Basic Occupational Health Services

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O
f the total 3 billion workers in
the world over 85% work and
live without having access to oc-
cupational health services (OHS). In
many countries on all continents oc-
cupational health services may cover only
5% of the workforce. Statistics on cov-
erage is also very unreliable and sub-
ject to variations in the definitions and
measurement methods. For example,
often coverage is reported as the intend-
ed coverage of services as stipulated by
legislation although the implementation
in the real life may have remained min-
imal. The real coverage is also affected
strongly by the content of services. The
service provided in the form of health
examinations only is substantially dif-
ferent of the service which comprises all
the preventive, promotion, curative and
rehabilitation elements which are pos-
sible to implement through occupa-
tional health services. Many experts share
the view that even the 15% coverage of
the workforce of the world may be an
over-estimate.

During the past 20 years the develop-
ment of occupational health services in
terms of coverage and real implementa-
tion has been at best modest. In fact, the
global trend is declining rather than im-
proving, due to several factors associ-
ated with globalization. Outsourcing,
downsizing, fragmentation of compa-
nies, minimizing the social costs of com-
panies tend to reduce the coverage. In
addition, growing numbers of the self-
employed and the informal sector work-
ers, growing turnover, short-term em-
ployment contracts and partial unem-
ployment all affect possibilities to pro-
vide occupational health services for
workers.

The declining trends are seen in spite
of the fact that several authoritative bod-
ies, including the ILO, WHO and nu-
merous professional organizations and
the organizations of workers have, al-
ready for several decades, emphasized
the need for services. The ILO Conven-
tion No. 161 on Occupational Health
Services and the WHO Global Strategy
on Occupational Health for All call for
the organization of services to all work-
ning people of the world. We are still far
from this goal, and it is not likely that
the coverage will essentially expand
without concerted efforts. The Conven-
tion No. 161 has been ratified so far by
19 Countries, i.e., about 10% out of 200
Member States of the ILO. A number of
other countries have reported they use
the Convention and related Recommenda-
tion as a guideline for the develop-
ment of occupational health services.

Very recently a new interest to devel-
op occupational health services has ap-
peared likely as a consequence of the
identification of negative social impact
of globalization particularly in the de-
veloping countries and countries in tran-
sition. The task to develop the services
for all working people is huge and takes
several decades to be totally met. The
most important underserved sectors or
sectors without services at all are par-
ticularly found in developing countries,
but gaps in the coverage are also seen
in the industrially developed countries
particularly in agriculture, informal sec-
tor, small-scale enterprises and medium-
sized enterprises. In addition, migrant
workers are in many countries without
services as they are likely to work in the
sectors, where services are not availa-
ble. The access to services does not
match with the real needs, i.e. the rates
of injuries and diseases and the expos-
sures of workers to various risk factors.
In several meetings of the occupational
health administrators and experts the
reasons for the slow development of the
coverage of OHS have been discussed.
Good examples of the reasons were re-
cently listed by the Inter-Country Work-
shop on Primary Health Care and Basic
Occupational Health Services of the
WHO Eastern Mediterranean Region
which convened in Sharm-El-Sheik,
Egypt in July 2005:

• Low awareness of decision-makers
  of importance and benefits of OHS
• Financial constrains
• Shortage of trained experts needed
  for OHS
• Poor understanding of the concept of
  OHS
• Ambiguity of the roles of various
  ministries and lack of collaboration
• Low priority given to occupational
  health in national health policies
• Low priority given by the Interna-
tional Organizations, WHO and ILO to
Occupational Health in their policies
and programmes.

So the recognized reasons are prima-
arily political and in policy prioritization
rather than technical. There is, howev-
er, also a recognized need to develop
new strategies and technologies to adapt
occupational health paradigms and prac-
tices to the changed structures of econ-
omies and to the new trends in the em-
ployment and demographic changes of
workforce.

Background and generation
of the BOHS concept

In order to meet the global needs to de-
velop occupational health services in the
world the 13th Joint ILO/WHO Com-
mittee on Occupational Health on 9–12
December 2003 decided to develop a
new concept, Basic Occupational Health
Services, BOHS. The development work
was agreed to be done in collaboration
among the WHO; ILO, and the Interna-
tional Commission on Occupational
Health, ICOH.

The concept of BOHS is based on the
The overall paradigm of BOHS is presented in Figure 1, emphasizing the role of four important elements: policy, infrastructure, appropriate content in the form of good practices, and the availability of human resources, well-trained experts, their competence, skill and ethical principles.

The objective of Basic Occupational Health Services is to help increase the global coverage of services and guide to appropriate content of services so that the occupational health needs of workers and workplaces in very 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) which so far have not had such services available or the services have not met their occupational health needs.

Stepwise development of infrastructures

A sustainable occupational health service requires an infrastructure. Every country should analyse its prevailing situation in OHS. On the basis of such an analysis, a national policy and strategy including an action programme need to be drawn up. To consider the wide variation in the stage of development of the occupational health services in different countries a stepwise strategy is recommended. Depending on the degree of development achieved by the country, following steps may be considered:

Stage I: Starting level
To the workers and workplaces, which do not have any OHS at all, this is a reasonable starting point. This is the service utilizing field OHS workers (if possible, a nurse and safety agent), who have a short training in OHS and who work for a primary health care unit or respective grassroots level facility. The content of service focuses on most important and severe health hazards and on their prevention and control.

Stage II: Basic Occupational Health Services (BOHS)
This is the infrastructure-based service working as close as possible to the workplaces and communities. The service provision model may vary depending on local circumstances and needs. The personnel comprises a physician and a nurse with training in occupational health. They may work on full-time or on part-time basis depending on needs and local circumstances.

Stage III: International Standard Service
This level is the minimum objective for each country as stipulated by the ILO Convention No. 161. The service infrastructure has several optional forms and the content is primarily preventive, although also curative services may be appropriately provided. The service staff should be led by a specially trained expert (usually a specialist occupational health physician) and the team should preferably be multidisciplinary.

Stage IV: Comprehensive Occupational Health Services (COHS)
This level is usually found in the big companies of industrialized countries or it may be provided by large OHS centres. The staff works as a multidisciplinary team often including several specialists like specialist physician, occupational health nurse, occupational hygienist, ergonomist, psychologist, safety engineer, etc. The content of services is comprehensive covering all relevant aspects of occupational health.

The Stages I and II are primarily designed for the smallest and micro-enterprises, the self-employed and the informal sector which have no possibilities to start immediately from the International Standard level three.

The content and activities of BOHS
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. Also curative activities are included where needed and to the extent which does not compromise the preven-
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 (the BOHS process cycle, see Figure 2 above).

Evaluation may lead to redesign of activities according to the principle of continuous improvement of services.

Following steps in the BOHS activity process deserve to be briefly mentioned here:

- Orientation and planning to the workplace by collecting information on the typical hazards and problems of the economic sector in concern, available data on hygienic measurements, actions undertaken in the past, records of injuries and diseases
- Surveillance of the work environment for identification of workplace hazards and for planning their prevention and control
- Surveillance of worker’s health to detect the occupationally determined diseases and to assess their consequences
- Assessment of health and safety risks and their judgement for prioritizations
- Information and education on risks to the employers and workers and advice on the need for preventive and control actions
- Participation in actions and campaigns for prevention of accidents and major hazards
- Maintaining and training preparedness for first aid and participation in the organization for emergency preparedness
- Diagnosis of occupational and work-related diseases when appropriate and their referral to an assigned clinic
- General health care, curative and rehabilitation services when appropriate
- Record keeping on activities, such as hygienic measurements and outcomes such as occupational diseases and injuries
- Evaluation of effects and impact of BOHS’s own activity by using the recorded data as a data source.

Service provision models

In general, numerous models for the provision of occupational health services are available:

- Primary health services model integrating BOHS into the primary health care unit’s activities
- Big company model operating from inside the company by staff employed by the company itself
- Social security institution as a service provider
- Group service organized jointly by several small or medium-sized enterprises on non-profit basis
- Private health centres providing exclusively occupational health services or BOHS as a part of other health services
- Private physician who has special competence in occupational health
- Local or regional outpatient clinic of hospitals as BOHS providers.

The structure, size, nature of activity and geographical distribution of workplaces vary widely. It is a lesson from many countries that one model alone is not sufficient for ensuring full coverage of services for all workplaces and all working people. Therefore, a flexible use of several models fitting best to the local circumstances is recommended. Each service provision option should, however, be integrated into the overall national OHS system.
Human resources and support services for BOHS

An experience-based estimate speaks for a minimum need of one physician and two nurses per 5000 workers with a great variation depending on the branch of industry and size of workplaces, as well as on their geographical distribution. The public authorities are responsible for ensuring that such a resource is available and its competence is regularly updated in every country. A core team should comprise at least a physician and a nurse, who both need to have training in occupational health. They should be supported by a kind of safety agent trained in safety and accident prevention. The front-line services also need to be supported by intermediate level services to ensure, for example, hygiene services and the diagnostic services for occupational diseases. The Institute of Occupational Health serves usually best this purpose.

Financing

According to the ILO Convention No. 161 on Occupational Health Services, the financial responsibility for the provision of occupational health services rests on the employer. As the ability of the small enterprises and the self-employed, and particularly the informal sector enterprises and workers, to buy external services is poor or nonexistent, often the only possible provider and financer of services is the public sector, i.e. the primary health care units, public polyclinics or social security organizations. As the employer is responsible to ensure safety and health at work, whatever is the financial arrangement, it is a strong principle of the ILO Convention No. 161 that the worker should not be put to pay for costs of services, which are established for correction and prevention of hazards at work.

Actors in organization and development of BOHS

Occupational health services are a collaborative activity of OHS experts, employers and workers of the workplace. In addition to these three partners numerous other actors are needed at the national level for various activities concerning OHS. A part of them ensure prerequisites for organization and functions of the services, another part participate in the service delivery. Among the most important actors are the following:

- Government’s special agencies in occupational safety and health and in the health sector
- Provincial and local municipal authorities
- Social partners, employers’ organizations and trade unions
- Branch organizations and chambers of commerce
- Associations of agricultural producers and small enterprises
- Associations of occupational health professionals
- Safety representatives of local workplaces and communities
- Ministry of Agriculture and Ministry of Industry
- Universities and other educational settings

To ensure good coordination and full participation of all the relevant partners, a National Committee for Occupational Health Services or for Occupational Safety and Health may be organized.

Summary

The global 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. The traditional instruments and totally voluntary activities have not provided such services in the past and the current trend in the coverage is declining rather than increasing.

The Joint ILO/WHO Committee on Occupational Health in collaboration with the International Commission on Occupational Health, ICOH, has developed a model for Basic Occupational Health Services, BOHS, which is intended to help the countries to meet the needs to expand the coverage of services and to provide a reasonable content, which fits to the local and workplace level OHS activities. Numerous practical tools for the implementation of BOHS and training of BOHS providers are still needed to get the objectives of the BOHS initiative implemented. Nevertheless, the BOHS initiative is one of the few actions to meet the objectives of the ILO Convention No. 161 and the WHO Global Strategy on Occupational Health for All at the practical level.

References