It is heartening to know that IMPF membership currently has 54 MPs from both the House. This is the first time in the history of the Lok Sabha that, profession-wise, medical fraternity membership has risen above lawyers or advocates.

According to a recent report by ICMR and PHFI, it is estimated that the proportion of deaths due to Non-Communicable Diseases (NCDs) in India has increased from 37.9% in 1990 to 61.8% in 2016. The four major NCDs are cardiovascular diseases (CVDs), cancer, chronic respiratory diseases (CRDs) and diabetes, which share four behavioural risk factors – unhealthy diet, lack of physical activity, and use of tobacco and alcohol. Major metabolic risk factors are obesity, raised blood pressure, increased blood glucose and raised blood total cholesterol levels.

India has adopted the Monitoring Framework for Prevention and Control of NCDs and implemented the National Action Plan. As part of the National Health Mission (NHM), India initiated the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). The Programme’s overall focus is on the prevention, early diagnosis, and treatment of NCDs.

Despite the efforts, data show that there is a rising trend of NCDs in India. Hence, the country needs to take more serious action. IMPF calls for a comprehensive review of the current measures and programmes and calibrated approaches and action plans to address NCDs’ prevalence and prevention.

We appreciate the valuable contributions of all our authors to this Monsoon 2022 issue of the IMPF newsletter, making it informative and relevant.
India Needs a Better System to Regulate its Antibiotic Market

Antimicrobial resistance (AMR) is a globally recognized public health crisis. Inappropriate prescription and use and unregulated antibiotic sale are major factors contributing to the spread of antibiotic resistance. When India became independent, the private health sector provided less than 20% of total patient care. In comparison, in recent years, the private sector accounts for 70-80% of outpatient visits, 50-60% of inpatient expenditure, and 40% of births in institutions. Therefore, it is crucial to have a functioning regulatory system to ensure the appropriate use of antibiotics in the private sector. Although we have come a long way, our private healthcare system remains unregulated mainly, with little monitoring of drug prescriptions and prescription of antibiotics. India has one of the highest antimicrobial resistance rates, but we do not have standardized national AMR surveillance data. However, the country has taken several progressive steps in recent years, including developing a national action plan (NAP) on antimicrobial resistance in 2017 that aligns with the global strategy of WHO. Many states are preparing their state-level plans.

Our country is the largest producer and consumer of antibiotics in absolute volume, although the per-capita consumption rate is lower than in Europe and America. However, unfortunately, a large volume of antibiotics that India consumes belong to broad-spectrum groups, which should ideally be used sparingly. Our recent analyses found that this pattern is consistent across the years, although there are signs of hope in some states with a better public system for drug distribution. Data show that one of the key drivers of inappropriate use is the approval and use of a significant number of fixed-dose combinations (FDCs) by state regulators without the permission of the national regulatory agency, the Central Drugs Standard Control Organisation (CDSCO). Previous reports, including a parliamentary standing committee report, highlighted this problem of “irrational” FDCs. This is due to an existing loophole in our antibiotic licensing and regulatory environment, with one central regulator (CDSCO) and 28 state-level regulators sharing powers and responsibilities. The state-level agencies have minimal technical and resource capacities in deciding the merit of approval of drug formulations. Therefore, the weak state regulatory systems lead to a large influx of antibiotic FDCs, most of which have gone through no systematic clinical trials or studies, resulting in inappropriate combinations fueling the emergence. The large volume of over-the-counter antibiotic use is another major threat. Although we brought in a stringent Schedule H1 regulation a few years ago, this rule covers very few antibiotics, essentially making very little difference in over-the-counter use.

These call for policy scrutiny at the highest level—legislative and cabinet level as we do not have many tools to address the serious threat of antibiotic resistance. There is an opportunity for the government to create a new law to replace the Drugs and Cosmetics Act of 1940. First, we need a single central regulator for drug approval and licensing, like the US FDA, or the CDSCO should have legal and regulatory powers to overrule inappropriate permissions by state regulators. Second, we must empower state regulators with adequate funding and human resources to take scientific decisions. Third, we should expand the list of Schedule H1 medicines to include at least all those antibiotics classified by WHO as “Watch” and “Reserve”. Lastly, digital health initiatives should facilitate the regular audit of prescriptions. These policy measures are essential even when we continue to invest in improving access to appropriate antibiotics through the Jan Aushadhi stores, improve prescription practices through antibiotic stewardship programs, raise awareness among the public, and reduce infections through vaccines and improved sanitation programs like Swachh Bharat Abhiyan.

Dr. Shaffi Fazaludeen Koya MBBS, MPH, DrPH
(Research Fellow with the Boston University School of Public Health USA)
Ensuring Access to and Availability of High-Quality and Latest-Generation Medical Devices

India can be a leading hub for manufacturing medical devices, catering to domestic and international demand. Recognizing this opportunity, the Government of India issued a Production Linked Incentive scheme on 29th October 2020, which was subsequently extended in April 2021. Now, the same is extended from 18.08.2022 till September end.

While the measures are positively driven to elevate India to a prominent global medical equipment supplier, the country is still at a nascent stage of making advanced, high-quality medical devices. Therefore, we must corroborate our efforts to ensure timely access to crucial, life-saving technologies for citizens seeking critical medical care. This is where the public healthcare system and value-based procurement (VBP) can play a significant enabling role.

Value-based procurement entails making procurement decisions around how a product or solution can best deliver the desired outcomes – while reducing the total cost of care. Instead of focusing exclusively on purchasing a product at the lowest possible price, value-based procurement assigns the highest priority to patient outcomes in terms of increasing Quality Adjusted Life Years (QALY) or reducing Disability Adjusted Life Years (DALY). This allows for maximizing ROI for public spending by focusing on societal benefits associated with a healthy populace.

The Government of India’s National Health Authority (NHA) is the country’s largest buyer of healthcare services. For authorities to reap more outstanding value for the taxpayer money spent on procuring healthcare services, harmonizing with well-defined global standards for manufacturers and developing Standard Treatment Protocol (STD) as per Medical Severity for Diagnostic Related Groups of patients is critical (MS-DRG). Doing so would ensure public access to high-quality medical care in government hospitals, with the average mortality rate coming down.

Addressing this issue of access to top-notch medical care, recently, in the case of Triveni Healthcare Private Ltd v. GNCTD the Delhi High Court has held that “the safety of the patients is of paramount importance and in certain fields, past experience and other qualifications cannot be relaxed especially in the field of health care.”

The court’s observations were in response to a petition led by a registered start-up challenging the quality standards and technical specifications of the tender conditions imposed by a Delhi government-linked super-speciality hospital for procuring their stents, grafts, and valves for their cardiology department. Noting that the hospital was dealing with an “abnormally high rate of deaths in relation to heart patients”, the Court espoused the view that non-grant of relaxation in Annual Turnover, past experience and EMD/ bid security amount for Start-ups/ MSMEs is undoubtedly not an unreasonable restriction keeping in view the sensitive nature of work.

This judgment is welcome, for it rightly reaffirms that patient safety is paramount. Therefore, medical establishments and hospitals
have a right to look beyond the procurement guidelines to ensure that deserving patients get the proper medical technologies to help save their lives.

As a nation, it is incumbent upon us to understand that significant progress is happening in many diverse areas of medicine like advanced diagnostics and detection, imaging diagnostics, advanced chemotherapy in oncology, usage of artificial intelligence and machine learning in advanced hemodynamic monitoring for critically ill patients in ICU and for patients undergoing high-risk surgeries which predicts the incidence of hypotension/shock even before it happens and the emergence of long
durable implantable devices associated with cardiology like pace-makers and biological tissue heart valves with advance anti-calcification treatments, etc. Adopting these technologies may ensure better patient outcomes, reduced hospital stay/ICU stay, proactive treatment initiation and lessened re-surgery chances. India needs to proactively adopt these technologies in its public procurement process so that we can radically improve patient outcomes. Only then will we be able to bring the vision of 'Health for All' to fruition.

- Dr Lorho S Pfoze
Member of Parliament (Lok Sabha)

Surgical Care in India: Challenges and Opportunities

The size of India's healthcare sector will almost double, from around $150bn in FY 2019-20 to as much as $300bn by FY 2024-25, according to a study published by RedSeer. In-patient care, provided by almost 70,000 hospitals across the country, accounts for around 70% of the sector, with surgeries contributing about 70% to the former, the research estimates.

From a long-term relief standpoint, surgical procedures form an indispensable part of the treatment regimen for millions of patients - be it for severe disorders of abdominal parts requiring general surgery, or gynecological, endocrinial, orthopedic, ophthalmologic, and neurological conditions necessitating specialized procedures.

According to a recent study published in the World Journal of Surgery, India needs 3,646 surgeries per 100,000 citizens yearly. Taking this as a base case, the annual volume of surgical procedures, from a demand point of view, comes to nearly 50 million. The supply side, however, is struggling to meet this demand. Currently, an estimated 30 million surgical procedures are carried out in the country every year, meaning only 30% to 35% of patients undergo necessary surgery compared to the global average of 60% to 65%.

There are multiple pain points associated with provisioning convenient, affordable access to high-quality surgeries for Indians. First, how does one find a “good” healthcare provider? Then comes the challenge of sourcing and making sense of complicated medical jargon and information, which form the bedrock of informed consent.

Access to hospital facilities remains another roadblock, as around 90% of the market is unorganised, so hospitals, doctors and insurers are not connected via a single interface. The organised segment revolves around private hospital chains, whose footprint is confined to the...
The COVID-19 pandemic has underlined the need for more trusted platforms for communication and access to information. Mass audiences were bombarded with scientific information and were snowed in by an infodemic. WHO defines an 'infodemic' as "too much information, including false or misleading information in digital and physical environments during a disease outbreak."

With the advent of many social media platforms and a large volume of information disseminated daily, clear and filtered messages for various target audiences are essential. Otherwise, they cause mistrust and confusion. The pandemic has witnessed different sub-fields of health gaining popularity, for instance, epidemiology, clinical trials, and virology. Various experts used a lot of scientific jargon, which journalists and other experts tried to simplify for lay audiences. Experts were inundated as they explained the different aspects of virology and epidemiology. The pandemic has highlighted the critical role of

Building Effective Communication Pathways in Public Health

"The two words 'information' and 'communication' are often used interchangeably, but they signify quite different things. Information is giving out; communication is getting through."

- Sydney J. Harris (American Journalist)
India is a diverse country with various cultures, languages and dialects. Communication channels must be explored and activated so that vulnerable and hard-to-reach populations can access information in a crisis or a pandemic. It is critical that at the regional and state levels, these communications pathways are built, and ecosystems of government, institutions, civil society, community and media (including social media platforms) are readied for the timely delivery of clear and compelling messaging. In this ecosystem, the role of the public health professional is critical. A trained public health professional, who has exposure to various diverse fields like statistics, epidemiology, social and behaviour change, nutrition, health management and data science, can work at various levels of the health system and also play an effective role of a 'change agent' at the community level.

We witnessed at our public health institutes that public health students could play a diverse role in contact tracing, field epidemiology, organising health camps and as counsellors delivering safe and preventive messaging to the community understanding the local culture and context and many diverse vernacular languages. They could provide a strong bond of trust and faith in the community. Building a solid network of Infodemic Managers and Fact-checkers can help fight misinformation and disinformation. With many of our fellow citizens spending time on social media platforms, these platforms also have become platforms for accessing public health information. It is essential that the information accessed is credible and provides timely guidance. Encouraging public health students to be trained as fact-checkers will help dispel much false information and disinformation pervading our lives. Our appreciation of the cultural context will enable better health-seeking behaviour. We have to also change our mindset from being curative to preventive. Building effective platforms where preventative health messaging is regularly disseminated via our phones or large outdoor hoardings will reinforce the need to change our mindset and behaviours to adopt healthier lifestyles and comply with preventive health messaging like wearing masks. A country's strength lies in its population's health and well-being. Establishing communication pathways so that all societies have access to timely and preventive health messages is one of the building blocks of a healthy community.

Gina Sharma
(Health communication professional, works with Public Health Foundation of India (PHFI))

Antimicrobial Resistance: A Global Public Health Threat

WHO lists antimicrobial resistance (AMR) as one of the top 10 threats to global health. It also views as a pressing health challenge for the next decade. Recent global studies estimate that 4.95 million deaths a year are associated with AMR, and 1.27 million are directly attributable to it.

World Animal Protection (WAP), an international non-profit animal rights organisation, has been working since 1981. WAP is trying to revitalise the conversations around AMR and its linkages with intensive farming. It is evident from various studies that AMR is seeping
into our systems through animal agriculture. WAP is recommending high animal welfare as a solution to reduce antibiotics in animal farming systems—the WHO recommends that antibiotics should not be routinely used to prevent disease across groups of farm animals. It believes that antibiotics should be reserved to treat animals and humans and not used to promote fast growth or as band-aid solutions across the herd to prevent stressed animals from falling sick.

Growing population, urbanisation and increasing economic prosperity are driving greater demand for animal-based products, thus placing more pressure on their habitats, rearing and farming. It is estimated that by 2050, livestock production will double what it was in 2000. More than 70 billion animals are estimated to be farmed for food each year, with two-thirds in conditions that mean they can't move freely or live naturally. Seven out of 10 people in India consume animal-sourced food, making it the world's second-largest market for chicken-sourced meat. If left unchecked, this huge demand for animals, animal-based products, spaces, land, resources, and their scale of suffering will continue to accelerate, leading humanity to new challenges. Recognising animals as equal inhabitants WAP works towards building a better world where compassion and care for animals and nature sit at the heart of our food systems, which are equitable, sustainable, balanced and capable of feeding the world. Its efforts are towards transforming the food systems that fuel animal abuse. WAP endeavours to address the root cause of their suffering and the irresponsible use of antibiotics in animal farming.

WAP brings focus and awareness to respective authorities of how antibiotics are becoming silent props in the intensive farming system. Keeping genetically uniform animals squashed together, subjected to painful mutilations, and unable to express their natural behaviours is a risk factor for the emergence of superbugs from antibiotic overuse and pandemics. Regular, unmonitored doses of antibiotics in the feed and water for entire herds or flocks, in addition to injecting drugs at various stages throughout their development, is becoming a low-cost way to keep the highly-stressed, immune-compromised animals alive and growing at a fast rate adding as one of the root causes to the emerging health threat finding an easy way in the human system.

The ongoing cruel cycle can be modified by choosing wisely and rethinking our food systems. Massive demand for cheap meat fuels the fire, causing mass suffering to farmed animals, impacting the environment and endangering people's health. By transforming intensive animal farming and moving to humane and sustainable proteins, we can achieve food security and feed the world with plant-based food as the most probable solution. AMR is an emerging threat thriving and finding its way into our systems and all linkages, straightforward consumption of exposed/overtreated animals on antibiotics. This complex problem requires a united multisectoral One Health approach, and effective integration of animal welfare in AMR programmes, policies, legislation and research can help address its challenges.

Gajender K Sharma
Country Director, World Animal Protection
IMPF Newsletter
July-August 2022

IMPF-PHFI Roundtable Report on MedTech4All submitted to Dr Mansukh Mandaviya, Hon. Union Minister, MoHFW.

ICMR’S DRONE RESPONSE AND OUTREACH FOR NORTH EAST (i-DRONE)

The project ‘i-DRONE’ (ICMR’s Drone Response and Outreach for North East) assessed the feasibility of using drone to deliver vaccines and medical supply. This was carried out in difficult geographical terrains including land, island, and foothills and across the hills. Collaborations with the State Health Mission of Manipur and Nagaland were key to such assessment. All necessary regulatory approvals from the Ministry of Civil Aviation (MoCA), Directorate General of Civil Aviation (DGCA), Airport Authority of India (AAI) and the State Health Authorities of Nagaland and Manipur were obtained prior to implementation of this initiative. Eighty drone sorties were undertaken in three districts of Manipur namely Imphal West, Bishnupur and Churachandpur and two districts of Nagaland-Mokokchung and Tuensang. The aforementioned operations connected the district hospitals to the community and primary health care centres in the study districts. [https://www.icmr.gov.in/idrone/index.html](https://www.icmr.gov.in/idrone/index.html)

Hon. Vice President of India, Sh. Jagadeep Dhankhar delivers his inaugural speech at #FICCIHEAL2022