

## Editorial

### Basic Occupational Health Services – “Occupational Health for All”

Niraj Pandit<sup>1</sup>, Ashish Trivedi<sup>1</sup>

Associate Professor, Department of Community Medicine, S. B. K. S. Medical Institute and Research Center, Sumandeep Vidyapeeth, Piparia, Vadodar, Gujarat

Correspondence to: Niraj Pandit – [drniraj74@gmail.com](mailto:drniraj74@gmail.com)

Occupational health is the area of medicine dedicated to the prevention and management of occupational and environmental injury, illness and disability, and the promotion of health and productivity of workers, their families and communities. Workers represent half the world's population and the major contributors to economic and social development. Their health is determined not only by workplace hazards but also by social and individual factors and access to health services<sup>1</sup>.

Despite the availability of effective interventions to prevent occupational hazards and to protect and promote health at the workplace, large gaps exist between and within countries with regard to the health status of workers and their exposure to occupational risks. In spite of the fact that several authoritative bodies, like International Labour Organization (ILO), World Health Organization (WHO) and many other International and National bodies are working for worker's health, still only a small number (15-20%) of the global workforce has access to occupational health services<sup>1</sup>. According to ILO, over 2 million people die each year from occupationally related diseases and injuries. This is only the tip of the iceberg – another 160 million nonfatal diseases, and 270 million nonfatal injuries occur annually. Occupational diseases and injuries account for a loss of about 4% of the global gross domestic product<sup>2</sup>.

In India, statistics for the overall incidence/prevalence of occupational disease and injuries for the country is not available. Leigh *et al.*, have estimated an annual incidence of occupational disease between 924,700 - 1,902,300 and 121,000 deaths in India<sup>3</sup>. Based on the survey of agriculture injury incidence study by Mohan and Patel (1992) in Northern India, they estimated annual incidence of 17 million injuries per year, (2 million moderate to serious) and 53,000 deaths per year in agriculture alone<sup>4</sup>.

In the field of occupational health, over the last few years a “double burden” of hazards has developed; the old hazards like silicosis, exposure to high levels of noise and (obsolete) chemicals and carrying heavy loads, go hand in hand with the newly emerged or recognized hazards, such as stress at work and long hours sitting in front of the

computer screen. This double burden of hazards translates into a double burden of disease, making the panorama of occupational injuries and diseases complex<sup>2</sup>.

Present Occupational health services focus mostly on the delivery of medical or curative services and on the provision of personal protective equipments, while the gain in health can be made mainly through (primary or primordial) prevention. At the same time, there has been a tendency worldwide to “blame the victim”, focusing strongly on the change of behavior of workers, and making them responsible for accidents and diseases<sup>2</sup>. Globally, occupational health is in a difficult position as lack trained human resources in health promotion, insufficient finances or lack of will. In many countries, particularly in developing countries, there is a lack of policies and appropriate plans to protect the health and safety of workers.

The ILO convention, 161 on Occupational Health Services and the WHO global strategy on Occupational Health for All, demanding health for all working people of the world and the responsibility lies with organization<sup>5</sup>.

In order to meet the global needs to develop occupational health services in the world the 13<sup>th</sup> joint ILO/WHO committee on occupational health in Dec-2003 decided to develop a new concept of – Basic Occupational Health Services (BOHS). The concept of BOHS is based on the concept of Primary Health Care as defined by the Alma Ata Declaration. The Basic Occupational Health Services can be defined as, an essential service for protection of people's health at work, for promotion of health, well-being and workability, as well as for prevention of ill-health and accidents<sup>5</sup>.

The overall paradigm of BOHS emphasizes on four important elements Policy, Infrastructure, Good Practice and availability of Human Resources. The objective of Basic Occupational Health Services is to increase the global coverage of services and guide to appropriate content of services so that the occupational health needs of workers and workplaces in varying conditions prevailing in different parts of the world are met.

The ultimate objective of the BOHS is to ensure provision of services for all workplaces in the

world (in both industrialized and developing countries). It is important to note that although the BOHS are intended to support meeting the basic needs of health and safety at work, the content of services still is designed to comprise all the three elements protection, prevention and promotion<sup>5</sup>.

#### **Stepwise Development of Infrastructure:**

The suggested model of OHS is discussed here. Every country should analyse its prevailing situation in OHS. On the basis of such analysis, a national policy and strategy including an action programme need to be drawn up. To consider the wide variation in the existing Occupational Health Services (OHS) in different countries a stepwise strategy is recommended. Depending on the degree of development achieved by the country, following levels of services are considered:

**Stage I: Starting Level :** For the workplace where there is no OHS at all, this is the starting point to start the services with the help of Occupational Health nurse and a safety person who should train in OHS. Focus of the services should be on severe health hazards and their prevention and control.

**Stage II : Basic Occupational Health Services (BOHS) :** This is an infrastructure based service which is working close to workplace. It includes a medical officer and a nurse – full time or part time depending on size of industry.

**Stage III : International Standard Services:** This type of services should be the objective of most of the countries, services are primarily preventive and also having curative component. This type of services provided by trained occupational health physician with multidisciplinary team.

**Stage IV : Comprehensive Occupational Health Services (COHS) :** This type of services are found in big companies of industrialized countries or large OHS centers. Staff includes multidisciplinary team like physician, occupational health nurse, occupational hygienist, ergonomist, psychologist, safety engineer, etc. The content of services is comprehensive covering all relevant aspects of occupational health<sup>4,5</sup>.

Stage I and II are meant for smallest enterprises and informal sector of work where there is no OHS and there is not possibility to reach Stage III services which is the main goal to reach and fulfils the services as per ILO convention 161, 1995, insisting for preventive services.

The BOHS activities are described as a process starting from identification of occupational safety and health needs, going to surveillance of the work environment and workers' health, risk assessment, initiation of necessary preventive and control actions which have been recognized through risk

assessment and proceeding to assistance in implementation of preventive and control actions and finally evaluation of the impact of actions<sup>5,6</sup>.

The need for the development of occupational health services particularly for the working people and workplaces, which at present do not have access to services, is massive and urgent, even in India. The past experience of traditional instruments and totally voluntary activities have not provided such services, so novel and innovative approach of integrating Occupational Health in Primary Health Care system is very important and need of hour<sup>5</sup>.

It is estimated that India has a working population of approximately 500 million. Less than 10% of the workforce is in organized sector, 60% self-employed and 30% do not have regular jobs. In India traditional public health concerns like communicable diseases, malnutrition, maternal & child health, poor environment and sanitation etc. get priorities in public health policies. But with recent industrialization and globalization newer pathologies like occupational morbidities, stress, cancers, psychological diseases and heart diseases are on rising trend. Increasing proportion of female in the workforce adds to the traditional Occupational problems. The changing face of service sector, in view of the exponential growth on account of globalization and increasing use of information technology, is expected to present new challenges to OHS<sup>7</sup>. In 2002, the National Commission on Labour has formulated a draft of OSH (Occupational Safety and Health) Bill 2002. The Bill has objective to incorporate a well-coordinated approach to safety and health which covering all sectors of the economy. The Act has general applicability to all worksites irrespective of number of employees and type of industry, including unorganised sectors like construction and agriculture<sup>8</sup>. But the Bill never comes on the floor for discussion and still waiting for enforcement.

The second important aspect of issue is the diagnosis and reporting of occupational diseases which is necessary to achieve and implement BOHS. As we aware that the statistics on accidents and occupational illnesses are very much under reported in country. The organized sector, both private and public, has basic level OH services available with the enforcement of the Factory Act. But in unorganized sector where the majority of workforce is working, OHS is still non-existent<sup>7</sup>.

In India, The director general of the Factory Advisory Services and Labour Institutes deals with the safety and health of workers employed in factories and ports, whereas, the director general of

Mines Safety deals with the safety and health of miners. There is a National Institute of Occupational Health (NIOH), Ahmedabad and two Regional Institute of Occupational Health providing speciality services and research in Occupational Health. Central Labour Institute (CLI), Mumbai, working under the Ministry of Labour has four regional labour institutes. The Institute carries out training and research related to industrial safety and health. But till date there is no agency, covering safety and health issues for workers in unorganized sectors<sup>7</sup>.

If we look for the availability of trained OH physicians, very few Universities in India are providing postgraduate courses in the field of Occupational Health and there separate short trainings for Occupational Health and Safety for health and safety professionals<sup>7,9</sup>.

Looking to above scenario there is urgent need to take action to provide good quality of Occupational Health Services to the employees in Organized Sector and atleast a basic level of Occupational Health Services for the employees working in Un-organized Sector. This can be achieved by incorporating the occupational health services with the primary health care delivery system in India. India has very good primary health care system in rural and tribal areas and also trying to get similar system in urban areas. Unorganised sectors and small scale industries can not afford the full flag OHS centre. In this scenario suggested model of incorporation can be as follows :

- Institutions like NIOH and CLI have to work as apex body with more national centres or regional centres with additional responsibility of capacity building and preparation of guidelines for uniformity of services. There are more than 300 medical colleges in the country in rural as well as urban areas.

- Nodal centres can be established in these colleges, to carry out the training and research in Occupational Health as under guidance of the Apex institutes and need of community. The Dept. Of Community Medicine can act as key for above activities with involvement of other departments like General Medicine, Respiratory Medicine, Orthopaedics, Skin & VD, ENT etc for their supportive role in OH.

- Nodal Centres can train all medical officers of Primary Health Centres, Community Health Centres and Civil hospital staff of state over time and also develop the surveillance mechanism of occupational diseases.

- Here one should not forget the big service provider i.e. private practitioners. They should also be involved in training and surveillance activities related to OH in later phase.

- The regular feedback to government, stake holders, industries and community should be the inherent part of the program

- Non-Government Organizations are also working for occupational health of community. They should promote for the awareness and accountability aspect of the issue.

- The most important need of above service is the coordinated action at Ministry of Labour, Ministry of Health and Family Welfare and other respective ministry.

- This is suggested primitive model of incorporation of occupational health services with primary health care by which we can attain the Goal of "Occupational Health Services for ALL". Still it requires more inputs from various agencies for refinement.

#### References:

1. Workers Health : Global Plan of Action : WHA 60,26, May 2007, Agenda items 12.13.
2. Dr. Gerry Eijkemans, Occupational health services as a part of primary health care, Occupational Health, WHO.
3. Leigh J, Macaskill P, Kuosma E, Mandryk J. Global burden of disease and injuries due to occupational factors. *Epidemiology* 1999;10:626-31
4. Saiyad H. and Tiwari R., Occupational Health Research in India, *Industrial Health* 2004, 42, 141-148.
5. Rantanen J., Basic Occupational Health Services, *African Newsletter on Occupational Health and Safety* 2005;15:34-37.
6. Rantanen J. Basic Occupational Health Services. A WHO/ILO/ICOH. 2nd ed. Helsinki: Finnish Institute of Occupational Health; 2005.
7. Pingle S., Basic Occupational Health Services, *IJOEM* - April 2009 - Volume 13(1).
8. Pingle S., Do occupational health services really exist in India?
9. S. P Zodpey, Himanshu Negandhi, R. R. Tiwari, *Indian Journal of Occupational and Environmental Medicine* - Dec 2009 Vol-13, issue -3, 135-40