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Health-promoting workplaces—international settings development[1]

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SUMMARY

This paper describes two recently established regional networks in workplace health promotion, and examines their history, current status, strategies and models of good practices. This is followed by an overall assessment of the barriers and keys to the success of workplace health promotion and the presentation of an evaluation framework for assessing workplace health. The paper concludes by pointing to future challenges and priority issues and the need to foster health-promoting workplace networks at various levels in order to facilitate future development.

Key words: workplace health promotion; international networks; model of good practice

HISTORICAL DEVELOPMENT

Strategic partnership and settings approach to health promotion

The Jakarta Declaration adopted at the Fourth International Conference on Health Promotion held in July 1997 sets out the direction of health promotion in the 21st century. The conference stressed the importance of multisectoral co-operation and partnerships in addressing public health challenges, and highlighted the settings approach as one of the main strategies to move forward. The workplace, along with the school, hospital, city, island and marketplace, has been established as one of the priority settings for health promotion into the 21st century.

The workplace is one of the most important settings affecting the physical, mental, economic and social well-being of workers, and in turn the health of their families, communities and society. It offers an ideal setting and infrastructure to support the promotion of health of a large audience. The health of workers is also affected by non-work-related factors. By improving their knowledge and skills to manage health, and by establishing an environment conducive to health within and outside the respective workplace, the workers, their families and the workplace itself should benefit. The health-promoting workplace can bring about positive changes which support the overall success of an organization.

The concept of the health-promoting workplace is becoming more important and more relevant as more private and public organizations increasingly recognize that future success in an increasingly globalized marketplace can only be realized with a healthy, qualified and motivated workforce. A health-promoting workplace can ensure a flexible and dynamic balance between customer expectations and organizational targets on the one hand, and employees' skills and health needs on the other, which is an essential and desirable combination for work organizations if they are to compete successfully in the modern

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world. For nations, the development of a health-promoting workplace will be a pre-requisite for sustainable social and economic development.

From healthy lifestyle to health-promoting workplace

The concept of the health-promoting workplace is relatively recent. It has developed out of the concept of workplace health promotion which has undergone a significant evolutionary process since coming to prominence in the 1970s. In the early stages of its evolution, health-promotion activities in the workplace tended to either focus on a single illness or risk factor, or on changing a particular lifestyle habit or behaviour of individual workers. However, the narrow focus adopted in these early programmes overlooked the environmental, social and organizational determinants of health.

In more recent times, most notably the early 1980s, workplace health-promotion activities were dominated by the 'wellness' programmes which were in fashion especially in western industrialized countries, e.g. the United States (O'Donnell and Ainsworth, 1984; Chen, 1988). 'Wellness' programs attempted to be more comprehensive in nature and offered an assortment of methods for delivering a wider range of interventions that targeted identified risk factors associated with employee health. Interventions included health screening, stress management courses, nutritional foodstuffs in canteens, exercise and back care programs, and health information seminars. However, the majority of wellness programs still focused on individual behaviour modification without regard to the broader socio-economic, environmental and organizational influences on workers' health (Chu and Forester, 1992). This wellness approach remains a dominant feature of current workplace health-promotion programs in many large companies in industrialized and affluent countries.

In the 1990s, a more interdisciplinary approach to promoting health has developed out of an increased understanding of the multi-determinants of workers' health. Reflecting this better understanding of health, workplace health promotion has reoriented to be more holistic and integrative in nature, thereby addressing both individual risk factors and the broader organizational and environmental issues. Health and well-being, and workplace health-promotion programs, have become an integral part of a workplace culture that values, supports and reinforces health. Therefore, instead of using the workplace as a convenient location for health professionals to conduct programs aimed at changing individuals, workplace health promotion involves both workers and management collectively endeavouring to change the workplace into a health-promoting setting.

Partnerships and network developments for workplace settings

A recent development, that complements the health-promoting workplace concept, is WHO's Global Healthy Work Approach (WHO, 1997) which calls for the development of a comprehensive approach towards the promotion of health of all working populations. This approach is based upon four fundamental complementary principles: health promotion, occupational health and safety, human resource management, and sustainable development. Fundamental to this approach are multi-sectoral partnerships and the involvement and co-operation of the key actors not only from within a specific workplace but from all areas that influence working life.

The identification of the need to form partnerships and networks to more effectively promote health was a key message of the Jakarta Conference. Accordingly, for the settings approach to health to be successful it is paramount that partnerships and networks be developed that can both facilitate the effective use of knowledge and resources and foster co-ordinated action to promote health. (Chu *et al*., 1997; WHO-WPRO, 1998).

There are many independent workplace health-promotion initiatives in countries around the world, but network development, especially at a regional level, is only just beginning. The WHO Regional Office for South-East Asia (WHO SEARO) is presently preparing an advocacy booklet on the health-promoting workplace, and a regional workshop on National Programs for Healthy Worksites is planned for 1999. The WHO Regional Office for the Eastern Mediterranean (WHO EMRO) is interested in instigating programs. However, perhaps the most advanced developments are the two recently established regional networks for workplace health promotion in the European (EURO) and the Western Pacific Regions (WPRO). The former has been fostered and supported by the European Commission, and the latter is due largely to the active facilitation of WHO-WPRO.

THE EUROPEAN REGIONAL NETWORK

Development of workplace health promotion in Europe

Workplace health promotion is relatively new to Europe. As early as the 1970s a number of companies in some European countries had shown great enthusiasm in starting up projects to humanize the world of work, but quickly abandoned these endeavours as they did not coincide with corporate interests. In the late 1980s, workplace health and safety returned to the fore due primarily to the European Commission (EC) Framework Directive on health and safety (Council Directive 89/391/EEC 1989). This directive gave rise to a widespread reorientation of occupational safety and health in Europe.

In the domain of public health, the World Health Organization set a far-reaching agenda in its formulation of a comprehensive health-promotion policy (WHO, 1986). In Europe this initiative has been complemented by activities in the field of workplace health promotion instigated at supranational level by the Regional Office of WHO-EURO, the European Foundation for the Improvement of Living and Working Conditions (EFILWC), the EC's Directorate General for Employment, Industrial Relations and Social Affairs (DG V), and the European Agency for Health and Safety.

At a Europe-wide level, between 1989 and 1997 the EFILWC conducted a number of research and development projects that focussed on workplace health promotion (Wynne and Clarkin, 1992; EFILWC, 1997a; EFILWC, 1997b; Wynne, 1997). In 1991 the WHO-EURO in Copenhagen expressed its commitment to workplace health promotion by establishing a WHO Collaborating Centre (European Information Centre) at the Federal Association of Company Health Insurance Funds in Essen, Germany (Demmer, 1995). Furthermore, in 1996 the EC established a 5-year program of community action on health promotion, information, education and training to financially support various networks promoting health (Decision No. 645/96/EC of the European Parliament and the Council of 29 March 1996).

Interest in workplace health promotion has grown considerably at the national and supranational levels in Europe over the past 5 years. This trend can be related to the far-reaching economic and social changes that are taking place in the member states of the European Community due, in part, to increasing international competition (Breucker *et al*., 1997). However, to a large extent workplace health promotion owes its current attractiveness to absenteeism in European industry, as it is argued that workplace health promotion can make a significant contribution to the reduction of ill-health-related absenteeism figures (Gründemann and van Vuuren, 1997).

At present there is no uniform European or even national approach to workplace health promotion. Instead, one can distinguish between the following notions of workplace health promotion:

- as a strategy of behaviour prevention at the workplace (lifestyle approach);
- as a part of extended occupational safety and health;
- as a strategy to influence important health determinants at work;
- as a strategy to reduce absenteeism;
- as a part of organizational development.

These interpretations may overlap and are incomplete, but they do cover the most important practical approaches.

The European Union Network for workplace health promotion

In 1996, a European Network for workplace health promotion was formed and it comprises all 15 member states and the European Economic Area (EEA) countries. The Federal Institute for Occupational Safety and Health (BAuA) in Dortmund, Germany has been entrusted with the task of setting up the requisite infrastructure (Federal Institute for Occupational Safety and Health, 1996). This initiative is part of the Programme for Action on Health Promotion, Information, Education and Training (No. 645/96/EC). The aim of the network is the expansion of exemplary workplace health-promotion concepts and measures based on a continuous exchange of experience.

The Federal Institute for Occupational Safety and Health (BAuA) acts as the Liaison Office and co-ordinates the activities of the European Network with the help of various measures including the following.

- Every 6 months there is a meeting of the European Network. This is organized by a National Contact Office (NCO) and is co-ordinated by the Liaison Office.

- The newsletter 'workplace health promotion-Net-News' offers all Network partners a further forum for the mutual exchange of information.
- At present a special homepage is being developed for the network and through this it will be possible to access more detailed information.
- The Liaison Office regularly informs the responsible service at the European Commission and handles all tasks relating to the administration of funds.

To complement these measures the respective National Contact Offices have established informal networks and act, to a certain extent, as information clearing offices between the key national players and key institutions at the European level.

Network strategies

All activities of the network are based on the principle of subsidiarity in the EU and support the collaboration between member states and the co-ordination of their policies with the European Commission. According to the principle of subsidiarity, the European Commission will only support those initiatives which cannot be realized on a national level and provide the Community with an added value.

The EURO network for workplace health promotion adopted the Luxembourg Declaration (28 November 1997) to announce the shared understanding of the aims, strategies and measures of the European Network for workplace health promotion. The member organizations agreed that for the future development and dissemination of workplace health promotion, effective co-ordination and co-operation is vital at all levels. The Luxembourg Declaration helped to establish the basis for future activities by identifying the following priorities for action.

- Increase awareness of workplace health promotion and promote responsibility for health with regard to all stakeholders.
- Identification and dissemination of models of good practice.
- Develop guidelines for effective workplace health promotion.
- Ensure commitment of the member states to incorporate principles of workplace health promotion in respective policies.
- Address the specific challenges of working effectively with small and medium enterprises.

The priorities for action detailed above have provided the basis for the Network partners to agree on the implementation of a Europe-wide project centring on the identification and dissemination of information about exemplary companies and organizations in workplace health promotion. To this end, quality standards are being developed that can be applied, quite flexibly, according to a company's level of development, size and industry.

This project bears the title 'Success Factors and Quality of Workplace Health Promotion: Identification and Dissemination of Models of Good Practice in Europe' and is funded by the EU Commission. The main approach of the project is based on the widespread benchmarking philosophy that is prevalent in the corporate sector. It has a timeframe of 2 years (July 1997–June 1999) and the European Information Centre at the Federal Association of Company Health Insurance Funds (BKK) in Essen, Germany has been engaged to co-ordinate the project. To monitor progress of the project, a steering committee comprising representatives of the Commission and Liaison Office and of five national contact offices (Great Britain, Netherlands, Italy, Portugal and Finland) has been set up.

Model of good practice: Volkswagen AG

Volkswagen AG (VW) is a leading German car manufacturer with its head office in Wolfsburg, Germany. VW employs 98 000 people. Health protection and health promotion, as an integral part of health management, are two of the corporate objectives. Health management is understood to be a continuously developing process based on the principles of active participation, solidarity and subsidiarity (self-help takes precedence over corporate support).

It consists of a series of obligatory modules that are implemented in all subsidiaries and some specific modules which can be used to meet specific needs. The priority of all activities is on work organization and job design. These include:

- innovative working-time models (working-time accounts);
- introduction of new forms of work organization;

- corporate regulations to prevent sexual discrimination and mobbing;
- ergonomic job design which involves the employees and health specialists within investment decision procedures including the planning of new equipment.

The active participation of employees is realized by:

- health circles in many company sectors (problem-solving groups with the task of identifying health-related problems and possible measures for improvement);
- extended job inspection routines involving employees;
- regular employee surveys on health matters;
- special training modules for health and safety education.

A crucial success factor for workplace health promotion is senior management support and its integration into improvement processes. At VW AG a company-wide health-related control system was established in 1992 which analyses the causes of ill health on a regular basis. The results of these programs are then discussed and acted upon by management. In addition, management deals with the subject of preventive health through regular discussions with staff. An important aspect of this system is that when an employee returns to work after a lengthy absence due to injury or illness, an individual rehabilitation plan is prepared, in collaboration with all appropriate offices. At the Wolfsburg works, employees can be given medical treatment and sports pedagogical counselling in the company's own rehabilitation centre. All these module-based measures are complemented by services relating to a healthy lifestyle.

The most important successes of the health management system at VW AG include the following.

- Absenteeism was halved between 1986 and 1996 which translates into a reduction in the average number of days lost (per employee) of 24 days in 1986 to 12 days in 1996.
- A very positive development of work attendance rate (reduction of lost days) from 91.7% (1988) to 95.8% (1996).
- Personnel costs of roughly DM 90 million (US$ 50 million) are saved per year through the increase in the health rate by one percentage point.

THE WESTERN PACIFIC REGIONAL NETWORK

Development of workplace health promotion and country networks

Workplace health promotion is relatively new for most country members of this region, although its development has been systematic and far reaching which is due to the facilitation of WHO-WPRO's health-promotion program under the Regional Office's new program framework *New Horizons in Health.* This new approach emphasizes a need to further strengthen and extend intersectoral collaboration in health promotion and health protection into the various settings where people live and work. In this regard, schools, workplaces, cities and islands are considered priority settings for the Region (WHO-WPRO, 1995).

Beginning in 1992, WHO collaborated with the Government of China on a project on health promotion among industrial workers in four major industries in Shanghai. The WHO collaborative project in Shanghai was a huge success demonstrating the benefits of workplace health promotion to industrial workers and management in China. The project has also resulted in many published articles (in Chinese) to report on the achievements, and a video to share the experience with other interested parties. The project is the first of its kind in China and its success has important implications for the development of the health-promoting workplace in China and elsewhere in the Region.

Training in workplace health promotion supported by WHO has also proved to be very useful, particularly in Singapore. The National Health Education Department, previously known as the Training and Health Education Department, Ministry of Health has been actively collaborating with WHO since 1993 in annual training of facilitators in workplace health promotion. Workshop participants are mainly personnel from human resource management, occupational health and safety, industrial hygiene, and health promotion. Thus far, 140 facilitators have been trained—66 from private companies, 41 from Ministries, 26 from Statutory Boards, and seven overseas participants from countries in the Asia-Pacific region including Malaysia, the Philippines, Sri Lanka and Macao.

The success of the workplace health-promotion training courses in Singapore was demonstrated when, in 1994, the Society of Workplace

Health-Promotion Facilitators was launched in Singapore. This was the first such group to be set up in Asia. Its membership has grown from 30 individual members to a current membership of eight corporate members and 62 individual members, most of whom are from the private sector. Since then, WHO has supported training courses on workplace health promotion in other parts of China, the Philippines, Vietnam and Mongolia.

The Western Pacific Region's workplace health promotion also owes its rapid development to the groundwork of individual countries within this region, most notably Australia and China. They have both developed country networks for workplace health promotion before the regional network was formed. Indeed, there have been vigorous exchange activities in workplace health promotion between Queensland, Australia and Shanghai, China, and the individuals involved in these activities were instrumental in the formation of the Regional network.

China

In China the idea of a country network for workplace health promotion emerged out of a workshop in 1984. The workshop was facilitated by the Ministry of Health and hosted by the Chinese Association of Health Education (CAHE). Under the leadership of CAHE, the Committee on Health Education in the Workplace (CHEW) was established with 154 members. CHEW is a national academic and non-governmental social organization for leaders of workplaces, health education workers and other health workers related to health education and industrial health in workplaces. The constitution of CHEW was developed and formalized on 9 July 1996. The purposes of the committee are to:

- unite the leaders in the workplaces, the health promotion and the health education workers and other health workers related to health education and industrial health in the workplaces in accordance with government principles and policies on health;
- carry out health education and health promotion in the workplaces;
- increase the awareness of the employed population on health;
- establish healthy behaviours and healthy environments for work and life;
- reduce and eliminate factors harmful to health;
- decrease the prevalence of occupational diseases and accidents with a view to the improvement of the life quality of the population in the workplaces and to contribute to the construction of spiritual and material civilization.

The committee has outlined a long list of future work tasks including a range of activities in training, research co-ordination, publication, exchange programs, and promotion of social involvement in health education and health promotion in the workplaces.

Australia

The field of workplace health promotion has developed and gained momentum in Australia since the late 1970s. It has undergone a significant evolutionary process similar to that described in earlier sections of this paper. Both industrial safety programs and health promotion were focussed on the behaviour of the worker rather than the conditions of the workplace. These programs were viewed with suspicion by the workforce and the trade union movement, yet this perspective dominated negotiations on health promotion in the workplace well into the mid-1980s (ACOM, 1983; ACTU, 1991; Chu and Forester, 1992).

Australia's national contemporary occupational health and safety (OHS) system emerged in the 1980s. During this time, with significant effort from trade union-funded Workers Health Centres, OHS started to orient toward action to address industrial hazards, e.g. chemicals and asbestos that cause ill health, particularly through long-term, low-level exposure. State legislation was progressively overhauled and transformed from limited regulation focussing on safety and minimum workplace conditions to facilitative legislation outlining employers' duty of care. This legislation also provides for systems and representative structures in the workplace to facilitate workplace-based action to address hazards. This development prompted re-thinking and reform in workplace health promotion leading to the formation of the National Steering Committee on Health Promotion in the Workplace (NSC health-promoting workplace) which consisted of representatives of the peak employer organization, trade unions, state and commonwealth health departments, and non-government organizations.

The NSC health-promoting workplace outlined prevention, participation, equity and access, and responsibility as the principles for workplace health promotion, and defined workplace health promotion broadly as 'those educational, organizational or economic activities in the workplace that are designed to improve the health of workers and therefore the community at large.' This type of health promotion involves workers and management participating on a voluntary basis in the implementation of jointly agreed programs that utilize the workplace as a setting for promoting better health [(NSC, 1989), pp. 8–10].

Workplace health-promotion activities in Australia are primarily delivered at the state level. State Steering Committees were established in most states, and workplace health-promotion programs have been implemented in Victoria, South Australia, New South Wales and Queensland. A strong feature of state committee efforts has been the transformation of workplace health promotion into the current integrated organizational development approach. Perhaps one of the most groundbreaking achievements by a State Steering Committee was the position statement on workplace health-promotion guiding principles developed by the Queensland State Steering Committee.

The Queensland State Steering Committee on Health Promotion in the Workplace, formed in 1990, brought together a diverse set of stakeholders to work together (Allen and Dwyer, 1994). It achieved a major breakthrough by reaching an agreement on a set of principles and guidelines for workplace health promotion titled 'Better Health for Working People: Guiding Principles' (Queensland Health, 1996). This was considered a significant achievement because: (i) for the first time in Queensland's history, representatives of different sectors ranging from government and NGOs, employer and employee groups, health professional bodies, academic and research institutions, to industry associations, were brought together to work through a negotiation process to reach a consensus which fostered real multisectoral cooperation to support the further development of workplace health promotion; and (ii) the guiding principles helped clarify concepts and offered a clear guide for program quality and directions to safeguard the interests of workers and companies at a time when Queensland organizations were faced with the aggressive marketing by overseas and local companies of costly workplace health-promotion programs that were narrowly oriented on individual behavioural risk factors.

The principles encourage workplace health promotion to be conducted on an agreed basis between employers, employees and, where appropriate, health professionals. The principles, in order of priority, are as follows.

(1) Is cost-effective and may not be expensive.
(2) Acknowledges and supports workplace health and safety.
(3) Is managed by the workplace (rather than a government agency or private consulting firm).
(4) Includes an assessment of needs to identify health problems/concerns in the workplace.
(5) Requires voluntary participation.
(6) Includes training in health-promotion principles.
(7) Is sustainable.
(8) Acknowledges social justice principles.
(9) Includes evaluation processes.
(10) Uses mixed strategies as appropriate.
(11) Workplace health-promotion programs should, where appropriate, involve family members.
(12) Considers the structures, cultures, laws and policies of the workplace (Queensland Health, 1996).

Formation of the Western Pacific Regional Network for the health-promoting workplace

Setting the scene for regional network development was the formation of a unique partnership in workplace health between Queensland Health and the Shanghai Health Education Institute. The partnership was possible mainly because of the already established relationship that had been formalized in a Memorandum of Understanding between the Shanghai and Queensland Governments. The partnership was also facilitated by Griffith University in Queensland which offers a unique Bachelor degree course that integrates occupational health and safety, industrial relations, health promotion, and change facilitation. Material developed in this course was used in WHO-sponsored training workshops in Shanghai and Singapore, which has enabled it to contribute to a common ground of basic understanding of workplace health promotion.

In June 1996, a Shanghai delegation conducted an 11-day study tour on workplace health promotion in Queensland. This event included

an international forum to discuss the WHO draft Regional Guidelines for the Development of the health-promoting workplace. It was during this forum that participants recommended that WHO-WPRO sponsor a regional workshop and form a regional network in health-promoting workplaces to facilitate formal links, and to advocate for the development of health-promoting workplaces in the region.

Subsequently, the Regional Network for the health-promoting workplace was formed during a WHO Regional Workshop held in Shanghai (10–12 December 1997) attended by 24 participants from 11 countries and areas including Australia, China, Fiji, Japan, Macao, Malaysia, Mongolia, Philippines, Republic of Korea, Singapore and Vietnam. Shanghai was nominated by workshop participants to take a lead role in furthering networking processes. Network functions would include the exchange of information and experiences, the conduct of joint studies of common problems and the provision of mutual support.

Network strategies

In order to facilitate regional development in the health-promoting workplace, WHO-WPRO has developed a book of guidelines to provide background information on the health-promoting workplace and to guide its evolution. The guidelines have undergone an extensive consultative and revision process, and were finalized in December 1997 at the Regional Conference in Shanghai. The guidelines aim to provide a useful framework to strengthen existing activities and to bring in new partners for improving the health of the working population. In addition, it will enable the sharing of useful methodological tools and valuable lessons from country case studies (WHO-WPRO, 1998).

The guidelines explain the why, what and how of achieving the health-promoting workplace. They provide a concise explanation of the definition, aims, guiding principles, and a frame of action for the health-promoting workplace. The guidelines stress that in order to become a health-promoting workplace, there needs to be a co-ordinating mechanism to manage a systematic problem-solving process through which the workplace can identify health concerns and decide on actions. To this end, it proposes a needs-based programme development cycle involving a process of programme planning, implementation and evaluation (WHO-WPRO, 1998).

Model of good practice: The Shanghai Project

Shanghai is the largest industrial city in China, with a population of over 13.5 million people. In collaboration with WHO, and supported by the Government of the People's Republic of China, the Shanghai Municipal Health Bureau and the Shanghai Health Education Institute conducted a pilot workplace health-promotion project from 1993 to 1995. The project involved 21 613 workers in four workplaces: Wujing Chemical Complex, Shanghai Hudong Shipyard, Shanghai No. 34 Cotton Mill and Shanghai Baoshan Steel Company.

Based on data gathered through a baseline survey conducted in early 1993, and guided by members of the Shanghai Health Education Institute and an occupational health expert advisory reference group, each workplace developed, implemented and evaluated workplace health-promotion programs.

The project adopted an integrative model of workplace health promotion and sought to address identified organizational, environmental and behavioural factors that were negatively impacting upon the health of the workers. Health-promotion programs employed multiple strategies in line with the Ottawa Charter and sought to develop healthy policies and regulations, create safe and supportive environments, strengthen preventive health services, facilitate workers' participation and educate workers to promote healthy behaviour. Initiatives undertaken included the establishment of health education and health-promotion committees, drafting and implementing workplace standards for identified occupational hazards, improved management of workplace sanitation and hygiene, and improved occupational health hazard monitoring and control (e.g. noise, dust and chemical leakage). Other initiatives included the supply of nutritious foodstuffs and the reduction of salt in food in workplace canteens, planting trees and flowers, cigarette smoking and alcohol cessation programs, cervical screening and thorough follow-up treatments, improved preventive health services for workers, and greater worker participation in the identification and control of occupational hazards.

During the project, particular attention was given to such issues as staff mobilization and training, establishing co-ordinating and networking mechanisms, and regular consultation with workers, management and expert reference groups.

These measures ensured that all interested parties were involved in the planning of the project and that they were given opportunities to participate in its implementation. Furthermore, there was an emphasis on multi-sectoral involvement and the integration of health promotion into management practices.

The project was closely monitored, and an evaluation carried out in 1995 showed excellent measurable outcomes, e.g.:

- reduced incidence of work-related injuries by 10–20%;
- reduced diseases and related health care costs (e.g. pharyngitis, from 16% to 10%);
- improved health and safety knowledge and practices (the use of safety devices or protective equipment increased from 20–30% to 70–90%);
- reduced risk behaviour (reduction of salt consumption, cigarette smoking);
- reduced levels of sick leave by 50%.

Other notable project achievements included: improved company image and management practices, a cleaner and safer workplace environment and work conditions, increased housing provision, recreation facilities and even transport in the case of the Hudong shipyard.

Learning from this pilot project, the project team has since developed what they have proudly called the 'Shanghai Model' of workplace health promotion. The model's four distinctive features are: comprehensive, integrative, a system of management and multi-sectoral networks, and a multiplicity of intervention strategies. Since then, the Shanghai Project team has developed draft Chinese language guidelines for workplace health promotion, and has been funded by the World Bank to work with 10 more workplaces.

OVERALL ASSESSMENT AND FUTURE DEVELOPMENT

Barriers to workplace health promotion

Workplace health promotion has evolved conceptually from behavioural prevention programs targeting the traditional risk factors into a more holistic and integrative concept through which workers and management can collectively endeavour to change the workplace into a health-promoting setting. Unfortunately, public and many health practitioners' perceptions of workplace health promotion have not evolved and remain largely limited to an understanding of workplace health promotion as a strategy to address behavioural risk factors, e.g. lack of exercise, poor eating habits, cigarette smoking, alcohol abuse and illicit drug consumption. This in fact reflects the field of health promotion in general. The Ottawa Charter has served to create a working basis for many different settings by specifying five principles of action. Yet in practice, behaviour-oriented measures still dominate health promotion even though leading experts and international and national conference resolutions demand a holistic orientation for workplace health-promotion programs.

In an attempt to progress workplace health promotion beyond these narrow perceptions, some initiatives have elected to present it utilizing different terminologies, e.g. Workplace Health Management (Queensland, Australia) and The Workplace Health System (Canada) (Shain, 1997). This suggests that, at present, workplace health promotion is characterized by a lack of conceptual clarity. This points to the need for training an appropriate workforce on the one hand, and strategies to clarify and build consensus on concepts on the other if workplace health promotion is to be broadly adopted.

Successful factors for workplace health promotion

Action and criteria models currently available point uniformly to the following factors as key indicators of a successful workplace health-promotion initiative.

Participation: all staff must be involved in all phases.
Project Management: measures and programs should be oriented toward the problem-solving cycle: needs analysis, setting priorities, planning, implementation, continuous monitoring and evaluation.
Integration: programs should be integrated into a company's regular management practices and should strive to formalize workplace health-promotion strategies into a company's corporate plan.
Comprehensiveness: programs must include individual-directed and environment-directed measures from various fields.

These factors collectively display a clear shift from the behaviour orientation to a linking of

behaviour-related and organization-related measures.

This approach is confirmed by the research programme of the EFILWC on 'What Makes Workplace Health Promotion Work?' (Wynne, 1997). The research programme included interviews with key players in eight countries (Germany, Greece, Ireland, Italy, the Netherlands, Spain, Portugal and the UK), a survey of health practices of more than 1400 companies and 24 case studies of good practice. Wynne further pointed out that the growth of workplace health promotion would require the following:

- systematic, pragmatic, problem-focused approaches;
- leaders motivated to implement health-promoting workplace;
- supportive corporate environments;
- non-health issues can be important as prompting factors;
- systematic approaches that require multi-disciplinary involvement.

In view of the many different variables involved (level of national development, size of company, industry and economic position, status of employees, traditions, culture and professional basis of the key players), further efforts to disseminate information about workplace health promotion are essential. In line with the WHO's conception of health promotion, the efficacy of these efforts will depend on whether workplace health promotion can be firmly established in strategic decision-making domains. The success of this undertaking will be paramount in counteracting the deterioration of basic health conditions in the world of work (EFILWC, 1997a; EFILWC, 1997b).

Prospects for the integration of workplace health promotion into the decision-making domains are emerging by virtue of the changing management and production strategies including modern approaches to work organization. Although these strategies often exacerbate the level of stress on employees' health, they nonetheless afford opportunities to combine economic goals and the health-related concerns of employees. The reasons why the integration of workplace health promotion is important are therefore twofold: it will help to effectively propagate workplace health promotion; and it will limit the adverse impact of corporate modernization strategies on employees' health.

Future challenges and priority issues

The world is changing at an ever-increasing pace. It is expected that the globalization of business, technological developments and changes in the demographic structure of populations, e.g. an ageing workforce or an increased rural to urban migrant workforce, will intensify competition for meaningful work, and will lead to different employment patterns and work conditions, e.g. increased part-time employment, temporary work without long-term job security, and working from home. High rates of unemployment will be one of the major global social problems. Until now, most investment in the health of working populations has been targeted at large-scale enterprises. However, the increasing importance, not only for employment but also for national stability and economic growth, of informal work settings, small-scale and micro-enterprises means a basic shift in focus is necessary. In this regard, the International Forum of the Western Pacific Region (1996) has suggested that there is an urgent need for an increase in effort to promote health and safety for the following workers and workplaces:

- workers in isolated conditions or areas;
- migrant workers;
- small businesses and workplaces;
- rural industry and the informal sector;
- high-risk industries; and
- joint-venture businesses.

An integrated framework for evaluation and workplace health assessment

As stated previously in this paper, there is a need for an integrated, interdisciplinary and multi-sectoral approach that utilizes a problem-solving needs assessment-driven program development, implementation and evaluation cycle. For this approach to be successfully self-administered in the workplaces, there is an urgent need to develop monitoring and assessment tools that can guide the conduct of needs assessments, program design and evaluation.

The evaluation of a comprehensive workplace health-promotion program is necessary but challenging because it involves monitoring and assessing not only overall health outcomes, but also changes in the workplace environment and culture, the effectiveness of different strategies and program-specific achievements. There are three types of evaluation needed: process, impact and outcomes evaluation (Hawe *et al*., 1990).

Process evaluation: evaluate the implementation of strategies, e.g. how were the activities received, how satisfied were the participants, what is the quality or appropriateness of the programme delivered, what aspects of programs need to be improved, and who the programme is reaching.
Impact evaluation: evaluate the immediate effects of specific programme activities, e.g. the extent of changes to awareness, knowledge, beliefs, skills, and behaviour of participants, the increase of morale, reduction of salt consumption due to healthy canteen provisions.
Outcome evaluation: evaluate the long-term effects of the overall programme, i.e. the improvement of health and well-being of workers, the development of a health supportive and caring workplace culture. In this regard, it would be useful to develop a set of indicators to collect baselines of workplaces and to assess outcomes.

Table 1 is a framework developed by a Griffith University Evaluation Team for outcome indicator development (Chu *et al.*, 1997).

Networking the networks and strengthening intersectoral partnerships

As recommended by participants in the WPRO Regional Workshop, the health-promoting workplace concept is a useful model to guide action and a comprehensive and pro-active approach to workplace health promotion. As such, it is an important investment in a country's overall health and development. However, for this approach to achieve sustainable beneficial results requires relevant bodies to make long-term, consistent efforts. Unfortunately, the transitory nature of many governments and companies due to restructuring and the electoral process means that continuity of effort is difficult to achieve. What is thus imperative is for international health-promotion networks to take the initiative in

Table 1: An integrated framework for workplace health assessment

Baseline categories	Baseline indicators		Data collection technique
Organizational features	Workplace culture Management style Division of labour Work group cohesion Worker autonomy Shift work Award structure Defined career paths Workload	Worker involvement in decision-making Communication channels Power/control versus responsibility Job satisfaction and morale Equity issues Relationship with outside communities	Interview Observation Secondary data Focus groups
Physical environment	Hygiene and environmental conditions Hazards exposure (e.g. noise, dust, heat, chemical)	Built environment: lighting, aesthetics, space, etc.	Interview Observation Secondary data
Health and safety data (Industry and workplace specific)	Absenteeism Workers comp. Sick leave Injuries and disability	Lost time frequency rate Specific OH risk factors OHS mortality and morbidity Health services utilization	Secondary data
Nature of work	Work tasks Routinized activities Manual handling	Design of work setting Ergonomic measures Repetitive motions	Interview Observation Secondary data
Demographic, lifestyle data and worker–client base	Number of workers Income Education Ethnicity	Socio-economic status Gender, age distribution Tobacco–alcohol use Nature of client base	Short interview survey Secondary data

setting future directions and guiding professional development. More specifically, it is necessary to ensure that governments and stakeholders continue their support for workplace health-promotion programs so as to prevent the loss of skilled personnel to unrelated projects, to maintain enthusiasm among participating companies and occupational and health-promotion professionals, and to encourage new work organizations to participate in developing health-promoting workplaces.

In order to facilitate the development of the health-promoting workplace there is a need for health care providers, decision-makers and researchers, regardless of their disciplinary backgrounds, to build partnerships and co-ordinating bodies to improve links, share information and provide mutual support. Thus, it would be beneficial for countries and regions, as demonstrated by the EURO and the WPRO networks, to develop and strengthen health-promoting workplace networks. The production and sharing of informative documents, e.g. the EU's Luxembourg Declaration for workplace health promotion, the WHO-WPRO's Regional Guidelines for health-promoting workplace coupled with other materials, e.g. videos of successful projects, will be very helpful. In this regard, it is also important to establish strong links with other existing settings approaches, e.g. Healthy Cities, Health-Promoting Hospitals and Health-Promoting Schools. Together these settings approaches form an ecological basis for the development of human health (Chu, 1994).

As we move into the 21st century the world's population will face enormous challenges to contain health care costs, on the one hand, and improve the quality of life on the other. The development of networks within and between health-promoting settings is vital to the sustainable healthy future and well-being of humankind.

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