

Key Stakeholders in Addressing Gaps in Occupational Health in India: Areas where IAPSM can Play a Crucial Role

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Introduction:


Industrialization has been a driving force behind Indias economic growth, transforming the nation into one of the worlds largest industrial economies. Over the past few decades, the expansion of industries ranging from manufacturing to construction has contributed significantly to employment opportunities, infrastructure development, and technological advancements. According to the Ministry of Statistics and Programme Implementation, there were 249,987 factories in India in the year 2022. Tamil Nadu is leading the list with the maximum number of factories in one state, and that is 39,512.^[1] While 92% of the Indian work force works in the unorganized sectors (agriculture, cottage industry, homework / services), 8% of the workforce is working in organized sectors (in the enterprises owned by government and the private sector).^[2]

In both urban and rural areas, Worker Population Ratio (WPR) for persons of age 15 years have increased. The rise in rural setting is from 48.1% in 2017-18 to 59.4% in 2022-23 while for urban areas it increased from 43.9% to 47.7%.WPR in male in India increased from 71.2% in 2017-18 to 76.0% in 2022-23 and corresponding increase in WPR for female was from 22.0% to 35.9%.^[3]

Alongside these economic benefits, industrialization has brought with it a rise in occupational hazards and an increasing need for robust occupational safety and health (OSH) practices. As India continues to industrialize, ensuring the safety and well-being of its workforce is no longer a matter of choice but a pressing necessity for sustainable development.

Currently only 15% of workers worldwide have access to specialized occupational health services.^[4] Indias occupational safety and health landscape has evolved over time, but it still faces significant challenges. Occupational health in India isgoverned by the Occupational Safety, Health and Working Conditions Code, 2020 (OSH Code), which aims to protect workers’ rights and welfare. The code covers various aspects of occupational safety, health, working conditions, social security, and grievance redressal. The OSH Code subsumes 633 provisions of 13 major labor laws (e.g. Factories Act (1948), Employees’ State Insurance Act (1948), and the Mine Act (1952) etc.) into one single code with 143 provisions.^[5,6]

AccordingtotheInternationalLabourOrganization (ILO), India has one of the highest rates of work-related fatalities in the world, with tens of thousands of deaths reported annually due to industrial

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accidents and occupational diseases. These statistics underscore the need for urgent attention to occupational safety and health issues.

Gaps in Occupational Health in India -

Fragmented Healthcare System:

Occupational healthcare in India is often fragmented, with little integration between occupational health services and the primary healthcare system. Occupational safety and health remain under the purview of the Ministry of Labour rather than the Ministry of Health. Even at places, where an Occupational Health Physician is employed, their role is typically cantered on curative treatment and administrative tasks, with limited attention given to occupational health concerns. Further more, there are significant social and cultural barriers to accessing healthcare in India. Many workers in low-wage, informal, or migrant labour jobs face stigma or fear associated with seeking help, particularly for issues related to mental health or chronic diseases.

Shortage of Occupational Health Professionals:

There is a severe shortage of trained occupational healthcare workers in India. There are around 1125 qualified occupational health professionals in India and only around 100 qualified hygienists as against a requirement of over 8000 qualified occupational health doctors.^[7]

Furthermore, these physicians may not be adequately trained in occupational health, leading to under diagnosis and under-reporting of occupational diseases. Occupational Health Centres are mandatory at factories or units involved in hazardous processes, and a full-time occupational health physician must be appointed when the number of employees exceeds 200.^[7] However, effective implementation of these guidelines is lacking.

Inadequate Regulations and Enforcement:

While India has laws governing occupational safety and health, the enforcement of these regulations remains weak and this is one of the

primary obstacles to improving OSH in India, particularly in the unorganized and informal sectors where a significant portion of the workforce is employed. Enforcement is managed by the Directorate General of Factory Advice Service and Labour Institutes (DGFASLI), which operates at the state level through factory inspecting engineers and medical inspectors. The number of these enforcement officers is woefully inadequate for a nation with a rapidly growing workforce.^[7]

Lack of Training and Research:

Occupational healthcare is a relatively underdeveloped field in India. There are only few institutions involved in training and capacity building. Occupational Health Institutes in India provide training and conducting research in occupational health are Central Labour Institute (CLI), Mumbai, National Institute of Occupational Health (NIOH), Ahmadabad, Industrial Toxicology Research Centre (ITRC), Lucknow, Central Mining Research Station, Dhanbad, Regional OHCs at Calcutta and Bangalore, Regional Labour Institutes at Calcutta, Madras, Faridabad and Kanpur and very few medical colleges and institutes.^[7]

Directorate General of Factory Advice Service and Labour Institutes(DGFASLI):

It is the only governmental agency conducting statutory courses in occupational health and safety which includes: 1) a three-month duration training program in Industrial Health, Associate Fellow in Industrial Health (AFIH) that enables Indian registered medical doctors of modern medicine to become competent occupational health physicians in various industrial establishments. Once limited to only 50 participants annually, since the last 15 years, the course has expanded and is now run by 17 institutions training about 600 doctors per year. About 4,400 doctors have been trained till 2023.^[8] 2) To address the need of qualified safety professionals to manage the various health risks and help factory management meet the statutory requirements for

appointing safety officers under Section 40-B of The Factories Act, 1948, the Central Labour Institute in Mumbai, along with Regional Labour Institutes in Chennai, Faridabad, Kanpur, and Kolkata, offers ADIS (Associate Diploma in Industrial Safety), DIS (Diploma in Industrial Safety), and PDIS (Post-Diploma in Industrial Safety) course, a one-year Diploma in Industrial Safety. These courses are the only nationally recognized qualifications for the appointment of safety officers under The Factories Act, 1948. 3) To address the gap in equipping supervisors with Occupational Safety and Health (OSH) knowledge and assist management of factories involving hazardous processes in adhering to the statutory provisions outlined in Section 41C(b) of the Factories Act, 1948, the Industrial Safety Division of various institutes under the Directorate General of Factory Advice Service and Labour Institutes (DGFASLI) conducts a comprehensive one-month (four weeks) full-time certificate course in Safety and Health.

Additionally, DGFASLI empanels various institutes across India to conduct the course according to the guidelines issued by DGFASLI. This training, equip supervisors with the latest techniques and the understanding of current statutory requirements, enabling them to analyse process hazards and implement appropriate risk mitigating methodologies.^[9] The Department of Occupational Health at the All-India Institute of Hygiene and Public Health (AIHH&PH) in Kolkata, established in 1949, works to address the shortage of trained professionals in occupational and industrial health by offering a range of training programs.^[10]

National Institute of Occupational Health (NIOH):

It is a leading institute under the Indian Council of Medical Research (ICMR), is majorly involved in research in occupational health. The Institute also conducts short-term training programs for industrial medical officers, industrial hygienists, factory inspectors, workers, trade unions, and others.

Additionally, it provides expert advice to the Ministry of Health, Ministry of Labour, Ministry of Environment, and Ministry of Commerce on matters related to occupational health, safety, and environmental concerns.

Central Industrial Hygiene Association (CIHA) of India:

It is a national association promoting industrial hygiene in India. CIHA has conducted several training programs, webinars and international conferences on industrial hygiene and related subjects.^[11]

The Indian Association of Occupational Health (IAOH):

It is a non-governmental organization of occupational health experts, has launched a collaborative initiative to raise awareness and sensitize primary care physicians in India. This initiative includes in-person training courses, satellite-based sessions, webinars, conferences and the creation of training videos, which are available on social media platforms.

Various Stakeholders in Occupational Health -

In India, the occupational healthcare system functions across multiple levels.

Ministry of Labour and Employment (MoLE):

It is the apex body responsible for labour welfare and occupational safety in India. MoLE works with other stakeholders to formulate policies, regulations, and programs that aim to improve working conditions and reduce occupational risks.

Directorate General of Factory Advice Service and Labour Institutes (DGFASLI):

It is the technical branch of MoLE responsible for drafting statutory guidelines and regulations. It plays a key role in monitoring compliance with safety regulations, conducting inspections, and offering technical guidance to industries regarding occupational health and safety measures. Additionally, it conducts intervention studies to

assess the prevalence of occupational health disorders and diseases. The data gathered from these studies are used to evaluate the scope of the issue, helping the government incorporate occupational health concerns into national planning and policy development.^[9]

Employees' State Insurance Corporation (ESIC):

It is responsible for providing medical care and social security benefits to employees covered under the Employees' State Insurance Act. Keeping pace with the process of industrialization, the Scheme has expanded in 35 States and Union Territories. As on 31.03.2023, 7.83 lakhs factories and establishments across the country are registered under the Act, benefiting about 3.43 crores insured persons/ family units and total beneficiary stands at over 13.3 crores. Medical services are provided through a network of 1574 ESI dispensaries/387 ISM units, 161 ESI hospital, medical colleges, panel clinics, 927 insurance medical practitioners (IMP) and 20 employers utilization dispensaries (EUD), making it a key stakeholder in occupational healthcare. For payment of Cash Benefits, the Corporation operates through a network of Branch Offices/Pay Offices, whose functioning is supervised by Regional/Sub-Regional and Divisional offices. The Corporation has also set up Occupational Disease Centers, for early detection and treatment of occupational diseases prevalent amongst workers employed in hazardous industries.^[12]

Employers' Role:

Employers are critical stakeholders in the management of occupational health. According to Indian labour laws, employers are legally bound to ensure the safety and well-being of their employees.

Non-Governmental Industry Associations:

Industry associations, such as the Confederation of Indian Industry (CII), and the Federation of Indian Chambers of Commerce and Industry (FICCI), are important players in promoting best practices in

occupational health and safety. These associations often collaborate with the government to advocate for worker safety standards, provide guidance on health regulations, and help their members implement health and safety programs.

Trade Unions and Worker Organizations:

Organizations like the Centre of Indian Trade Unions (CITU) and the All India Trade Union Congress (AITUC) have long been involved in exploring measures for improved working conditions and stronger safety regulations. They are also instrumental in highlighting unsafe conditions and demanding compliance with existing labour laws.

Professional Associations in Occupational Health

Professional associations related to occupational health provide specialized knowledge and expertise in the field. These associations not only train healthcare professionals but also play an important role in setting standards for occupational health practices, offering certification programs, and conducting research. Associations such as the Indian Association of Occupational Health (IAOH), Indian Society of Ergonomics (ISE), and the Occupational Health and Safety Association of India (OHSAI) are central to advancing occupational health in India. Considering the existing gaps in occupational health, it is essential to engage with other professional associations like Indian Association of Preventive and Social Medicine (IAPSM) to help address these shortcomings.

Indian Association of Preventive and Social Medicine (IAPSM):

It is a National-level professional body in the field of Community Medicine/ Preventive and Social Medicine/ Public Health, founded in 1974. IAPSM was formally registered under the Society Act XXI of 1860 on February 13, 1984, in the office of the Registrar of Societies in New Delhi.^[13] As a not-for-profit organization, it comprises specialists in

Preventive and Social Medicine, Community Medicine, Public Health, Epidemiology, Health Management, Health Promotion, and Family Medicine.^[13] As on today, IAPSM has 8,800 plus members across India, serving in medical colleges, national and state government health departments, and various health institutes involved in research, training, epidemiology, and surveillance. Many of its members also work as experts with international development agencies, Non-Governmental Organizations (NGOs), or as freelance public health consultants. The association plays a crucial role in shaping public health policies, educating healthcare professionals, conducting research, and advocating for better health outcomes at the national and community levels. IAPSMs contribution to public health in India can be observed in various areas such as disease prevention, health promotion, medical education, policy development, capacity building, and research.

Key Areas where IAPSM Can Serve as a Stakeholder in Occupational Health -

1. Raising Awareness and Education

Occupational health in India remains an underdeveloped field, with many workers and employers unaware of the risks associated with their work environments. IAPSM can leverage its network and resources to organize workshops, seminars, and awareness campaigns targeting both workers and employers. By empowering workers with knowledge, they can take preventive actions to protect themselves, leading to improved health outcomes. Furthermore, IAPSM can contribute to the training and education of healthcare professionals, including primary care physicians, who are often the first point of contact for workers experiencing health issues. By conducting specialized training programs, webinars, and creating educational content on occupational health, IAPSM can enhance the capacity of healthcare providers to diagnose, treat, and manage work-related health problems effectively.

2. Collaborating with Government Bodies and Policymakers

IAPSM, as a well-established professional body, has the influence and credibility to collaborate with government agencies and policymakers to advocate for stronger occupational health regulations. IAPSM can engage with government ministries such as the Ministry of Labour, Ministry of Health, and Ministry of Environment to contribute to policy formulation and implementation. By serving as a bridge between workers, employers, and policymakers, IAPSM can advocate for stricter enforcement of occupational health standards, the establishment of more comprehensive worker health surveillance systems, and the inclusion of occupational health in national public health agendas. This collaboration can help create a more robust legal and regulatory framework for occupational health across the country.

3. Promoting Research and Evidence-Based Interventions

Research is a critical component in improving occupational health outcomes. IAPSM can support and promote research in the field of occupational health by providing funding, resources, and platforms for the dissemination of new findings. Research initiatives can focus on identifying emerging occupational health hazards, studying the impact of specific industries on workers' health, and evaluating the effectiveness of existing interventions. The results of such research can be used to develop evidence-based guidelines for the prevention and management of occupational diseases, as well as to advocate for policy changes that address identified risks. Furthermore, IAPSM can collaborate with National Medical Commission (NMC) and research institutions to include occupational health topics in medical and public health curricula, thus nurturing a new generation of experts in the field.

4. Improving Access to Quality Occupational Health Services

Access to quality occupational health services is a critical issue, particularly in India's informal sector, where the majority of workers remain underserved. IAPSM can contribute by helping to develop and implement models for accessible, affordable, and effective occupational health services. This could include setting up mobile health clinics for workers in remote areas, establishing community-based health programs, or working with employers to integrate occupational health services into workplace wellness programs. Additionally, IAPSM can advocate for the inclusion of occupational health in primary healthcare settings, where many workers seek care for non-specific symptoms that may have occupational origins.

5. Advocating for Mental Health in the Workplace

While physical health risks in the workplace have received much attention, mental health in occupational settings is an often-neglected area. The rise of stress, anxiety, and depression due to job-related pressures such as long working hours, unsafe working conditions, and workplace harassment has profound implications for workers' overall well-being. IAPSM can take a leadership role in advocating for mental health awareness in the workplace, emphasizing the importance of creating supportive work environments, and promoting stress-reduction interventions. Through awareness programs, policy advocacy, and collaboration with mental health organizations, IAPSM can work towards integrating mental health support into occupational health programs.

6. Advancing Occupational Health in Vulnerable Populations

Certain groups of workers, such as women, and migrant labourers/workers who are often more susceptible to occupational hazards due to

inadequate safety measures, lack access to health services and face disproportionate risks in the workplace. IAPSM can contribute by focusing on the specific occupational health challenges faced by these vulnerable populations.

Conclusion:

India's industrialization has brought significant economic growth, but it has also exposed the workforce to various occupational risks that require urgent attention. Occupational health in India faces numerous challenges that hinder the protection and well-being of workers. These challenges include inadequate regulation and enforcement, emerging hazards, limited access to healthcare services, and a lack of education and training for both workers and healthcare professionals.

Addressing these challenges requires a multifaceted approach. Only through a collaborative effort among governments, employers, workers, and professional organizations can significant progress be made in improving occupational health outcomes in India. The Indian Association of Preventive and Social Medicine (IAPSM) has the potential to make a notable contribution to improving occupational health in India. By focusing on education, research, advocacy, and collaboration with government and industry stakeholders, IAPSM can help bridge the gap between the current and the desired state of occupational health. Through its multifaceted approach, IAPSM can be instrumental in creating healthier workplaces, reducing occupational diseases, and improving the quality of life for millions of workers across the country.

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References:

1. India Manufacturing Industries: Number of Factories 1982 - 2022 | Yearly | Unit | Ministry of Statistics and Programme

- Implementation. www.mospi.gov.in. [Last accessed on 16-11-2024]
2. Shyam Pingle. The Future of Work and OSH – A View from India. *Occupational Medicine*, 2024;74(1):32-35.
3. Ministry of Statistics & Programme Implementation. Periodic Labour Force Survey (PLFS) Annual Report 2022-2023 Released, Increasing Trend in Labour Force Participation Rate and Worker Population Ratio Constant Decrease in Unemployment Rate. Posted On: 09 OCT 2023 by PIB Delhi. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1966154> [Last Accessed on 16-11-2024].
4. Occupational Health: World Health Organization (WHO). www.who.int/india/health-topics/occupational-health [Last Accessed on 16-11-2024]
5. The Occupational Safety, Health and Working Conditions Code, 2020 No. 37 of 2020. www.labour.gov.in [Last accessed on 14-11-2024]
6. India's Occupational Safety, Health and Working Conditions Code, 2020: What is it and How Should Companies Prepare? www.labour.gov.in. Last accessed on 14-11-2024
7. Occupational Health and Services (OHS) – Indian Scenario. <https://amrcentre.org/sites/default/files/Occupationalstat> [Last accessed on 15-11-2024].
8. Shyam Pingle, Arkaprabha Sau. Occupational Health Training in India – Current Status and Challenges. *Occupational Medicine*, 2024;74(1):25-29
9. Directorate General of Factory Advice Service and Labour Institutes (DGFASLI) India. <https://dgfasli.gov.in> [Last Accessed on 15-11-2024]
10. All India Institute of Hygiene and Public Health (AIHHPH). <https://aiihph.gov.in/department-of-occupational-health> [Last accessed on 15-11-2024]
11. International Occupational Hygiene Association (IOHA). <https://www.ioha.net/asia/india>. [Last Accessed on 15-11-2024]
12. ESIC Annual Report 2022-23. Published by Employees State Insurance Corporation, Panchdeep Bhawan, CIG Marg, New Delhi
13. IAPSM | Indian Association of Preventive and Social Medicine [Internet]. Available from: <https://iapsm.org/about.html> [Last accessed on 12-11-2024].