Workers' health and primary health care

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About half of the world's population is economically active. The health of workers is determined by a number of occupational hazards, individual risk factors and access to health services, which are modified by social factors and employment conditions. Though highly effective occupational health interventions exist, less than 15% of the global workforce, primarily in big enterprises in developed countries, have some access to occupational health services. Workers with precarious jobs, unemployed, migrants and those in informal economy and agriculture often do not have access to any preventive or curative health care.

The changing world of work features increasing mobility of the workforce, growing numbers of small and medium size enterprises, informal economy, sub-contracting, precarious forms of employment, rapid spread of new technologies and transfer of occupational hazards between and within countries. Unfortunately, health services for workers do not adapt quickly enough to the changing working conditions and in many cases are not fit anymore to respond adequately to the changing health needs of the workforce.

In many countries, occupational health services, if they exist at all, tend to focus on medical check ups, registration, treatment and compensation of occupational diseases and injuries. At the same time, general health services fail to detect and address health problems related to work. The linkages between occupational and general health care services are often very poor and in some countries there is a structural separation between the two. Such fragmentation of the health system results in insufficient primary prevention of work-related health problems, rising rates of sickness absenteeism, inability to reintegrate sick and injured workers back to the workplace, lack of continuity in care and inefficient use of human and financial resources.
The workplace provides ample opportunities to implement public health interventions, such as treatment of tuberculosis, immunizations against certain infectious diseases, as well as promotion of healthy diet, physical activity, well-being and mental health. However, because of the poor integration of occupational health services in primary care many public health programmes, for instance tobacco control, can not reach working populations.

The Alma Ata Declaration on Primary Health Care from 1978 emphasized the importance of bringing health care as close as possible to "where people live and work." Furthermore, resolution 60.26 "Workers' Health: Global Plan of Action", adopted by the World Health Assembly in 2007, urged Member States "to work towards full coverage of all workers, including those in the informal economy, small- and medium-sized enterprises, agriculture, and migrant and contractual workers, with essential interventions and basic occupational health services for primary prevention of occupational and work-related diseases and injuries."

The concepts of Primary Health Care (PHC) as they were expressed 30 years ago are still valid today. The 2008 World Health Report proposes four inter-linked goals for health systems strengthening based on a revitalized PHC approach for today:

- achieve universal coverage by giving everyone fair access to health services;
- re-organize health services around peoples' full range of life-long health needs and expectations and with their involvement;
- include health in all public policies and in health considerations with all external partners to create healthier and more stable communities.
- make regulation of the health sector more effective and include other sectors, NGOs, civil society and the private sector in health decision making.

This renewed attention to development of primary health care provides plentiful opportunities to scale up occupational health services using the values of equity, solidarity and social justice and the principles of multisectoral action and community participation. Such a process could allow for an adequate response by health systems to the specific health needs of a large group of workers who are currently left out, particularly by providing channels to participation and inter-sectoral action, covering working populations in a given territory, and integrated approaches to health in working and family life.

Therefore, the Government of Chile in collaboration with the World Health Organization has convened a global consultation in May 2009 to identify directions for integrating workers' health into the strategies of primary health care. The experience of the participating countries (Brazil, Chile, China, Finland, Italy, the Netherlands, South Africa, Thailand, United Kingdom, United States of America) demonstrated that this is feasible.

The meeting recommended to study systematically the lessons learned from the development of primary health policies in the context of workers' health. The discourse on renewing primary health care that is going on at the global, regional and national levels should engage workplace actors. At the local level there is a need to improve the performance of primary care services in addressing the health needs of workers. Ministries of health have a very important role to play in protecting and promoting the health of all workers by integrating occupational health services into primary care. Occupational health could strengthen primary prevention and health promotion of primary health care policies and services. Key factors for success include: strengthening the regulatory base; building of human and institutional capacities for occupational health at the primary care level, and providing adequate financing mechanisms that stimulate the delivery of essential occupational health interventions to all workers.

WHO will work with ministries of health and WHO Collaborating Centres to develop case studies and policy options for integrating workers' health into the strategies of primary health care in different socio-economic and geographical contexts. Such work will be carried out in collaboration with international partners, such as International Labour Office, International Social Security Association, International Trade Unions Confederation and International Organization of Employers. The active involvement of the professional associations such as the International Commission on Occupational health (ICOH) and the World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians (Wonca).
Basic occupational health services in East Africa


In the past, Kenya, Tanzania and Uganda have enjoyed economic and political co-operation since the first decade of the 20th century. The East African Community (1967-1977) was established in 1967, but it dissolved in 1977. A new Community was re-established on 30 November 1999. The Treaty entered into force on 7 July 2000. On 1 July 2007, Burundi and Rwanda joined the Treaty.

The Chapter 16 of the Treaty stipulates the objectives for co-operation in the development of human resources, science and technology, including establishment of common training and research institutions and harmonization of training curricula at all levels of training. The Chapter 17 provides principles for free movement of persons, labour, services, right of establishment and residence. The Article 104 among others includes the following points as a scope of collaboration:

a. (d) maintain common employment policies
b. (e) harmonise their labour policies, programmes and legislation including those on occupational health and safety
c. (h) enhance the activities of the employers’ and workers’ organisations with a view to strengthening them.

In addition the Partner States undertake to co-operate in the enhancement of the social partnership between the governments, employers and employees so as to increase the productivity of labour through efficient production. The integration has developed fast since 2000 and the Community is in the move towards the establishment of a Common Market by 2010 and a Monetary Union by 2012 (1, 2).

Today the EAC population is estimated at 132 million with an average annual growth rate of 3 percent, while literacy rate of the Region was estimated between 62 and 74 percent in 2007. Overall, the EAC recorded an average economic real growth of 6.8 percent in 2007. The aggregate, total GDP for the Region amounted to USD 60,491 million in 2007 giving an aggregate GDP/Capita of 424.2 USD with a six-fold variation between the poorest (Burundi 118 USD/Capita) and richest (Kenya 724.5 USD/Capita). The total aggregate labour force is 59.43 million. The economic structure varies widely; In Burundi, 94% of employment is in agriculture and only 6% in industry and services, while the respective figures in Kenya are 25% and 75% (1).

Development collaboration for occupational health in East Africa

Collaboration for development of occupational health in East Africa has long traditions. In the early 1970s, the Finnish Institute of Occupational Health (FIOH) started practical development programmes mainly with Kenya, Tanzania and Zambia with financial support from the Finnish Development Aid Agency, FINNIDA. The activity was substantially strengthened in the late 1970s by the FINNIDA-supported ILO Programme for Occupational Safety and Health. Later on in the 1980s and the 1990s the FIOH carried out the East African Regional Programme for Occupational Health and Safety with several programme elements together with Kenya and Tanzania. The Swedish-funded WAHSA project implemented in 2005–2009 a 10-element 4-year programme with partnership of several institutions in the SADC Region, including Tanzania. The World Health Organization and the International Labour Organization have continuously had programmes for occupational health and safety in the Region, for example, on elimination of silicosis, on pesticides and on safety and health in general.

East African Regional Programme on Occupational Health and Safety
The current planning for the Regional Programme on Occupational Health and Safety in the East African Region aims to underpin the East African Community (EAC) Development Strategy. The objectives and activities of this Programme are closely related to the EAC Development Strategy, its strategic interventions on harmonizing labour policies and legislation in particular. The focus should be on creation of decent work and better jobs, thus increasing the competitive edge of the East African Region. The connection between health, work ability and productive work life are clearly spelled out in the EAC Strategy. The 12-month planning phase is funded by the Finnish Ministry for Foreign Affairs. This Programme will contribute to strengthening the infrastructures in the countries and to creating joint research and training activities, as well as improving the occupational health and safety information exchange systems among the countries.

The programme plan consists of five substantive elements:

1. development of legislation, including national OSH profiles and programmes
2. strengthening of service infrastructures, including Basic Occupational Health Services, BOHS
3. research and development, including sectoral and subject-oriented profiles
4. training and capacity building, and
5. information, communication and networking activities.

**EARPOHS Framework 2010-2013**

**EAC, Regional activity**
- Regional OHS Policy
- Regional OHS Action Plan
- Regional Information and Communication Strategy on OHS
- Regional Research Strategy
- Regional Training of Trainers Courses on BOHS

**Country level**
- National OSH Profile and Policy
- National Information and Communication Strategy on OHS
- National Policy on BOHS
- Training of Trainers
- National Research Strategy
- National Training Strategy

*Figure 1. Structure of the East African Regional Programme on Occupational Health and Safety (3)*

### Development of basic occupational health services

The development of basic occupational health services is included in element 2 of the Programme. The objective is implemented by using the Basic Occupational Health Services (BOHS) approach to develop a service infrastructure that covers the majority of the Region’s workforce employed in agriculture, small-scale enterprises and the informal sector.

*The overall objective is that at the end of the 4-year period BOHS has been established in the East African Community area so that it is included in the policy documents, trainers have been trained and national training programmes initiated, BOHS pilots have guided the practical implementation and in three countries there is at least one functional BOHS unit providing services.*

The following specific objectives for BOHS development during the next 4 years have been planned:

- a. Carrying out a survey on OHS in each country
- b. Preparation of OHS/BOHS policy document for each country
c. Provision of a full set of practical guidelines for all actors utilizing the policy guidance and practical guidelines developed by ICOH/WHO/ILO joint activities (4,5,6,7)

d. Completing Training of Training (ToT) courses so that every country has trainers in BOHS, who are able to carry out training at the national level.

e. Completion of BOHS pilot projects in each country (first in three 'old' member countries and later on, if feasible, in the rest two countries).

The preliminary planning stage of the Programme was started in September 2008. The principles and practices of occupational health services and particularly BOHS have been introduced and thoroughly discussed with the responsible government representatives and experts of the Region. To get a baseline data, an initial survey of the situation in occupational health services in the countries was made through a questionnaire survey among the main responsible bodies in all countries. The main question entities were the following:

1. Availability of national policy and programme for OHS
2. Legal basis and legal coverage of OHS
3. Coverage of occupational health service provision
4. Content of services (prevention/curative services/promotion/rehabilitation)
5. Financing of occupational health services
6. Service provision models at local and workplace levels
7. Human resources available for OHS
8. Training systems for OHS human resources
9. Support services including occupational hygiene, analytical services, clinical occupational medicine, etc.
10. Recognition, registration and compensation of occupational diseases and injuries
11. Collaboration between occupational health services and primary health care services
12. Collaboration between occupational health services and occupational safety and health activities.

The response rate was 100% and following rough conclusions can be drawn on the basis of the survey:

1. Great variation was found between countries in their OHS systems, the three largest countries having substantially better development than the two others. Policies were in all countries either in drafting stage or non-existent.
2. Legislation and Government authorities were relatively well developed, but the implementation of legislation was weak in the whole Region.
3. The legal and particularly practical coverage of services is currently low. While the regulations may stipulate comprehensive content for services, the practical content may often be very narrow, including only health examinations and curative general health services. Preventive activities were under-developed. Similarly, the countries suffered from weak systems for recognition and registration of occupational diseases and injuries.
4. There are substantial needs to develop financial systems for OHS by obligating employers to invest more in OHS and to organize alternative public service provision opportunities for the informal sector, agriculture and the self-employed.
5. All types of human resources for OHS are seriously under-dimensioned or partially non-existent. The need for the establishment of extensive training programmes for OHS/BOHS personnel is a critical step in further development of services in the Region.
6. Support services for front-line OHS/BOHS are weak or non-existent. There is a need for development of a National Centre of Excellence for occupational health, Institute of Occupational Health and Safety, or a respective body, able to provide support services.
7. Collaboration with key partners and sectors in various jurisdictions is not well developed or it is partly non-existent. There is a need to develop permanent collaboration mechanisms at all levels for collaboration and interaction between the labour and health sectors and between the government and social partners in issues of occupational health.

The results of the survey and discussions carried out with the Countries' representatives are used for further planning of the Programme. The planned elements of the Infrastructure/BOHS elements are the following:

1. Assignment of special responsible persons for the development of OHS/BOHS in the countries.
2. Organizing the second round of OHS/BOHS survey in countries with a broader scope and more detailed questions.
3. Drawing up a Policy statement and policy document on development of OHS/BOHS in the countries.
4. Providing BOHS guidelines for national actors and possible translation into Kiswahili.
5. Organizing Regional Courses for Trainers of BOHS. Organizing national courses on BOHS by utilizing trained trainers as the main resource.
6. Initiating BOHS pilot projects for each Country for testing the feasibility of BOHS approach and providing on-site training for BOHS providers.
7. Evaluation of all the activities exercised during the 4-year programme period to take lessons from practical implementation.

The planned programme aims at the development of permanent infrastructures for BOHS in all member countries (Figure 1). All member Countries have expressed high interest towards BOHS approach and are willing to implement it in their constituents (Table 1). The BOHS guideline material has been developed by ICOH in collaboration with WHO, ILO and FIOH. The practical experiences gained from respective WHO/ILO/ICOH programmes in China, Thailand and Vietnam will be fully utilized. All these together will substantially facilitate a relatively rapid implementation of the Programme.

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<tr>
<th>Activity</th>
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<td>Assignments</td>
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<td>OHS situation analysis</td>
<td>CHESTBOS Survey (Questionnaire)</td>
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<td>BOHS policy</td>
<td>Policy statement &amp; document on BOHS</td>
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<td>BOHS guidelines</td>
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<td>Training of trainers</td>
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<td>Fidelity testing</td>
<td>BOHS Pilot Projects</td>
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Table 1. Commitments of Countries in implementation of the BOHS element of the East African Regional Programme of Occupational Health and Safety, EARPOHS. Code: B= Burundi, F= Finland, = Kenya, R= Rwanda, T= Tanzania, U= Uganda.

Figure 2. Flow-scheme for BOHS development in the East African Community Region.

Some of the activities will be carried out regionally, such as organization of training of trainers-courses and comparative analysis of evaluation results after the pilot projects. It is likely that some of the countries also can help their neighbours in the development of BOHS in practice.
Acknowledgements

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How employers benefit from good occupational health and safety in Finland

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In most countries of the world occupational health is regarded as a part of work safety, and it often has a minor status and significance. This may be due to the fact that only safety at work is considered to be the responsibility of the employer. Other matters that relate to health are generally taken care of in the context of separate public or private health care systems. Neither is the treatment of diseases considered to be a function of occupational health.

In Finland, however, the situation in this regard is different. Occupational health services are stipulated by law and regarded as the responsibility of the employer. As a consequence, the employer is responsible for arranging adequate and professional occupational health services. The main professionals are occupational physicians and nurses and if needed physiotherapists, psychologists, ergonomists and work hygienists.

Obligatory occupational health care in our country consists of workplace visits and surveys conducted by these professionals. During their visits they gather all the necessary information that they need for their activities. Generally a pre-survey is necessary before the first workplace visit. In this connection the line of business of the workplace, the functions and the developmental phase of the enterprise, as well as the working time arrangements, structure of the personnel including gender, age and job descriptions are charted. Occupational accidents and diseases and their causes are of special interest in this connection, as well as statistics on their type and quantity, and data on absenteeism.

A workplace inventory generally includes an investigation of the workplace as a whole. Attention is paid to items such as space allocation and structures, machines and equipment, illumination, temperature, draft, dust, noise, indoor climate, any possible physical and chemical exposure,
work load, work stations, and risks in the environment, hazards during work, as well as bullying or harassment in the work community. To summarize, the duty of occupational health professionals is to disclose all hazards to the employees’ health and welfare.

The majority of Finnish employers have voluntarily made arrangements for medical care of their employees, who are entitled to the treatment of common illnesses at the obligatory occupational health service unit. The occupational health service consists of the services of general practitioners, who give acute preliminary treatment and follow-up treatment of, for example, hypertension, allergic diseases and musculoskeletal disorders. The employees can visit the doctors during working hours. No salary deductions are made during these services despite the recommendation that non-acute sicknesses should be taken care of outside the occupational health service system. The more expensive X-rays, laboratory tests, and medications, the employees have to pay themselves. The kind of health care arrangement described above is very common in Finland.

No doubt you are curious to know the indirect cost of the occupational health service system to the employer. If the employer does not have to pay the employee's salary during sick leaves for accidents, occupational diseases and other leaves due to the inability to work, the financial gain may be small. This question nevertheless has to be viewed as a societal responsibility. It should also be borne in mind that industrial safety regulations are obligatory to the employers according to the directives of the European Union. Another feature in the Finnish social security system is that employers fund partially this system, out of which the citizens are paid for expenses arising from medical treatment and costs of inability to work. The social security system reimburses 50% of the expenses incurred by the occupational health services paid by the employer. Additionally, according to recent legislation, employers are reimbursed 60% of the costs of workplace surveys made by occupational health professionals. This is due to the appreciation and high priority given to the occupational health service system.

How does the employer benefit from all this?

The rising work absenteeism figures have attracted attention everywhere. Normal absenteeism figures are 3.5 – 4.5% for white-collar employees and 5.5 –6.5% for blue-collar employees. These figures are averages and do not apply to small enterprises with only a few workers, as naturally even a single long period of absence can bias the statistics. Higher figures than the ones given above may reflect other perspectives than inability due to sickness. Some of these perspectives could well be problems in work attitudes and norms at the workplace, a poorly functioning work community, unfair work arrangements, or lack of trust, confidence, appreciation, etc. The eventual loss is, however, a loss in production.

We have calculated that salaries make up a third of the overall costs, because absenteeism causes losses in production and expenses resulting from temporary labour compensation. If the occupational health service arrangement can decrease absenteeism by even one day, the cost of a single person's occupational health care is already refunded.

The prevention of diseases and the possibility of intervening rapidly and starting medical care at an early stage can significantly decrease the prolongation of a sick leave. Capable and motivated employees are an invaluable success factor for an enterprise.

It is interesting that in Finland employers pay the major part of the pension costs. This is why early retirement means significant costs for the employer. Consequently, Finnish employers want the occupational health service system to be as efficient as possible in general, but especially in the prevention of illnesses. A well organized occupational health service system is also an effective public relations asset. An employer who takes good care of the personnel is appreciated and held in high esteem; this ensures the availability of labour and wins the respect of the clients.

The occupational health service must be so successful and of such high quality that both the employer and the employee benefit essentially from it, despite its costs. It has to be based on the competence of qualified and motivated occupational health personnel.

In summary, if the work ability of workers can be enhanced, the number of work accidents and occupational diseases minimized, and illnesses treated rapidly and efficiently, it will lead to a lower rate of absenteeism and will benefit the enterprise as a whole.
Occupational health services in agriculture and rural areas: an urgent need for the healthy village campaign

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Agricultural workers have some specificities making them different from any other worker. In particular, since they produce food and use land, they directly act on the wellbeing and healthiness of millions of people; on the other hand, unhealthy and unsafe agricultural practices may cause environmental pollution and depletion, production of unhealthy food as well as important public health problems. Specific examples are “mad cow disease”, SARS, avian flu and Influenza type A, H1N1 flu, all raised from agriculture and animal breeding and repeatedly attributed, at least partially, to unsafe procedures in intensive animal breeding.

A significant specificity of agriculture is represented by the lack of a clear separation between living and work environments, and between living and working time: very often all the members of the rural family are involved in work, sometimes in an informal way. This is particularly evident in family-based enterprises, where the involvement of elderly and children is highest: based on International Labour Office (ILO) estimates, about 250 million children are engaged in agricultural activities in the entire world, while the elderly are a significant component of the workforce in developed countries. A further characteristic of the sector is represented by a significant presence of migrant and seasonal workers, with their well known specificities and vulnerability.

Agriculture brings about exposure of workers to several occupational risks for safety and health. In particular, ILO estimates that almost half of the occupational fatalities occurring in the world are attributable to agriculture. This means that every year about 170,000 agricultural workers lose their lives in occupational accidents. Data on non-fatal accidents are less robust; anyway, it is possible to estimate a yearly incidence of such events of around 130,000,000. In agricultural activities workers are exposed to a high number of health risks: either chemical, as well as physical, biological and psychosocial. However, significant uncertainty on the real dimension of the impact of these health risks on agricultural workers and the related burden of disease still persists. Some data coming from the developed world suggest that the most common occupational diseases in the sector affect muscular-skeletal apparatus, the respiratory and nervous system, and the skin. Also allergies are significantly present, while the total number of reports of other diseases is quite small. The incidence of occupational cancers in agricultural workers is lower than in the general population, although for some specific cancers, such as melanoma and lip cancers, the incidence is significantly higher. As for zoonoses, they are in theory present but very often not regularly reported, or not reported at all, apart for specific severe diseases, such as H5N1 infection, or tuberculosis.

Since the number of agricultural occupational diseases so far reported worldwide is very small, notwithstanding the several risk factors identified and the poor occupational hygiene conditions frequently observed in agricultural settings, it is reasonable to assume that nowadays, even in the most developed countries, there is a significant underreporting of occupational diseases in the sector. Uncertainty with respect to this data brings about uncertainty in a correct characterization of the risks, and in the identification of priorities for preventive interventions.
Apart from the structural characteristics of agricultural work, a further reason for underreporting of occupational diseases is the weakness and in some cases the absence of OH and safety services in the sector. Agricultural workers are rarely provided with health surveillance at the workplace, and health care is often delivered by rural general practitioners (GPs), who very often are not adequately trained on diagnosis and prevention of occupational diseases in agriculture.

In substance, fragmentation in the territory, relevance of family-based enterprises without any (or with a very small number of) employees, lack of risk assessment and management expertise make agriculture a “grey area” for occupational and environmental medicine, despite the presence of relevant health risks. Moreover, despite a strong need for preventive interventions, rural areas are largely neglected by research, prevention and welfare. Compared against urban dwellers, rural inhabitants, and not only rural workers, suffer from an evident gap in the quality of life, sanitation, income, and distribution of welfare benefits, including occupational health services. On the other hand, agriculture represents a priority for prevention, because only healthy and trained agricultural workers can be able to produce healthy food, in an environmentally safe production scenario.

Therefore, the promotion of basic occupational health care in the sector and the creation of basic occupational health services (BOHS), is a key goal for the whole healthy village campaign, launched in Lodi by the “Lodi Declaration on Healthy Villages” adopted at the end of the 16th International Congress on Rural Health held in Lodi, Italy, in June 2006.

In order to be effective, BOHS have to be widespread in the territory, according to local needs (number of workers and enterprises) and to host different preventive activities: health surveillance, education and training; vaccinations; execution of specific laboratory and instrumental examinations (electrocardiography; respiratory function and a hearing function examination) together with biological specimen collection. Specific activities addressed towards active searches of cases of occupational diseases and research on new and emerging risk factors and diseases should be carried out. Risk assessment should be a further task of agricultural BOHS, in order to address periodicity and contents of workers’ health surveillance.

BOHS activities need to be performed by specifically trained personnel: specific information on occupational health and safety in agriculture have to be urgently incorporated in university courses for medical doctors, nurses and environmental and occupational health personnel. Training and education activities in the field are also required. Finally, since very often general practitioners (GPs) are the only health care providers for agricultural workers, BOHS may be the place for conduction of specific experimental activities of collaboration between occupational health physicians and rural GPs. Collaboration should be based on information exchange, accompanied, when possible, by pilot experiences of electronic file sharing. The option of creating BOHS in selected rural GPs services, and of asking rural GPs to perform specific instrumental examinations in support of the activities done by occupational health doctors should be explored. Finally, since some specific diseases observed in agricultural workers are mainly related to unhealthy life-style, or living conditions, and not to the workplace itself, and since workplace is a suitable forum for health promotion, the planning and conduction of specific health promotion activities is a further field of collaboration between occupational health doctors and general practitioners.

Selected references

The model development of basic occupational health service (BOHS) in primary care units in Thailand

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The WHO/ILO/ICOH/FIOH have launched the joint effort on the development of Basic Occupational Health Service (BOHS) policy and guideline in order to improve coverage and quality of occupational health services (OHS) in the world. The principle of BOHS is to ensure the provision of OHS for all workers by developing new service provision models, which are adaptable to local conditions, low cost, widely covered the workforce, and still meet the quality requirements of OHS. The aim of this report is to describe the experience on the development of BOHS in Thailand.

More than half of the working population in Thailand are agricultural, informal, or self-employed workers. They are unable to get access to OH services because of their work characteristics e.g. scattering work site, frequent mobilization, and less budget for OSH investment. The Ministry of Public Health recognized the situation and co-operated with the ILO to develop BOHS for those underserved workers in terms of feasibility and suitable OH services. The desirable BOHS model should be integrated into existing primary health care services in the country with no need to have extra investments or develop any new system. Therefore, the research team conducted a pilot study on BOHS model development in 17 Thai primary care units (PCUs) in 8 provinces during 2004-2007. The activities included setting the BOHS guidelines, development of training curriculum for health officers, and pilot provision of BOHS.

The study showed that all PCUs were able to provide BOHS. The target groups were mainly farmers. The activities performed included OH education (100%), first aid and emergency treatment (77%), working environmental survey in farms (38%), and health screening for pesticide exposure (79%). Although most local health officers knew how to provide some OH services for farmers, especially pesticide poisoning, they needed to learn and understand other aspects of farmers’ health at work such as occupational injuries, musculo-skeletal disorders, etc. In addition, the PCUs staff should have capacity to provide systematic OH services covering all health aspects including health protection, health promotion, curative, and rehabilitation by integrating into general health care services. This was the conceptual framework for the development of OH service guideline in the project.

The training for the PCU staff was also a key success factor for the project achievement. The aim of the training course was to develop the knowledge and capacities of the staff on occupational risk assessment and utilization of this information for planning effective OH services. The capacity building program began with a five-day training course, followed by pilot activities on the community level under the supervision of experts. The five-day training course combined theory (lectures, training documents, and manuals), field practice and group works. The training curriculum covered all essential topics in occupational health and safety. At the end of the course, all trainees were evaluated by measuring of the extent to which learning objectives were met.

After the training course, the staff in the pilot PCUs started providing OH services. The activities performed included both outpatient services at the health units and OH services in communities. Improvement of simple and common occupational disease recognition, OPD card re-arrangement, and disease reporting system were the main activities implemented in the project. Activities implemented in communities consisted of workplace survey, participatory data analysis, health screening, and communication of results with workers for joint problem solving. Since some staff in some pilot provinces had also undertaken the ILO WIND training program, they combined all these experiences for improving their working environment in agricultural activities.

Lessons learned and good practices

After the implementation of the project, some good practices and lessons learned were observed from the project. The pilot project can raise awareness of the importance of OH in workers among health authorities and officers at provincial and local levels. It also showed that OH services can be integrated effectively into a general health service system at the PCU level. The PCU’s staff increased their understanding and knowledge on OH services. During the
implementation of the project, they gained their experiences by learning and practicing by themselves with the support of research supervisory team. The staff were able to provide all aspects of an OH service:

- occupational disease prevention,
- health promotion, and
- (common and simple) work-related disease diagnosis and treatment.

The project also affected workers’ belief and attitude about their health and work. Examples of preventive and control measures of relevant occupational diseases were also developed and implemented.

**Obstacles in implementation**

Some constraints were identified that affected the implementation and continuation of integrating OH services into the PCUs. These include policy and budgetary constraints, lack of staff and resources, and OH service capacity. Political advocacy on OH is still limited. In addition, no specific budget is available for PCU’s or local health care units to provide OH services.

After all relevant agencies and network movement, the government has decided to pay attention to workers in the informal economy. Last year the government declared the national agenda on OSH for workers in informal economy. The Ministry of Public Health conducted the plan of expansion of BOHS model into every province throughout the country. In addition, the National Social Security Office also lists the health risk assessment for workers as an important activity in every PCU. These will enhance the development of BOHS in the country.

In conclusion, the project showed that BOHS for underserved workers, i.e. informal workers, can be integrated effectively into a general health service system at the PCU level. However, policy support, resource allocation and continued capacity building to increase knowledge and skills for the health care staff are needed to improve the quality of the services.

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**Basic occupational health services in China**

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China is one of the most rapidly developing countries in the world. The current pattern of economic development has increased the number and frequency of occupational hazards and incidents. Occupational diseases exist in a wide range of industries and are rampant in middle and small scale enterprises. There are occupational hazards in traditional industries like coal mining and metallurgy as well as some newly emerging industries like automobile manufacturing and bioengineering.) [1]( Almost more than 90% of enterprises in China are middle and small scale enterprises which employ a large number of laborers especially migrant farmers from rural areas.) [1]

The population in China reached about 1,314.48 million by the end of 2006.) [2] There are now between 100 and 200 million migrant workers, mostly moving from rural to urban areas, [3]
who are increasingly exposed to occupational hazards. These workers often move from one employment setting to another and do not receive appropriate training.

By the end of 2007, there were 690,858 cases of occupational diseases in China, of which 90.8% (627,405 cases) were pneumoconiosis. Experts estimate that in the next 10 to 15 years, the trend of occupational diseases will be on the rise.[4]

In comparison to industrialized countries, where occupational health services coverage ranges from 20-50%, [5], the coverage in China is estimated to be in the 10% average. [6] Workers engaged in agriculture, forestry, middle and small scale enterprises, self-employed and the informal sectors, including migrant workers get limited or no occupational health service at all.

In order to protect workers' health and to enhance occupational health service in China, in 2005, the Ministry of Health of P.R.China made the decision to launch the pilot study of basic occupational health service (BOHS) in 19 counties of 10 provinces. These provinces include Beijing, Hebei, Shanghai, Anhui, Fujian, Hunan, Guangdong, Chongqing, Guizhou and Guangxi.

The objectives of the pilot projects were to: explore various models of occupational health service (OHS) at different levels; develop working mechanisms for resource allocation, improve multi-sector cooperation and worker's participation; expand coverage of compulsory work-related injury insurance; expand program service network; integrate occupational health service to primary health care at county & community level and to provide relevant training.

WHO has contributed to the development of the BOHS in China by technical expertise and funding support. An amount of USD$400,000 was allocated for the year from 2006 to 2009.

The BOHS pilot projects that were implemented for more than three years, have resulted in many benefits. Some of achievements are highlighted below:

1. The BOHS concept, principle, implementation approach and the specific technical guidelines on work environment surveillance, workers health surveillance, risk assessment and accident prevention that were developed by Professor Jorma Rantanen, WHO consultant, and the guidelines have been translated into Chinese to be used in pilot sites.
2. The base-line surveys on BOHS in 19 pilot counties have been completed, including general background of the local population, business and economic development, and basic information on occupational hazards, diseases and occupational health structure and systems.
3. The awareness of BOHS in all pilot sites has increased with most of county-governors promising to OHS plan into their agenda and providing policy and funding support. For instance, the government of Bao’an district included the "the coverage of workers' occupational health services" as one of the "tenth morale projects of Bao’an district in 2007", which increased the coverage from 24% in 2004 to 68% in 2006. [7]
4. A series of training workshops, seminars were conducted in all pilot sites of the 10 provinces. Several thousand people including the heads of local government, staff from health bureau, health inspection, local CDC, the local clinics and the community, and representatives from safety department, enterprises, and Trade Union sectors were trained in BOHS.
5. The structure of occupational health sectors has been strengthened. The county CDCs have set up the independent occupational health division, with more than 5 part-time or full-time staff with basic health facilities. Most pilot counties have also set up a supervision division on occupational health with responsibility for workplace monitoring and inspection.
6. The provision of occupational health services at township level was reorganized and improved.

Taking Bao’an District of Shenzhen City as an example, a three-level of administration system was established as shown in figure 1.
The BOHS as implemented in the pilot counties have resulted in many positive outcomes. However, there is still a need to emphasize the primary prevention and enhancing working environment monitoring and surveillance. A stronger public awareness campaign is needed with strengthened coordination and cooperation among the enterprise, employee and trade union. Adequate funding should also be mobilized to sustain the BOHS at all levels, particularly in poor counties.

References

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5. Global Action Plan for Worker’s Health---WHO HQ
6. Presentation—from Professor Jorma Rantanen, WHO consultant
7. China Report on BOHS—Dr Su Zhi, Former Director-General, Bureau of Health Supervision and Inspection, 2007
8. Pilot report on BOHS—developed by project office of Guangdong Province, 2008

ILO headquarters: Occupational health services - an ILO perspective

Dr Igor Fedotov, International Labour Office (ILO), Geneva

Introduction

The ILO Occupational Health Services Convention No.161 defines occupational health services as services entrusted with essentially preventive functions and responsible for advising the employer, the workers and their representatives in the undertaking on the requirements for establishing and maintaining a safe and healthy work environment which will facilitate optimal physical and mental health in relation to work and the adaptation of work to the capabilities of workers in the light of their state of physical and mental health. Similar requirements for the provision of the preventive and protective services at the enterprise are defined in many national laws. To date, the Convention No. 161 has been ratified by 28 countries. Many countries use it and its accompanying Recommendation No. 171 voluntary as models for establishing requirements for the organization and functioning of occupational health services.

Initially, the provision of occupational health services has been carried out mainly by teams of specialists (occupational health professionals) set up under specialized institutional arrangements mostly at large enterprises in the organized labour sector. Later on, other models of occupational health services have been developed in an attempt to meet varying needs of a very large informal sector in which the model of “in-plant health services” was not feasible. Despite efforts of governments and legislators to extend occupational health services to the
working populations, the average coverage figures are only 5–10% in developing countries and 20–50% in industrialized countries featuring a limited access of workers to such services.

**Occupational health practice**

The provision of occupational health services entails carrying out occupational health practice with the aim of protecting and promoting workers’ safety, health and well-being, as well as improving working conditions and the work environment. Occupational health practice, however, consists not only of the activities performed by occupational health services. It is a multidisciplinary and inter-sectoral activity, involving in addition to occupational health and safety professionals, other specialists both in the enterprise and outside, as well as competent authorities, employers’ and workers’ organizations, standard-setting and enforcement bodies and others. Such involvement requires a well-developed and a well-coordinated system at the workplace. The necessary infrastructure should generally comprise all the administrative, organizational and operative systems that are needed to conduct the occupational health practice successfully and to ensure its systematic development and continuous improvement.

In its broadest context, occupational health practice should be understood as the activities of all those who contribute to the protection and promotion of workers’ health and to the improvement of the working conditions and the work environment. These activities should not be seen as limited only to the practice of occupational health professionals. Infrastructures for occupational health practice should comprise all the organizational arrangements needed to implement a national policy on occupational health services, as requested by the ILO Convention No.161, to ensure its implementation at the national and enterprise levels. Activities of many bodies other than occupational health services, such as enforcement agencies, research institutions, educational and training institutions, non-governmental organizations, and tripartite bodies having stakeholders’ interest in occupational health contribute to occupational health practice. Obviously, occupational health services are the core element that dwells in the centre of occupational health practice but the entire infrastructure of the national OSH system is critical and ultimately conducive to their efficient performance.

**Investment in prevention**

It is increasingly recognized that a healthy workforce is a prerequisite for the success of economic and social policies and a necessary condition for the achievement of sustainable development. At the same time, it is often observed that enterprises spend incomparably higher amounts of funds to compensate losses due to unsafe work environments in comparison with those that would be necessary to create and maintain safe and healthy working conditions and work environments.

The investment in prevention is meaningful from the economic point of view. Prevention reduces costs due to occupational injuries and diseases. It is estimated that the social cost of occupational diseases is two-threefold higher than the investment that would have been necessary to prevent them. The existing health economics studies and the experience in the field of occupational health confirm this assertion. Common knowledge indicates that prevention is better and less costly than treatment. It is necessary to define most feasible approaches in order to evolve new patterns in occupational health practice and to optimize the efficiency of the institutions and organizations concerned with the protection and promotion of workers’ health and the maintenance of their working capacity. The areas of actions of these organizations should be broadened to aim at the total health of workers to provide both preventive and curative activities. They should address in a concerted manner disease prevention, workplace health promotion, rehabilitation, and workers’ compensation. The renewal of primary health care (PHC), which has been recently put forward by WHO, convincingly demonstrates the importance of the provision of occupational health through PHC in addition to multidisciplinary health services in order to reach underserved working populations.

If this goal is to be achieved, it is necessary to expand occupational health services emphasizing the importance of their activities to society in order to help reduce the increasing social costs of work-related ill-health and disabilities. To ensure their efficient functioning and continuous development, countries are encouraged to adopt comprehensive national policies on occupational health services in line with the requirement of the ILO Convention No.161.

**ILO message**
Despite all efforts by those concerned with workers’ health, the numbers of occupational accidents and diseases are still too high. Public awareness of occupational safety and health remains generally low and all too often occupational health does not get the priority it merits. This must be changed and action needs to be taken to stimulate an accelerated response nationally and internationally.

To address this challenge, the International Labour Conference adopted the Promotional Framework for Occupational Safety and Health Convention, 2006 (No.187). The main pillar of the Convention No.187 is the formulation and development of national OSH programmes. These programmes are strategic time-bound policy documents that focus on specific national priorities for OSH, are based on analyses of the situations in the countries concerned, which should preferably be summarized as national OSH profiles. Such programmes should be developed and endorsed by the highest government authorities and have clear objectives, targets and indicators. Overall, these programs should aim to strengthen the entire national OSH system and to foster a preventative approach and safety culture that are critical to achieving sustainability of improvements in safety and health at work.

With this approach, occupational health services become an integral element of the national OSH system where their expansion is defined by national OSH policy. The development of occupational health services will therefore be closely linked to the development of national OSH systems representing infrastructures for the performance of occupational health practice at large through the implementation of national OSH programmes. This new approach, which is determined by the ILO Promotional Framework for Occupational Safety and Health Convention No.187, is the way forward towards a progressive development of occupational health services in all parts of the world with an utmost goal to cover all workers in all occupations.

Bibliography


2: Global news and events

Collaborating Centres meeting, Geneva, 19-22 October 2009

Provisional programme (and subject to slight changes - check the website for updates):

19 October - 9-5 p.m. : Meeting with GPA Objective Managers, initiative leaders, WHO staff

20 October - 9-12 p.m.: Meeting with Regional Advisors, CC Advisory Committee, Regional Advisers to meet with their networks

Official CC meeting to follow Regional Advisors Meeting at 1 p.m.

Three workshops are planned:
• capacity building for education and training in occupational health
• healthy workplaces & tools
• healthcare workers

Meeting of the ILO CIS Centres and the WHO CCs (info to come)

More details to follow:

• provisional agenda
• registration and hotel information

Implementation of the Global Plan of Action of Workers’ Health in the European Region

Report of the Sixth Meeting of European Network of

WHO Collaborating Centres in Occupational Health
The European Institute of Health and Social Welfare

Madrid, Spain - 14 - 16 October 2008

Executive Summary

1. A total of 54 participants from WHO Collaborating Centres in Occupational Health in Europe, WHO Headquarters, WHO Regional Office for Europe, European Agency on Safety and Health at Work, and the International Trade Union Confederation attended the Sixth European Network Meeting of the WHO Collaborating Centres in Occupational Health, “How to implement the WHO Global Plan of Action of Workers Health in the European Region” at the European Institute of Health and Social Welfare in Madrid, Spain.

2. The agenda of the meeting included the Marco Maroni Memorial Lecture, a progress report of the WHO activities and achievements in the Collaborating Centres since the Buxton Meeting in March 2007, a situation analysis of the baseline survey in the European Region, a report on the results of the First Meeting of the National Contact Persons for Workers’ Health, a proposal for intensified research collaboration among US and European Collaborating Centres in Occupational Health, and further development of the Work Plan for the European Region concerning the implementation of the Global Plan of Action on Workers’ Health. In addition, the Working Groups discussed in detail the current activities in selected topical areas from the viewpoint of implementing the Global Plan of Action on Workers’ Health.

3. In addition to the reports and conclusions of the Working Groups, the participants of the meeting approved six general conclusions and recommendations.

4. The next meeting of the Network will be held in 2010. As the venue of the meeting is rotated, the possibility of organizing it in the South-East European Region will be looked into.

5. The Meeting participants expressed their warm gratitude and appreciation to the European Institute of Health and Social Welfare, for the excellent organization and arrangements of the Sixth Network Meeting of the WHO Collaborating Centres in Occupational Health “How to implement the WHO Global Plan of Action of Workers Health in the European Region”.

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Occupational health must adapt and develop to place itself at the heart of our approach to promoting health in modern Britain

Dame Carol Black, Director for Health and Work, Government of the United Kingdom

At a time when rising dependency ratios and the effects of ever greater global competition place seismic pressures on economic and welfare systems all around the world, acting to prevent people from becoming ill at work-and supporting and rehabilitating those who do become ill- is not only crucial to the physical and mental health of the nation’s workforce- but ultimately critical to the nation’s financial health. For the success of British business; for the economy; and for the very fabric of our whole society.

Current structures in occupational health may have been right at the time they were created, but there is need now to make sure they are right for the present and for the future. To reposition and redefine the role of occupational health as an integral part of the new picture of public health policy for the 21st Century. And to reconsider the relationship between occupational health and the National Health Service, especially primary care, together with wider contribution to the national economy.

Certainly more general medical practitioners (GPs) must change their attitudes towards health and work. When the evidence is clear that work is generally good for health- the benefits of work must feature more prominently in the general advice that GPs give their patients. But it is not enough to expect GPs to change without offering them significantly more support. There is a role for occupational health in helping to change this.

The challenge for a new paradigm of occupational health is to examine the care pathways for working people and to find new ways to support them before, during and after illness at work. It will require forging new partnerships and new ways of working across traditional boundaries. There is a need to bring together at a local level anyone with expertise or interest in occupational health to find locally tailored and ever more innovative ways to allow occupational health to articulate its crucial contribution to the health of the national economy.

See Dame Carol Black’s review of the health of Britain’s working age population at: http://www.workingforhealth.gov.uk/documents/working-for-a-healthier-tomorrow-tagged.pdf


ICOH review - 23-27 May 2009 - Report written by Leslie Nickels

At the ICOH meeting 23-27 March 2009 in Cape Town, South Africa, representatives from collaborating centers and others had an opportunity to discuss issues specific to the Network of Collaborating Centers (Network) workplan, which supports the Global Plan of Action for Workers’ Health 2008-2017 (GPA). The discussion was focused on adaptation and dissemination of curricula, training materials and training (priority 3.2). The objective of the session was to further explore the need for a platform for assisting ministries of health and others in the creation and implementation of occupational health services, and education and training programs. Participants included physicians, nurses, and industrial hygienists from Europe, US, and Africa.
The Network currently includes 65 government, research, professional and academic institutions from 37 countries, and three international professional associations. The 2009-2012 workplan is organized into 5 GPA objectives and 14 priorities. Two of the priorities specifically address capacity building in occupational health. Priority 3.1 to develop working methods, provide technical assistance to countries for organization, delivery and evaluation of basic occupational health services in the context of primary health care, with particular focus on underserved populations and settings with constrained resources, and priority 3.2 to adapt and disseminate curricula, training materials and training for international capacity building in OH. Expected outputs from these priorities include (3.1) good practices and demonstration projects for organization and delivery of occupational health services, evaluation of service delivery, international knowledge networks of service providers, website clearinghouse of information materials for occupational health practice; and (3.2) model materials and courses for BOHS, inventory, technical support for delivery of international courses and on-line training, national training programmes in low- and medium-income countries, introduction of OH into professional education.

Key elements from the discussion included:

- Curricula and training programs exist and there are models in other disciplines in developing skills and knowledge, however, there continues to be an occupational health “Blindspot” globally at the national and local levels.
- The collaborating centers have proposed projects with specific outcomes in this area, however, there is a need to streamline these projects and focus on projects that address needs in many countries.
- On-line training resources are available (ie NetWORM) however, connectivity is still limited in some locations.
- Training is needed at all levels, experts, primary care, and community outreach; however, many countries do not have basic primary health care systems upon which to build.

Perceived capacity building needs:

- Capacity building needs to take place comprehensively and sustainably within the PHC approach encompassing community health workers, primary care level practitioners and specialists.
- Multidisciplinary approach to raise awareness
- Continue to strengthen capacity in Africa
- Consider an advocate and community based approach and cover community issues as well.
- Adaptation, use and evaluation of existing courses, training materials, practice tools and mentoring programs
- Increase visibility of faculty globally to develop and deliver educational materials
- Expansion of successful projects, such as WISE, into other countries

We believe there is a need, however, where is the demand?

There is a demand from professionals at all levels within limited discretionary resource countries for accessible, affordable education and qualifications that can be made sustainable locally by developing educational capacity in OHS

Way forward:

- Look at existing education and training resources and identify gaps
- Use existing education and training resources making them accessible via repository and a global faculty network
- Create a centralized resource for providing education and training and other resources and consultations on developing occupational health services
- Identify partners and pathways to get message out
- Learn about how communities get information and services and approaches for reaching target audience
- Create an inventory of ways to get information disseminated
• Identify channels for spreading information. Adopt techniques for campaigns, getting messages out and capacity building from successful programs

The need for the creation of a centralized facility for providing education and training resources for developing occupational health services was discussed. There are several existing and proposed capacity development initiatives through education and training in OHS. Existing programs include various Fogarty programs such as ITREOH Southern Africa and Latin America, education and training materials, course modules and components. There are programs spread between developing countries (Geolibrary, distance web-courses at universities; NETWoRM) and low discretionary resource countries (University of Cape Town distance web-based courses in OH).

John Harrison, UK PHS and Frank Vandijk presented a concept for creating a more services-oriented resource which would include core curricula, clearinghouse, identifying and matching “experts” to help with development of services, knowledge and skills, advise and support for people who want to implement projects, and monitoring/evaluation activities. The resource would be programmatic in nature and include an on-line portal for people who want to: 1) guide themselves, 2) seek assistance at country level, and 3) contribute resources and offer expertise. It will start as a repository of experiences which have worked in particular settings and, in cooperation with local practitioners, contribute to capacity building, recognizing the need for local champions-messages. If you are interested in supporting the development of this resource please contact Dr. Vandijk at j.l.vandijk@amc.nl and/or Dr Harrison at john.harrison@imperial.nhs.uk. For other initiative proposals please contact Leslie Nickels at lnickels@uic.edu.

You may find information specific to basic occupational health service and capacity building at http://www.who.int/occupational_health/network/newsletter_15_compendium/en/index.html

You may also contact Timo Leino at Timo.Leino@ttl.fl and/or Leslie Nickels.

Announcement: new online program in occupational health practice

The Department of Environmental and Occupational Health at the University of Illinois at Chicago (UIC), a WHO Collaborating Center in Occupational Health, is starting a 100% online, seven month long "International Program on Occupational Health Practice" (390 hours). The training program is designed for company health professionals worldwide (doctors, nurses and others) but it is also open for other professionals. It is specifically aiming at professionals who work in global companies or in institutions in developing countries. Teaching is in English but assignments can be sent back in four different languages (English, French, German, Spanish). The program starts on August 31st 2009. Enrollment is open now.

More course information is available at http://www.uic.edu/sph/glakes/ce/UIC_International_Program_in_Occ_Health_Pract.pdf

There are several discount options for institutions with multiple participants (see details on website). The brochure can be downloaded from the same location as above.

4: GOHNET Contributors’ Information

5: How to become a GOHNET member

6: Disclaimer [pdf 11kb]