urad dal (black gram) flour, derive their distinctive tanginess from fermentation. Typically paired with coconut chutney and sambar, millet dosas offer both a palatable culinary experience and nutritious start to the day.

iii. **Savory Millet Porridge**: Across many African nations, millet porridge is a staple relished by all age groups. Preparing Savory millet porridge involves simmering millet grains until they attain a creamy consistency, seasoned with spices, herbs, and occasionally vegetables. Its creamy texture and mild flavor make it a versatile accompaniment to various meals.

iv. **Millet Grain Bowls**: Western cuisines have enthusiastically embraced millets in grain bowl preparation These customizable, nutritious meals combine millets with an array of toppings, proteins, and flavorful sauces, offering a balanced dietary experience.

v. **Ragi Milk porridge**: My personal favorite and my moms' personal recipe. Begin by heating milk in a saucepan. In a separate bowl, mix ragi flour with milk to form a smooth paste. Pour this mixture into the saucepan and stir constantly. Add a 1 tsp organic jaggery/ honey, cardamom powder, and ghee. Cook until thickened. Garnish with nuts and serve warm.

Modern Applications

Millets are experiencing a resurgence, embraced by health-conscious and environmentally aware individuals:

i. **Millets in Gluten-Free Diets**: As a natural gluten-free option, millets cater to individuals with celiac disease and gluten (glidin protein) sensitivity, offering nutritious alternatives for flours, baked goods, and pasta.

ii. **Millets in Snack Foods**: The snack food industry increasingly incorporates millets into healthier alternatives, such as chips and puffed bars, meeting the demands of health-conscious consumers.

iii. **Millets in Baking**: Millet flour enhances the nutritional profile of baked goods by replacing or supplementing wheat flour, introducing a nutty flavor and increasing fibre and nutrient content.

iv. **Millets in Brewing**: Traditional millet-based alcoholic beverages are being revived by craft breweries and homebrewers, offering unique, gluten-free beer options.

v. **Millets in Baby Food**: Millets are recognized for their nutritional value and digestibility, making them an excellent choice for infant cereals and porridges.

vi. **Millets in Animal Feed**: Beyond human nutrition, millets serve as valuable animal feed in regions where they are abundantly grown, promoting livestock health and productivity.

Environmental Impact

In an era marked by environmental concerns, millets offer a sustainable alternative to resource-intensive crops. Their low water requirements, enhanced biodiversity, climate resilience, and reduced greenhouse gas emissions make them an eco-friendly choice. Millets play a pivotal role in bolstering food security in regions susceptible to climate-related disruptions.

Market Opportunities and Challenges

While the resurgence of millets presents numerous opportunities, it also poses certain challenges:

A. Market Opportunities

i. **Health and Wellness Trends**: Growing health-consciousness among consumers fuels the demand for nutritious, gluten-free, and environmentally friendly food options, positioning millets favourably in the market.
ii. **Culinary Innovation**: The versatility of millets encourages culinary experimentation. Chefs and food entrepreneurs continually explore new millet-based products, leading to a surge in innovative millet dishes and snacks.
iii. **Gluten-Free Market**: Millets tap into the expanding gluten-free market, catering to individuals with celiac disease and gluten sensitivity who seek diverse and tasty alternatives.
iv. **Sustainability Initiatives**: Environmental concerns and sustainability initiatives promote millets as a sustainable crop option, attracting conscious consumers and investors.
v. **Food Security Programs**: Governments and non-governmental organizations (NGOs) recognize millets' potential in addressing food security issues and promoting agricultural diversity, leading to support and incentives for millet cultivation.

B. Challenges

i. **Limited Awareness**: Despite their many benefits, millets suffer from limited awareness among consumers. Efforts are needed to educate the public about the value of millets in nutrition and sustainability.
ii. **Processing and Infrastructure**: Millet processing facilities and infrastructure require development and modernization to meet market demands efficiently.
iii. **Market Access**: Expanding millet markets beyond local and niche segments can be challenging, requiring concerted efforts to establish distribution networks and supply chains.
iv. **Regulatory Frameworks**: Regulatory frameworks may need adaptation to recognize and support millets as a viable crop, both in terms of cultivation and product standards.
v. **Research and Development**: Continued research and development are crucial to improving millet varieties, increasing yields, and enhancing their adaptability to changing climate conditions.

Conclusion

The resurgence of millets reflects a growing global awareness of their multifaceted contributions to health and sustainability. These ancient cereals, steeped in cultural heritage, offer myriad benefits, from nutritional superiority to climate resilience and reduced environmental impact. As consumers prioritize health-conscious and eco-friendly choices, millets stand as a testament to the wisdom of our ancestors and a beacon of hope for a more sustainable and health-conscious future. With concerted efforts from stakeholders, millets can transition from a traditional crop to a modern and sustainable solution for nourishing a growing world population.

As I reflect on the legacy of these ancient grains, it becomes evident that their future significance may well surpass their historical importance. In a world searching for resilient, sustainable, and nutritious food sources, millets are poised to play an essential role in the future of agriculture and food systems and are a promising alternative for health-conscious gen Zs'. Hope to see you in the Millets Fanclub soon!

References:

1. Taylor JR, Duodu KG, editors. Sorghum and millets: chemistry, technology, and nutritional attributes. Elsevier; 2018 Oct 12.
2. Hulse JH, Laing EM, Pearson OE. Sorghum and the millets: their composition and nutritive value. Academic press; 1980.
3. https://www.mygov.in/campaigns/millets/
4. Baltensperger DD. Progress with proso, pearl and other millets. Trends in new crops and new uses. 2002:100-3.
5. C Gopalan, B V Rama Sastri, Balasubramanian SC. Nutritive value of Indian foods. National Institute Of Nutrition; 2021: 47
6. Kumar, A., Tomer, V., Kaur, A. et al. Millets: a solution to agrarian and nutritional challenges. Agric & Food Secur 7, 31 (2018). https://doi.org/10.1186/s40066-018-0183-3
7. Saleh AS, Zhang Q, Chen J, Shen Q. Millet grains: nutritional quality, processing, and potential health benefits. Comprehensive reviews in food science and food safety. 2013 May;12(3):281-95.
8. https://www.millets.res.in/m_recipes/Millets_Recipes-A_Healthy_choice.pdf
9. Maharajan T, Krishna TP, Ceasar SA. 14 Nutrigenomics Studies in Millets.
10. Ordovas JM, Mooser V. Nutrigenomics and nutrigenetics. Current opinion in lipidology. 2004 Apr 1;15(2):101-8.
11. Belton PS, Taylor JR. Sorghum and millets: protein sources for Africa. Trends in Food Science & Technology. 2004 Feb 1;15(2):94-8.
12. Yadav OP, Upadhyaya HD, Reddy KN, Jukanti AK, Pandey S, Tyagi RK. Genetic resources of pearl millet: status and utilization. Indian Journal of Plant Genetic Resources. 2017;30(1):31-47.
13. Shivhare R, Lata C. Exploration of genetic and genomic resources for abiotic and biotic stress tolerance in pearl millet. Frontiers in plant science. 2017 Jan 23;7:2069.
14. Baba SA. Effects of Cobalt-60 Gamma Irradiation on Growth and Yield of Pearl Millet (Pennisetum glaucum L.) In The Guinea Savannah agroecological Zone Of Ghana (Doctoral dissertation).

"IPHA Inter Medical College Public Health Quiz Competition: 2023" for Undergraduate Medical Students: Report of Final Round

Dr. Sujata Murarkar – Co-ordinator Final State Round

Date: 11th July 2023

Venue:
Department of Community Medicine, Bharati Vidyapeeth (DTU) Medical College, Pune

Coordinator for Final State Round:
Dr. Sujata Kapil Murarkar,
Associate Professor, Dept of Community Medicine, Bharati Vidyapeeth DTU Medical College, Pune

At the outset welcoming all, the brief information about Dr Jal Mehta in whose name the rolling trophy is awarded to quiz winners, was given by Dr Sujata Murarkar.

Welcome on behalf of Bharati Medical College was done by Dr Prasad Pore, Vice Principal and Professor, Department of Community Medicine.

Quiz Masters:

1. Dr Sanjivani Patil, Associate Professor Department of Community Medicine

2. Dr Sudhanshu Mahajan, Associate Professor Department of Community Medicine

Jury of the quiz:

1. Dr Saibal Adhya (Professor Department of Community Medicine, BV(DTU) Medical College Pune

2. Dr Varsha Vaidya (Professor Department of Community Medicine, BV(DTU) Medical College Pune

Quiz was conducted by quiz masters in five rounds –

1. Direct Question Round (10 Questions. 2 For Each Team)
2. Visual Round (10 Questions. 2 For Each Team)
3. MCQ Question Round (20 Questions. 4 For Each Team)
4. Rapid Fire Round (Max. 10 Questions to be answered in 1 Minute by Each Team)
5. Buzzer Round (10 Questions for Any Team which presses buzzer first)

All participants enthusiastically participated in quiz. The competition was stiff and at times it was difficult to predict the winner.

Welcome by Dr Prasad Pore, Vice Principal and Professor Community Medicine

Jal Minocher Mehta was a Parsi Indian surgeon, and philanthropist, known for his services for the rehabilitation of people who have leprosy. He was the president of Pune District Leprosy Committee and was involved in organizing self-help groups of the leprosy patients and in creating social awareness about the disease through documentaries. He chaired the Serum Institute of India. He was Instrumental in the development and manufacture of measles vaccine from the seed virus stage and thereby making SIIL the only producer of this vaccine in the country. He sat in the Advisory Boards of Pharmabiz, Chronicle Pharmabiz and the Vienna Karl Landsteiner Institute. His efforts towards the Leprosy eradication program included the management of a Leprosy Hospital and a Rehabilitation Centre in Pune. The Government of India awarded him the third highest civilian honour of the **Padma Bhushan**, in 1982, for his contributions to medical science.

Address by Dr Prasad Waingankar
(Secretary IPHA Maharashtra Branch)

Quiz in Progress

Final State Round Quiz Participants

Zone	Zonal Winner	Team
Marathwada	GMC Aurangabad	Jotiraditya V Kaliya
		Shaikh Aman Afsar
Vidarbha	GMC Akola	Sahil Khilwani
		Jay Heda
North Maharashtra	GMC Jalgaon	Fiza Choudhary
		Ram Chaubey
Mumbai & Konkan	BKL Walawalkar Rural MC Chiplun	Ankita Adarkar
		Manasi Deshpande
West Maharashtra	D Y Patil MC Pune	Upasana Sarkar
		Varsha Kanodiya

Team GMC Aurangabad emerged as winner at the end of final round.

Runner up team was Government Medical College, Akola

After the quiz conduction, felicitation of Office Bearers of IPHA, Juries of the quiz and Mentors of all the five contesting teams was done.

Dr Jal Mehta rolling trophy of Inter medical college Public health quiz was handed over to winner team of Government Medical College Aurangabad by Dr Prasad Waingankar (Secretary IPHA Maharashtra Branch), Dr Prasad Pore (Vice Principal and Professor Department of Community Medicine, Bharati Vidyapeeth (DTU) Medical College Pune), Dr Nandkumar Salunkhe (Treasurer, IPHA Maharashtra Branch), Dr Saibal Adhya (Professor Department of Community Medicine, BV(DTU) Medical College Pune), Dr Varsha Vaidya (Professor Department of Community Medicine, BV(DTU) Medical College Pune), Dr APS Narula (In-charge RHTC, BV(DTU) Medical College Pune.

Jury for State Round: Dr Saibal Adhya, Professor Department of Community Medicine, BV(DTU) Medical College, Pune

Jury for State Round: Dr Varsha Vaidya, Professor Department of Community Medicine, BV(DTU) Medical College, Pune

Certificates were given to all the participants of all teams. Vote of thanks was given by Dr Sujata Murarkar.

Awarding Dr Jal Mehta rolling trophy
of Inter Medical College Public Health Quiz 2023 to
Winning team - Government Medical College Aurangabad

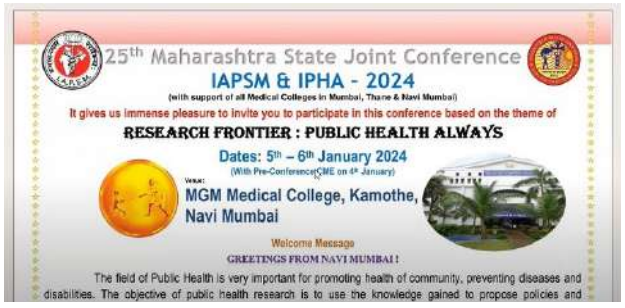
'India 2047: 1.6 BILLION LIVES - INFINITE POSSIBILITIES'

CME Report by Dr. Ashlesha Tawde - Organizing Jt. Secretary

A CME titled, '**India 2047: 1.6 BILLION LIVES - INFINITE POSSIBILITIES**' was organised in hybrid mode to commemorate World Population Day 2023. The program was jointly organised by MGM Institute of Health Sciences Navi Mumbai and Indian Public Health Association, Maharashtra Branch, on the 28th of July 2023 at MGMIHS.

On this occasion the 2nd issue of 15th Volume of IPHA Maharashtra Branch Newsletter was released. This newsletter is a platform for Public Health practitioners across the state to present their views, research work, innovative practices, and experiences in the field.

Also, the website of 25th Joint State Conference of IAPSM Maharashtra Chapter and IPHA Maharashtra Branch displaying the first announcement was inaugurated.



The CME was a timely and important event that brought together experts from various fields to discuss the challenges and opportunities that India faces as it approaches its 100th year of independence. This year's theme of World Population Day is "Unleashing the power of gender equality: Uplifting the voices of women and girls to unlock our world's infinite possibilities."

The CME was inaugurated by Lamp-lighting by Honourable Vice Chancellor, MGMIHS Dr. Shashank Dalvi, Hon'ble Pro-Vice Chancellor Dr. Nitin Kadam in presence of other dignitaries Dr. Akarte, Dean MGM Medical College, Vashi, Navi Mumbai, Professor Dr. Sanjay Zodpey, President PHFI, and online presence of Dr. Gajanan Velhal, President IPHA Maharashtra Branch, and Dr. Sanghamitra Ghosh, National President of IPHA. The eminent speakers of CME and guests were felicitated on this occasion.

The CME speakers highlighted the importance of investing in education and skill development for women and girls, promoting gender equality, and addressing social determinants of health such as poverty and malnutrition. They also emphasized the need to ensure universal access to quality healthcare and family planning services, and to promote sustainable development and environmental protection.

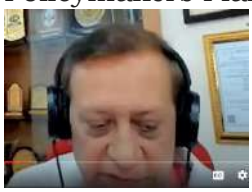
Prof Dr. Udaya Shankar Mishra, Professor at the International Institute of Population Sciences (IIPS), Mumbai, spoke on "A journey to the demographic dividend."

He provided an insightful perspective into various demographic trends in India by 2047 that will influence the democratic dividend. He emphasized that India's demographic dividend is a unique opportunity to accelerate economic growth and social development. However, to reap the benefits of the demographic dividend, India needs to invest in education and skill development, create jobs, and improve healthcare services.

Prof Dr. Sanjay Zodpey, President of the Public Health Foundation of India,

spoke on the topic: "Health workforce in India: Current status and future projections." He highlighted the key challenges such as shortage of personnel, uneven distribution, and lack of training. He also discussed strategies to improve the health workforce, such as increasing the number of medical and nursing schools, providing more training opportunities, and improving working conditions.

Air Vice Marshal Dr. Rajvir Bhalwar, Dean of Pravara Rural Medical College at Loni, joined online and spoke on the topic: "Morbidity shift: Challenges for Policymakers Planners and Implementors".



He discussed the changing patterns of diseases in India, with a shift from communicable to non-communicable diseases and strategies to address the morbidity shift, such as promoting healthy lifestyles and strengthening preventive healthcare programs.

Dr Gajanan Velhal, President IPHA Maharashtra Branch, spoke on the World Population Day theme explaining key factors that impact demography playing a role in reducing gender bias in society going forward. He highlighted the importance of gender equality and women empowerment in achieving demographic goals. He also discussed strategies to reduce gender bias in society, such as educating girls, promoting women's participation in the workforce & addressing harmful social norms.

The panel discussion at the CME was particularly thought-provoking. The panellists discussed a range of aspects, including the role of government and civil society in promoting gender equality, the importance of male engagement in gender equality initiatives, and the need to challenge harmful gender stereotypes. It was moderated by Dr Prasad Waingankar.

The panellists were Hon. vice Chancellor, Dr Shashank Dalvi, Dr Sanghamitra Ghosh, National President of Indian Public Health Association. Dr. Prakash Doke, Professor Bharti Vidyapeeth Medical College, Pune & Ex Director Health Services, Maharashtra, Dr Harshad Thakur, Professor, Centre of Public Health, School of Health System Studies, TISS, Mumbai and Ex- Director NIHFW.

The panel discussion focused on the challenges and opportunities of achieving India's demographic goals. The speakers discussed the importance of investing in education and skill development, promoting gender equality, and addressing social determinants of health. They also emphasized the need for sustainable development and environmental protection. Investing in education and skill development for women and girls is essential for empowering women to participate fully in society and to reach their full potential. Promoting gender equality and empowering women to participate fully in society can be done through a variety of means, such as changing social norms, enacting and enforcing anti-discrimination laws, and providing support services for women. Addressing social determinants of health, such as poverty and malnutrition is important as these factors have a significant impact on women's health and well-being. Ensuring universal access to quality healthcare and family planning services is essential for improving women's health and well-being, and for reducing maternal and child mortality. Promoting sustainable development and environmental protection is important for creating a healthy and sustainable environment for all Indians. All these recommendations and action points are interconnected and need to be addressed comprehensively to achieve more equitable and sustainable future for all Indians.

The CME was attended by approximately 400 participants virtually across the country. The Maharashtra Medical Council has awarded 2 Credit points for it. Organization of event was assisted by Assistant Professors Dr. Noopur Kulkarni & Dr. Ganesh Nair.

"Harnessing the Untapped Potential of Millets for Food Security, Nutrition & Sustainable Agriculture"

CME Report by Dr Shobha Salve – Organizing Chairperson

On occasion of National Nutrition Week 2023 a State level CME was organized in consideration with the International Year of Millets 2023 with theme **"Harnessing the Untapped Potential of Millets for Food Security, Nutrition & Sustainable Agriculture"** on 14th September 2023 at MGM Medical College and Hospital, Aurangabad by Department of Community Medicine and IPHA Maharashtra Branch.

India's age-old nutrition tradition had millets at forefront, but the trend has changed shifting focus on fast food inviting many lifestyle diseases. Therefore, to highlight the importance of millets in our diet, their nutritional advantages, and merits for human life, and environment at large this CME was conducted.

The event commenced with welcome of guests and paying tribute to Mahatma Gandhiji. Dr. Salve, Prof. & Head, Community Medicine, gave preface of the event. Dr. Prasad Waingankar, Secretary, IPHA, Maharashtra branch graced the occasion online & applauded the efforts and topic of choice for the event.

The faculties from GMCH Aurangabad, & IIMSR Badnapur were invited as Guest Speakers for this event. The first speaker Dr. Mahavir Nakel (MBBS MD, FND) enlightened on the theme of International Year of Millets & Nutritional Importance of Millets. The second speaker Dr. Vijay Jadhav (MBBS MD, Director Samanway Fitness Centre) focused on Millets & Health.

Both sessions were informative & useful. Questions from the participants were addressed at the end of CME. Dr. Glory Takawale did the comparing of the event. Dr. Anwaya Magare delivered the vote of thanks. Event concluded with a group photo and refreshment. Feedback from participants was taken. More than 500 participants attended the program combining both online & offline. The benefits of including millets in our diets was highlighted and their role in health was percolated among the audience successfully.

All the faculties and staff of Department worked hard for the success of CME. Assistant Professors Dr. Anwaya & Dr. Glory shouldered the responsibility of the CME as organizing secretaries.

DEPARTMENT OF PREVENTIVE ONCOLOGY

Centre for Cancer Epidemiology (CCE) Tata Memorial Centre

(a grant-in-aid institution under the Department of Atomic Energy (DAE), Government of India)

Cancer ranks as a leading cause of death and the overall, the burden of cancer incidence and mortality is rapidly growing worldwide which have a significant impact on public health due to premature deaths, associated costs with therapy, long-term treatment, and the quality of life of survivors. It is estimated that over 40% of cancer-related deaths could be prevented by addressing modifiable risk factors. Additionally, routine screening, early detection, and treatment have potential to prevent nearly 1/3 of cancer deaths. By implementing appropriate prevention, early detection and treatment strategies, millions of lives can be saved each year.

Discipline of Preventive Oncology primarily focuses on comprehensive prevention and control interventions to reduce the risk of developing cancer, application and uptake of cancer screening/early detection tests including strategies for implementation into clinical and public health practice. Since its inception and establishment in 1997, the Department of Preventive Oncology has been actively engaged in providing Comprehensive range of services for Health Promotion, Cancer Control, Prevention, Screening and Early Detection of preventable cancers.

Recognized as a WHO Collaborating Centre for Cancer Prevention, Screening and Early Detection since 2002, the department has been playing a significant role towards its contribution to inform evidence-based research for cancer control planning efforts at the national and global level. Faculty at the Department of Preventive Oncology has been actively engaged and involved in conducting a range of multidisciplinary research and service projects with cross-cutting themes in this area, demonstrating the importance of comprehensive cancer control in improving outcomes for most common cancers.

The Preventive Oncology services and programs are systematically delivered through the following focus areas:

1. **INFROMATION EDUCATION AND COMMUNICATION**
   a. IEC Cell (Development & Dissemination):
   b. IEC Cell (Population Cancer Education/ Awareness program):
2. **CANCER SCREENING SERVICES:**
   a. Cancer Screening: Hospital and Community-based Screening.
   b. Diagnostic Service & Colposcopy
   c. Pre Cancer Management
   d. SPECIALS CLINICS: Tobacco Cessation Clinics, Dysplasia Clinic.
3. **HEALTH MANPOWER DEVELOPMENT & TRAINING**: Centre and State Governments.
4. **RESEARCH:** Broader themes
   a. Testing evaluating cost effective cancer screening technologies.
   b. Randomised Control Population based cancer screening trails.
   c. Translation Research: Molecular marker for cancer screening.
   d. Implementation/ Operation research for Cancer Prevention Screening Programs
   e. Tobacco Control Cessation/ Policy intervention research
   f. Human Papilloma Virus Vaccine Trails
   g. Behavioural Research & Interventions
5. **ACADEMIC PROGRAMS:**
   a. Flagship Training Workshop under Homi Bhabha National Institute [HBNI]
      i. Cancer Control, Prevention & Screening
      ii. Tobacco Control & Cessation: Epidemiology, Principles and Practice
      iii. Information, Education & Communication for Common Cancer
   b. Fellowship in Preventive Oncology [2YRS]
   c. Research Degree
      i. PhD (Clinical Epidemiology & Preventive Oncology)
6. **ADVOCACY, POLICY, NETWORKING:**

ACHIEVEMENTS: Since its inception the Department of Preventive Oncology has established itself on a national and international stage as a primary resource centre for Service, Education, Research and Training in Preventive Oncology. The programs and projects outline multifaceted, multidisciplinary approach that the Department has undertaken to advance cancer control and prevention in the country. The Department has so far Completed 26 Research Projects with has current ongoing research projects with National [BIRAC, DBT, DHR, ICMR] and International [GACD, IARC, NIH_NCI USA] collaborations and published 90 Indexed Journal Publications with 21 Book chapters/ online series articles, 19 Training Handbooks and 5 expert reviews.

The Department of Preventive Oncology is a recognized Training Centre for Cancer Prevention, Screening & Early Detection with WHO [WHO CC IND-59 [SEARO], INCTR, IAEA and receives trainees in the field of Preventive Oncology from across the regions of Southeast Asia, Asia Pacific and Africa. The Faculty has contributed on several Technical Working and Expert Advisory Group of the Government of India for developing position papers and guidelines for cancer control in India. It is a certified training centre under International Federation for Cervical Pathology and Colposcopy (IFCPC) - IARC for Colposcopy Course in cervical cancer.

- Dr. Sharmila Pimple, Professor and Physician
- Dr. Gauravi Mishra, Professor and Physician
- Dr. Subita Patil, Associate Prof & Physician

Visit for More Information:

https://tmc.gov.in/tmh/index.php/en/preventive-oncology
https://tmcepi.gov.in/PreventiveOncology/PreventiveOncology.aspx

MHIAPSMIPHACON2024

Organized by Department of Community Medicine, Mahatma Gandhi Mission Medical College, Kamothe, Navi Mumbai
(With support of Medical Colleges in Mumbai, Navi Mumbai & Thane)

5-6 JAN 2024

25th Joint State Conference of Indian Association of Preventive & Social Medicine Maharashtra Chapter & Indian Public Health Association Maharashtra Branch: 5th & 6th January 2024

RESEARCH FRONTIER : PUBLIC HEALTH ALWAYS

MHIAPSMIPHACON2024 25 (Research Frontier: Public Health Always)

5-6 JAN 2024

Friday, 5th January 2024
Saturday, 6th January 2024
4 Pre-Conference Workshops
Thursday, 4th January 2024
*** MMC Credit Points**

25th State Conference MAHARASHTRA

@ MGM Medical College, Kamothe, Navi Mumbai, Maharashtra

Public Health research enables developing newer innovative ideas and tools in priority areas and providing initiatives for comprehensive and integrated health care and services for benefit of the community.

Organized by :
Department of Community Medicine,
MGM Medical College, Kamothe, Navi Mumbai
(With Support of All Medical Colleges in Mumbai, Navi Mumbai & Thane)

https://www.mhiapsmiphacon2024.com

Call or WhatsApp: +91 - 85913 14313

Research Study Abstracts of Winners of IPHA Maharashtra Branch Scheme

Padvyuttar Sanshodhan Prakalp Anudan

for Post Graduate Students of Medical Colleges in Maharashtra

2021: Dr. Minal Hatnapure*

B. J. Government Medical College, Pune

Direct Benefit Transfer (DBT) for Tuberculosis patients treated under National Tuberculosis Elimination Programme: A retrospective cohort study from a metropolitan city in Western Maharashtra.

Background: In case of TB, cash incentives for the patients with TB has been found to be more efficacious than non-cash support strategies in improving clinic attendance, increasing awareness among the patient of timing of their follow-up visits and completion of treatment. **Objectives:** This study aimed to assess the coverage and explore enablers and challenges in implementation of direct benefit transfer (DBT) cash incentive scheme for patients with tuberculosis (TB). **Methods:** This is a mixed methods study comprising a quantitative cohort and descriptive qualitative study. The study was conducted in a TU of City TB Centre, Pune, Western India. We used routinely collected data under the National TB Programme (NTP) on patients with TB notified between 1st October 2020 to 30th September 2021 and initiated on first-line anti-tuberculosis treatment (ATT) to assess the coverage of DBT. We interviewed NTP staff and patients to understand their perceptions. Primary and secondary outcome measures. The study outcomes are receipt of DBT (primary), time to receipt of first instalment of DBT and treatment outcome. **Results:** Among 261 patients, 162 (62.1%) patients had received at least one instalment of DBT. Significantly more patients from the public sector had received. For majority of patients 73(45.1%) the time of receipt of first instalment was 2 months to 4 months; The median (IQR) time to receipt of first instalment after treatment initiation was 3.2 (2.4, 4.2) months. Treatment in private sector, residing outside city limits and being HIV non-reactive were significantly associated with longer time to receipt. Timely and sufficient fund release, adequate manpower and adequate logistics in TB centre were the enablers. Inability of patients to open bank accounts due to lack of identity/residence proof, their reluctance to share personal information and inadequate support from private providers were the challenges identified in implementation. **Conclusion:** DBT coverage was found to be reasonable among the study participants, though there were delays in benefit transfer. However, the coverage was low in the private sector. Facilitating opening of bank accounts for patients by NTP staff and better support from private providers may improve DBT coverage. The study participants were not satisfied with the adequacy of DBT. Through analysis is a key in long term success and to derive maximum benefit from this scheme.

*** Guide: Dr. Malangori Parande, Associate Professor, Department of Community Medicine, B J Government Medical College, Pune**