Dear Friends,

On behalf of the IMPF, it is our pleasure to present the IMPF Newsletter, Monsoon Session Issue. We take this opportunity to welcome new Doctor MPs from both the Houses to the IMPF and its activities. In this issue, we highlight the issues related to the Thalassemia, which is one of the commonest genetic disorders – a disorder of the haemoglobin molecule – in our country.

There are about 10 to 12 thousand Thalassemia major children born every year and 2 lakhs of such children are undergoing regular blood transfusions and related treatments. We have brought a brief article in this issue, which highlights the necessity for its early screening and increased awareness. Thalassemia is a traumatic disease which afflicts the patient for life and spells immense emotional and financial burden on the caretakers. With bone marrow transplantation as its only cure, a more proactive approach in the pre-natal screening can help circumvent this grave disease. With a view to sensitise doctors, policy makers and the public, we support the campaign to achieve the objective of Zero Thalassemia by 2020.

We express our sincere thanks to all contributors who have made this newsletter more informative. We look forward to working with you in the future as we continue to carry forward our responsibilities in more productive ways.

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Climate Change and Health

Climate change refers to a long-term alteration in the Earth’s climate, due to an increase in the average atmospheric temperature. It has the ability to alter our ecological systems and affect the basic requirements of health i.e., supply of food, water and clean air. It is estimated that the temperature in India will rise 2°C by 2030 and sea levels will rise by 1 mm every year. Climate change also robs 1.5% of India’s GDP. The United Nations Industrial Development Organization projects that developing countries, with their scarce resources, will encounter a number of health effects due to climate change; and India will bear a disproportionate impact due to its unique geography, diverse population and high carbon energy dependence.

Climate change affects health in a variety of ways, from extreme weather to transmissible diseases. In India, loss of life due to excessive heat occurs every year and with the projected rise in temperatures, the death toll is expected to increase. In 2015 and 2016, 1600 and 2300 people respectively, died due to heat waves and studies show that states like Andhra Pradesh and Rajasthan will face temperatures in the range of 45-50°C by 2030, causing severe droughts.

Climate change also causes excessive flooding, creating conditions conducive for the spread of diarrhoea and vector-borne diseases like cholera and malaria. Diarrhoea is responsible for 13% of deaths in children below the age of five in India, killing about 300,000 children each year. Moreover, a strong correlation exists between sea-surface temperatures and cholera, with cholera outbreaks following the seasonal rise and fall in sea temperatures. Hence cholera outbreaks are frequent in coastal areas like Orissa, Hyderabad and Kerala, with almost 100,000 cholera cases annually. Malaria is already a deadly disease in India and it is likely that rising temperatures will increase the risk of transmission. Almost all of India’s population is susceptible to contracting malaria and 973,000 people are exposed to malarial parasites.

Further, climate change has numerous indirect effects. It can destroy natural ecosystems, cause mass displacement of animal and human communities and increase air and water pollution.

The government has taken steps to mitigate this situation. The National Disaster Management Authority is in the process of implementing a “Heat Wave Management Plan” which mobilizes communities to protect themselves against health problems. The key strategies are to establish early warning systems, collaborate with the government and civil society in responding to heat wave situations and increasing public awareness. The government has also stepped up the fight against malaria by establishing Drug Distribution and Fever Treatment centres in rural areas to provide access to anti-malarial drugs to people. It has also increased the use of Early Case Detection and Prompt Treatment (EDPT) to treat and eliminate malaria. India has also committed to converting all vehicles to electric ones by 2030, which will reduce air pollution levels by almost 80-90%.

Climate change is the defining issue of our time and it is important that the government keeps up its efforts. In water scarce areas, drought proofing measures like rainwater harvesting and water storage can be applied. Methods to clean the fumes and smoke in cars need to be introduced and a shift is needed towards renewable energy to further reduce air pollution levels. Afforestation and creating awareness among people about the importance of forests can help preserve our ecology and reduce the chances of natural disasters. Only if all countries address climate change in an inclusive, cooperative and scientific way can we remain healthy and preserve the planet’s health for future generations.

- Dr Kirit Premjibhai Solanki
Member of Parliament
Thalassemia— A Grave Public Health Challenge

Whenever I think of AMIT, my only son who died in 1997, I agonise about the life of so many children afflicted with Thalassemia major. Amit was a Thalassemia major, but ironically he became a victim of HIV/AIDS infection acquired due to repeated blood transfusions.

Thalassemia major is an inherited genetic blood disorder which manifests as a severe form of anaemia in the first year or two after birth of a child. Their body does not produce enough Red Blood Corpuscles (RBCs) and needs blood transfusions every two/three weeks throughout their life.

Repeated blood transfusions give rise to an accumulation of excess iron, affecting various organs in the body. This complication needs to be mitigated by ingesting iron chelator medicine daily. The most effective iron chelator medicine is an injection called Desferal, to be administered very slowly over 8 to 10 hours daily, using an electronic infusion pump. The pump as well as Desferal are imported, very expensive and hence beyond the reach of most families. Cheaper oral iron chelators can be used based on the extent of iron overload in the body. Prolonged blood transfusions and other treatments often lead to complications and risk of infections like Hepatitis C, HIV, etc. The trauma the child undergoes, besides the financial, physical and emotional burden on the parents, is unimaginable.

In our country about 10 to 12 thousand Thalassemia major children are born every year and there are about 2 lakhs such children who are undergoing regular blood transfusions and related treatments. A comprehensive care of a Thalassemia major child could cost up to Rs 2 lakhs per annum.

The only cure for this disorder is Bone Marrow Transplantation, a much specialised procedure which can be availed of by those who have a matching sibling donor and who can afford a cost of Rs 10 to 20 lakhs.

Is there any way to prevent Thalassemia? Yes, of course, there is a method of prenatal diagnosis available, but this is not practised regularly due to ignorance, social taboo, etc. Here a Gynaecologist can play a responsible role by asking for a Thalassemia screening test at the first pregnancy of every Indian woman just as they do several other tests. If the woman tests positive she is Thalassemia minor or trait, which is totally asymptomatic. Then her husband should also be tested similarly. If both are Thalassemia trait there is a one in four (25%) chance that the foetus could be Thalassemia major. They should be offered genetic counselling and advised of medical termination of pregnancy. This is the practice in the advanced countries of the world.

To make this a reality, affirmative action is called for at the Government level. Thalassemia screening test at the first pregnancy of every woman should be made a legal mandate for the Gynaecologists in the country. If we can have a law to prevent female foeticide, why should we not have a law making Thalassemia screening test mandatory? Alongside the legal mandate, a public awareness campaign should be mounted through various media in order to sensitisise every woman in the country and encourage her to demand for the Thalassemia screening test at first pregnancy. Have we not done such awareness campaigns for Polio, TB, HIV, Leprosy, etc?

As Amit’s father, having experienced life with a Thalassemia major child for 18 years, I look forward to India becoming free of Thalassemia in the years to come. I believe this is highly doable and must be done.

- Sundaesan V Iyer
Sankalp India Foundation
Bangalore
A Silent Epidemic on the Rise: India No. 2 in Child Obesity

In a country confronting the most acute case of child malnutrition, it is disconcerting to observe a growing epidemic of child obesity. A 2015 study conducted by New England Journal of Medicine revealed that India is second to only China, with approximately 14.4 million children struggling with obesity. This unique 'double strain' of nutritional inequity on either of the extremes sounds a voluble alarm for India's present and future.

Childhood obesity may appear to be a cosmetic problem on the surface, but it can be far more damaging than previously recognized. Before considering its socio-economic consequences, a biological feature demands discussion. It states that while genes determine where one’s body stores its fat, the number of fat cells one has, are determined during the pre-pubescent childhood years. As we lose weight, our fat cells are likely to shrink, but their number remains unchanged. Thus, it is imperative that caretakers remain attentive early on, because afterwards, it can get extremely difficult to get rid of fat cells. Childhood obesity is a worrying occurrence for it is a known precursor to a lifetime of health issues — including diabetes, heart disease and mental-health issues, among others.

A recent study by the Indian Journal of Medical Research showed that obesity rates among our youth are increasing, not just in higher socio-economic groups but also in the lower income ones. India being a fast-growing economy is facing several epidemiological and demographic transitions. These shifts, along with a lack of adequate dietary education, have fuelled unhealthy consumption patterns and a growing spate of lifestyle-related diseases. Since primary causes for obesity involve either excess calorie intake or insufficient physical activity or both, it warrants an urgent need to re-examine our deeply embedded dietary habits (which need to be adapted to current, often sedentary lifestyles).

Statistics project that, approximately, one in every five children will be affected by obesity by 2025, if the current rates are left unchecked. Bearing in mind that children and adolescents make up 41% of our total population, devising policies to protect the health of our children would further augment the development of our country.

For instance, government procurement and school contracting policies can favour whole foods over processed, incentivizing farmers to fulfill the increased demand. Currently, the only major attempt to address the issue at a national level is the consideration of a ban on junk food sale in schools. While this is a step in the right direction, complementing it with school policies on nutrition education can equip students with requisite knowledge on how to balance their energy intake and expenditure in such a volatile food environment. This dual approach could increase children's resilience when faced with unhealthy consumption patterns in adulthood.

Furthermore, better informed consumers can drive change to reduce portion sizes or alter product formulation to reduce calories, salt, and fat. A successful policy to this effect has been undertaken in the United Kingdom, where the government has implemented a “food traffic light” where green, yellow and red correspond to low, medium and high percentages of salt, sugar and fat content. Thus these easy-to-use, front-of-pack labeling systems help guide consumers, leading to better informed decisions. Thus, through policies that help make people’s default choices healthy ones, the government can lead compelling change.

In essence, the problem of childhood obesity needs to be tackled with efforts aimed at improving health in the broader environment (i.e., home, school, workplace, and community) rather than specifically targeting obesity. We must aim to ensure the availability, accessibility and affordability of healthy food, through better awareness and government support to farmers. In doing so, we can progress holistically, taking our youth along.

- Alisha Suhag
Centre for Legislative Research and Advocacy (CI:RA)
Improved Sanitation for a Healthier India: Need for addressing the social determinants

The linkages between health, nutrition, water, and sanitation are well established. Indian children suffer from the highest levels of impaired growth and development (stunting), low weight for height (wasting) and underweight, in the world. As per the National Family Health Surveys, there has been some improvement in the health indicators over the years, yet the progress is very slow. Open defecation, i.e. defecating without using a toilet or latrine, is an important challenge for early-life health in developing countries, including India. Poor water, sanitation and hygiene facilities and practices, under-nutrition and high infant mortality rate (IMR) are mutually reinforcing, leading to a vicious cycle of neonatal, infant and under-five mortality and morbidity.

Inadequate sanitation and hygiene is a serious public health issue. Exposure to unhygienic settings provides ideal conditions for diseases to thrive and increases the risk of infectious diseases such as typhoid and diarrhoea, which limits children’s ability to absorb nutrients. However, this can be significantly reduced by introducing preventive measures, including ensuring availability and use of sanitation facilities and adoption of healthy practices.

Rural sanitation has been one of the core working areas for the Swachh Bharat Mission (SBM), the Nirmal Bharat Abhiyan (NBA), the earlier Total Sanitation Campaign (TSC) of 1999, and the Central Rural Sanitation Programme (1986) of the Government of India. As per studies, many household toilets built with government subsidies are unused and despite government spending on latrine construction, rural open defecation in India has remained high. The erstwhile sanitation programmes had limited scope for engaging community in the design and implementation of efforts towards influencing cultural norms to prevent the practice of open defecation.

Reducing open defecation requires access to and use of improved sanitation facilities. Although building sanitation infrastructure is an important step in delivery of sanitation services, individual and community behaviour must change to ensure demand for these services. There is an important role for social and behavioural change communications to address the demand-side determinates of toilet use. The government and implementing partners have taken several measures to ensure that people receive information and key messages through multiple channels. Under Swachh Bharat Mission, the Government aims to increase demand for sanitation through communication campaigns and is making efforts to comprehensively cover the rural community through renewed strategies and saturation approach by 2019. The supply-side driven approach of building toilets is achieving the purpose of making toilets available; however, significant gains in reducing the practice of open defecation remain a challenge.

It is well demonstrated that infrastructure alone does not solve the problem of open defecation. Understanding and addressing the behavioural factors, which are socio-culturally entrenched, is important. Efforts at grassroots level, involving all community members including men, women and youth in the planning process are needed to ensure that dignified and gender-sensitive sanitation solutions are developed and gender-power relations are addressed which influence toilet adoption and use.

Some of the most successful public health interventions so far have been community-driven where people's engagement has been high. Population-wide delivery strategies, including involvement of community health workers, organising village health nutrition and sanitation days have shown proven impact in improving service uptake in the community. So, interventions need to be more focused around facilitating community-led initiatives combined with high-level political support.

In addition, there is a need for creation of adequate capacity of programme implementers to provide universal sanitation coverage and deliver information and services in tandem with available levers, such as gram panchayat, schools, self-help groups, and village health and sanitation committees available at the sub-national levels to bring about visible and lasting change in improving sanitation and hygiene.

- Kavita Chauhan
Public Health Foundation of India, New Delhi
Controlling TB: Awareness for Political Actors and Communities

Despite being one of the fastest growing economies, India's health issues have been one of its greatest obstacles. A key reason for this is that most politicians remain poorly informed on health issues. This lack of understanding is a result of consistently poor information on health given to them. Consequently, politicians do not think health issues are urgent in requiring immediate action. The media, a key source of information, is often too preoccupied with breaking news and hence unable to represent important issues such as health in public discourse.

Take Tuberculosis (TB) as an example. India has the largest TB burden globally yet its political class remains mostly unaware about the TB crisis India is facing. TB is India's ticking time bomb yet it is in the news only intermittently and as a result, the political class and public remain ignorant of TB and its more dangerous forms such as drug resistant TB.

How do we address this communication and information gap? The answer is simple. We need a comprehensive multi-layered communication campaign which informs the public, particularly communities and the political class. This would ideally be a multi-lingual campaign that focuses on key messages for each audience, developed in the media most convenient to them.

These campaigns need to touch politicians who do not understand the urgency to invest in health and diseases like TB, and who do not sufficiently realise the human and economic consequences of their decisions affecting India's growth process. Until and unless the political class prioritizes issues such as TB, such crises are bound to snowball into epidemics.

Communities need to understand that TB can happen to anyone, understand symptoms and seek help early when they appear. They also need to understand issues of treatment, the numerous side effects and how to control infection from spreading to other family or community members. Communities also need to be constantly made sensitive on issues of TB related stigma to ensure that the affected, particularly women and children, are not discriminated against but supported.

Until we help politicians understand what their neglect of TB has done, they are unlikely to act on it. Not just with TB, but it is time our political class understood what their overall neglect of health issues has done. Our health system is overburdened, understaffed and underfunded, with poor quality of care. As a result, a vast, unregulated private sector has emerged where most of India seeks care. Our population, often its poorest sections, remain at risk due to a lack of economic and food security, poor housing and environmental conditions. The average Indian is at risk for falling prey to every disease including TB and yet remains uninformed of this grave risk. India needs freedom from hunger, malnutrition, disease and poverty.

Those obsessed with growth should realise India will not grow just because we have big roads and airports. India will grow when we have a healthy citizenry. We can no longer dismiss these problems as too big to be handled. TB in India exists at an epic scale and costs us $ 24 billion in losses each year. Why then, not invest in TB?

It is time our political class got its information right and acted decisively by investing in diseases like TB that kill an Indian every minute. That's more Indians in a month than Pakistan has killed in 60 years. Investments in diseases such as TB are probably the most important ones for India, and let us do it now.

-Chapal Mehra
Independent Public Health Expert and Convenor,
Survivors Against TB
News Box
Teenage Suicide

Suicide underlies serious mental health issues and is an important public health concern. India has one of the world’s highest suicide rates between ages 15-29. Between the years 2010-16, the number of student suicides escalated to almost fifty thousand, though the number of attempted suicides is likely to be much higher.

Teenagers experience strong emotions of stress, pressure to succeed, financial uncertainty and other fears while growing up. For some, uncomfortable situations like parental divorce or community displacements can be unsettling and intensifies self-doubts. In periods of heightened anxiety, suicide may appear to be a solution to their problems.

Recognition of suicidal tendencies can be challenging, yet some indications can sound a timely alarm. Sudden changes in daily routines, withdrawal from interactions and an unusual neglect in personal appearance and quality of work, are some common signs. While substance use can increase such risks, suicidal tendencies are more pronounced in cases associated with marked personality changes and a loss of interest in pleasurable activities.

Suicidal feelings are treatable mental issues. The individual needs to have his/her illness recognized, diagnosed and appropriately counselled. When parents are in doubt whether their child has a serious problem, a psychiatric examination can be very helpful.

Source: www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Teen-Suicide-010.aspx

Atal Amrit Abhiyan Health Insurance Scheme

The Government of Assam announced a new program titled “Atal Amrit Abhiyan”, starting 1st April 2017. This scheme focuses on providing health insurance for people in Assam. It will provide insurance cover against 437 critical illnesses under 6 different categories. The health insurance will cover illnesses including cancer, cardiovascular diseases, neurological conditions and neonatal diseases. The state government will spend Rs.200 crores on the scheme and a separate society will be set up under the Department of Health and Family Welfare, which will be responsible for its administration.

The Atal Amrit Abhiyan plans to provide quality and affordable healthcare to the people. Its major benefits include a health insurance cover of Rs.2 lakhs for all citizens of Assam. Further, citizens registered under this scheme will be eligible to avail treatment at all government and CGHS empanelled hospitals.

Atal Amrit Abhiyan Smart Card: Under this scheme, the Assam Government will issue a unique ID number and a smart card to every eligible person. The smart card will be free for the people below poverty line (BPL), while everyone else has to pay Rs.100. It can also be used for cashless treatment from 1st April 2017.

Source: govinfo.me/atam-amrit-abhiyan-health-insurance-scheme-for-people-in-assam/www.atalpensionyojana.co.in/at-al-amrit-abhiyan/

mSakhi: Digital Innovation App

The non-profit organisation “Intra Health International”, along with the Uttar Pradesh Government and tech major Qualcomm, has been running a mobile application program called mSakhi since 2013. mSakhi is an interactive regional language audio/video-guided mobile application that supports Accredited Social Health Activists (ASHAs) and Anganwadi Workers (AWWs) in conducting routine activities related to mother-and-child care. The application’s content is designed as per guidelines of the National Health Mission and Integrated Child Development Scheme.

Health workers register pregnant women and newborns by entering information into the mSakhi app during home visits. Upon registration, mSakhi generates a home-visit schedule for each beneficiary and provides a set of guided instructions for counseling, assessment and referral specific to each mother and child. Further, mSakhi converts the data required by ASHAs and AWWs into a digital format right from the point of entry — to be accessed, analyzed and processed across the health system by all relevant staff members.

While originally designed for ASHAs, the app has since been expanded for auxiliary nurse midwives and other frontline health workers. It currently benefits 12,000 health workers and 16,000 mothers.

In January 2016, mSakhi expanded its’ services to Uttarakhand and also plans to extend services to Jharkhand.

Source: www.intrahealth.org/vital/msakhi-digitizing-health-care-grass-roots
Fungal infections

With the coming in of the monsoon season, the risk of contracting a fungal infection increases exponentially. A fungal infection is an inflammatory condition in which fungi multiply and invade the skin, the digestive tract, the genitals, and other body tissues, particularly, the lungs and liver. Fungi are widespread in the environment and grow rapidly under conditions of moisture, warmth, irritation, or injury; so it is not unusual for a certain amount of fungi and their spores to end up being inhaled or landing on the skin.

Superficial fungal infections may be due to an overgrowth of fungi already present, or the infection may be the result of contact with an infected person or contaminated surfaces. Such infections can spread from one part of the body to another by scratching or touching. Fungal infections of the skin, hair, and nails often can be diagnosed based on the characteristic appearance of affected areas. A simple laboratory test to confirm the diagnosis is the KOH (potassium hydroxide) prep. Examining the skin with a Wood's ultraviolet lamp is another easy and convenient method to determine the presence of a fungus.

Source: http://www.encyclopedia.com/medicine/diseases-and-conditions/pathology/fungal-infections


Quotes

“I was at one time a great lover of the medical profession...I no longer hold that opinion...Doctors have almost unhinged us...I regard the present system as black magic...Hospitals are institutions for propagating sin. Men take less care of their bodies and immorality increases...ignoring the soul, the profession puts men at its mercy and contributes to the diminution of human dignity and self control...I have endeavoured to show that there is no real service of humanity in the profession, and that it is injurious to mankind...I believe that a multiplicity of hospitals is not a test of civilization. It is rather a symptom of decay.”

Mahatma Gandhi

“Awe-inspiring medical technology has combined with egalitarian rhetoric to create the dangerous delusion that contemporary medicine is highly effective. Although contemporary medicine is built on this erroneous assumption, it is contradicted by informed medical opinion.”

Ivan Illich, Limits to Medicine, Medical Nemesis: The Expropriation of Health

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Printed at A.K. Printers, New Delhi-110067, Ph: 9818114996