Working Life Across Cultures: “Work Life 2000: Quality in Work” and Occupational Health Education in Developing Countries

Bengt Knave
Swedish National Institute for Working Life, Sweden

Richard Ennals
Centre for Working Life Research, Kingston University, UK

The article reflects on the changing world of work, and the challenges presented to both occupational health and occupational health education. We draw on the 63 preparatory workshops and the international conference in the “Work Life 2000: Quality in Work” program, an initiative of the Swedish Presidency of the European Union. The International Commission on Occupational Health is introduced, with particular concentration on a current practical project initiated by the Department of Health in South Africa, intended to lead to a set of projects, networking for occupational health education in developing countries. The practical initiatives cast light on a new set of issues that arise when occupational health and safety crosses cultural barriers, and previously separate comparative cases are linked.

1. WORKING LIFE AND OCCUPATIONAL HEALTH

Work must be understood as being culturally situated (Tengberg, 2000*; Toulmin, 1997a, b), with consequences for the health of workers, individually and collectively, as well as for the health of their families and communities.

*Correspondence and requests for reprints should be sent to Bengt Knave, Swedish National Institute for Working Life, S-17184 Solna, Sweden. E-mail: <bengt.knave@niwl.se>.
Work is not simply an aspect of business, a matter of economic market activity, explained in terms of textbook analysis; nor is it simply a matter of medical science, explained in terms of human anatomy and physiology (Bergqvist & Hanson Mild, 2000*; Johansson, 2001*; Lundberg & Vingård, 2000*). There have been two cultures, two modes of description and explanation, medical and social, which now need to be combined, with a grounding in practice (Fischer, 2000*; Kadefors, 1999*; Malmberg, 2001*; Melin & Norén, 2001*; Theorell, 2000*).

The changing world of work (Dhondt & Jungeteg, 2000; Johansson, 2000; Magnusson, 2001*), combining globalization, changes in technology, and changes in work organization, obliges us to conceptualize and develop new institutional structures across conventional discipline barriers (Westerholm & Marklund, 2001*). We must begin to see economic production in terms of human costs and benefits, with health value chains linking occupational exposures to long term health impacts (Åkerstedt, 2001*), and with analysis capable of justifying interventions on health grounds (Cox, 2000*). This change in approach is made more urgent by demographic changes (Kilbom, 1999*; Ohlsson, 2001*). It is not adequate to base judgments on short-term accounting figures alone (Gröjer & Johansson, 1999*, 2000*), driving policy using only the rear-view mirror. Classic examples come from the asbestos industry, which continues in developing countries long after bans in developed countries, and in other areas of mining (Knave, 2000*), as well as from welding (Kadefors, 2000*). We can construct child care chains, linking women in the developed and developing worlds, enabling professional women to participate in the workforce while others, often immigrants, look after their children (Gonäs & Nyberg, 2000*). There are gender dimensions to workplace health promotion (Björklund, 2001*; Englund, 2001*; Menckel, 2001*), which go beyond the level of simple slogans. Within particular occupational groups, there are clear patterns, linking work with damaging health consequences (Härenstam, 2000*). These are not restricted to the more obvious physical exposures, but include long-term low intensity phenomena (Johansson, 2001*). We must take increasing account of the impact of psychosocial factors (Cox, 2000*; Karasek, 1999*, 2000*; Siegrist, 2000*; Theorell, 1999*, 2000*, 2001*).

This approach challenges the knowledge driven economy, as, despite rhetoric about human resources as the key assets of any enterprise, conventional accounting has failed to value human resources and other intangibles (Gröjer & Johansson, 1999*, 2000*). Employers avoid the expense of training wherever possible, or demand quantitative evidence to
support investment (Bassi, 1999*), given constant pressure to bear down on costs. Occupational health is a cost to be cut: The case for healthy work must be stated (Harrington, 2000), taking account of both direct and indirect costs of occupational disease, borne by both the employer and employee. The key research has been undertaken (e.g., Theorell, 1999*, 2000*): We must now present the case to those concerned at each stage, not omitting accountants and senior managers.

Strategic managers seek to outsource all except the core functions of their organizations, reducing risk and relocating costs. The human consequences of outsourcing are rarely addressed, either as an element of national or of international policy; because many of the discarded externalities have, conveniently, not been quantified. If transnational companies are free to locate production and employment wherever costs are lowest, this may be at the expense of the people concerned. Low wages and poor levels of occupational health and safety protection are the sources of the competitive advantage of particular regions (Magnusson, 2001*). This is a problem for countries that rely on inward investment, accepting new forms of employment contracts. Research evidence (e.g., Dwyer, 1999*; Isaksson & Aronsson, 2001*; Quinlan, 1999*, 2001*) shows adverse consequences of precarious employment, rarely addressed. These are issues of human rights, at both the individual and collective levels, and questions of trade union representation are raised, as well as of social clauses in trade agreements (Bruun & Bercusson, 1999*, 2001*; Kadefors, 2000*).

The changing world of work challenges the politics of nation states. The power of national governments and legislation is often less than that of transnational corporations. Few value chains, whether in terms of economics or of health, involve only one country. National legislation and regulation can no longer be assumed to meet the needs for control of the market; there is pressure for deregulation. We have to consider approaches at the sub-national (such as national region) and supra-national (such as European Union or Southern African Development Community, SADC) levels (Bruun Bercusson, 2001*; von Otter & Brulin, 2001*).

In both the industrialized and developing worlds the dominant source of employment is from small and medium-sized enterprises, comprising over 90% of workplaces (Antonsson, 2001*; Eijkemans, 2001*; Kogi, 2001*; Jeyeratnam, 2001*; Michael, 2001*; Oliveira, 2000*, Tengberg, 2000*; Walters, 2001*). Despite this, policies tend to be predicated on experience of large enterprises. New forms of work organization need to be developed, enabling small enterprises to work together in networks and development coalitions (Ennals & Gustavsen, 1999).
To improve living and working conditions through occupational health services and education means going beyond the workplace, involving health and education services, each with distinctive local institutional structures, traditions, and priorities, making generalized international programs more difficult. Successful initiatives depend on building new coalitions between departmental cultures. It is rare for Ministries of Health, Labour, and Education to have long experience of successful collaboration (Bradley, 2000*; Hofmaier, 2000*; Sandberg & Backlund, 2000*; Schmid, 2001*); their organizational structures can involve them in conflict.

Even where there are agreed values and standards with respect to health and safety in the workplace, as within the European Union (EU) covered by Framework Directives, implementation of Directives and development of improvements vary greatly (Bruun & Bercusson, 2001*). In some countries, such as France, Italy, and Germany, occupational physicians have dominated policy development and practice, whereas in the UK, Ireland, and Denmark, there has been greater influence for other professionals (Englund, 1999*). In Scandinavia there is a tradition of concern for occupational health as a distinct field (Frick, 1999*), whereas in the UK it tends to be subsumed into the general context of the National Health Service: Both are sources of national pride.

The full product life cycle must be considered: The EU is debating assigning responsibility to manufacturers for the eventual disposal of products after use (Melin & Norén, 2001*). Discussion of chemical exposures, such as from isocyanates (Brown, 2000*) can concentrate on the production processes used by major manufacturers, rather than hazards encountered in small enterprises by “accidental users.” There are similar problems with the proliferation of new technology (Mårtensson, 2000*), and with new substances in contact with the skin (Fischer, 2000*), posing challenges for the development of standards to cover the whole product lifecycle (Holmér, 2001*).

The “Work Life 2000: Quality in Work” program, culminating in a major conference as part of the Swedish Presidency of the EU, highlighted this diversity, and has demonstrated the case for learning from such differences (Ennals, 1999, 2000, 2001). A new program, “Work Life and EU Enlargement,” involves the 13 applicant countries to the EU. There are competing cultures within occupational health; even diversity in the workforce comes in diverse forms (Ohlsson, 2001*, Wise & Fagerlind, 2001*), with implications for numerous policy fields. We have repeatedly encountered tensions between medical and social models of research and explanation. The
improvement of occupational health and safety involves medical scientific research, technology transfer, and delivery of services via intermediaries, in a package tailored to local economic, social, and cultural conditions (Antonsson, 2000*; Lagerlöf, 2001*; Lagerlöf & Aaltonen, 1999*).

2. OCCUPATIONAL HEALTH EDUCATION

Occupational health education is complex and changing, tailored to local circumstances, not simply a matter of producing courses based on the most advanced science. It involves enabling professionals to make sense of, and operate within, dynamic contexts, with participation by nonprofessionals. Engagement of the workforce and social partners is vital, working with health and education professionals, if a healthy work culture is to be developed and sustained.

As work and leisure time become less clearly separated, occupational health issues have an impact across family life and communities (Åkerstedt, 2001*; Bradley, 2000*; Edlund & Karlsson, 2000*; Isaksson & Aronsson, 2001*; Kauppinen & Grönkvist, 2000*; Zamore, 2000*). Occupational health education needs to spread, through participation, and cannot simply preserve the existing authority of the few. It is a democratizing process, with impacts beyond narrow definitions of health, cutting across conventional qualifications structures and delivery patterns.

In a knowledge-driven society, seen in terms of the health value chain, occupational health education is vital, protecting the individual, family, and community from both threats to health and economic exploitation of ignorance. Where threshold limit values have been established in industrialized countries, the information should be available in developing countries, including the consequences of exposures. With globalization, changing technology, and changing work organization, occupational health presents a new human rights agenda. The alternative to occupational health education is the continued sacrifice of human health for commercial advantage.

Education involves asking awkward questions. Occupational health education asks about the effects of boring repetitive work; it challenges the work environment of the new factory environment of call centers; it explores the links between stress in particular occupational settings and adverse health consequences, borne by the individual. Such questions challenge the capacity of the employer to disown responsibility for the consequences of a range of occupational exposures, with impacts on
employment policies and practice. The British government has recognized the need to bring together several government departments to rise to the challenge of a new occupational health strategy “Securing Health Together” (Milburn, 2000).

3. INTERNATIONAL COMMISSION ON OCCUPATIONAL HEALTH

The concern of the International Commission on Occupational Health (ICOH), founded in Milan, Italy, in 1906, is to advance the cause of healthy work internationally, making available the results of research, and giving access to the expertise of members, who are currently organized in 37 Scientific Committees. The first author is the current President of ICOH (Knave, 2000).

The theme of the ICOH 2000 Congress in Singapore was “Healthy Worker, Healthy Workplace: A New Millennium.” In 2003, in Brazil, the theme will be “The Challenge of Equity in Occupational Health and Safety.” The 2000 Congress marked a transition, from a traditional passive academic organization, towards ICOH becoming an active international nongovernmental organization (NGO), with a unifying mission. It gave attention to the impact of globalization, changing technology, and changing work organization, in the workplace and on occupational health, and published a 5-year forward strategy for action, focusing attention on developing countries.

A recently established ICOH network, led by the second author (Ennals, 2000), is addressing “Occupational Health Education in Developing Countries.” This network complements networks for “Information Technology and Communication Strategies” (Lum, 2000), and for “Women, Work and Health” (Lagerlöf, 2000). A further international network is now being formed to address HIV/AIDS, which is having a dramatic impact on health and the economy, especially in sub-Saharan Africa (Loewenson, 1996, 1998, 1999, 2000). These networks are linked to each other and to the specialist Scientific Committees.

4. A CHOICE OF EDUCATIONAL APPROACHES

One universalist approach to occupational health education would be to identify existing leading courses and sources of expertise around the world, place the relevant materials on an ICOH website, and advise potential
beneficiaries to visit. For those who argue for the indivisibility of scientific knowledge, this is an obvious move, and an appropriate use of the Internet. The world is a global village, and scientific realities remain unchanged irrespective of location; technology has made distance education much easier. There is more knowledge; it should be made available to all (Aaltonen, 2000*). Many regard the English language as the natural language of international education and communication, and argue against publishing in numerous languages, on the grounds of efficiency.

On the other hand, curricula for education and professional development are developed locally, as expressions of the intended integration of academic and policy considerations, using local languages and examples (Loewenson, 1999). Authoritative scientific perspectives from other continents may address different agendas, with different underlying assumptions. ICOH works with local partners, who take the lead in determining the form and direction of their occupational health education, and give local authentications. The objective is to contribute to developments in Africa, Asia, and South America, starting in 2000 with modest pilot activities, giving case study experience on which larger sustainable activities may be built (Odamtten, 2000; Sekobe, 2000; Setswe, 2001). Knowledge is more than simply the collection of codified propositions. Knowledge concerning occupational health involves experience of practice in the workplace, "knowing what to do" in particular practical circumstances: This tacit knowledge, held individually and collectively, cannot be "delivered" via the Internet. It must be spread by methods that include human contact and shared experience.

We expect to use a range of technologies and teaching methods. The dialogue workshop model that characterized "Work Life 2000: Quality in Work", and now "Work Life and EU Enlargement," is echoed in the practice of ICOH Scientific Committees and other academic groups, and conforms with accepted models of organizational development (Ennals & Gustavsen, 1999; Gustavsen, 1992). Production organizations, responsible for the daily operations of enterprises and governments, need to be complemented by development organizations, which provide opportunities to look ahead, and engage key actors in dialogue. Experience suggests (Gustavsen, Hofmaier, Philips, & Wikman, 1996) that the implementation of training programs without an accompanying context of organizational development is unlikely to bring constructive results. Education, training, and organizational development must both be integrated and central to strategic thinking. During "Work Life 2000: Quality in Work" we engaged in knowledge-based social dialogue. The same principles apply in SADC, with human contact
underpinned by technology, enabling ongoing electronic communication after physical meetings. Participants return from the development organization context of workshops, and rejoin their production organizations, with ongoing contacts (Balfour, 2000).

5. NEW TECHNOLOGY

New information and communication technologies are powerful delivery mechanisms, enabling high quality content to reach new audiences, providing intellectual refreshment to those parts of the world other methods cannot reach. There are problems with this approach (Ennals, 2001*).

Firstly, it can lead to the mistaken conclusion that “learning” can be “delivered;” learning is an active process undertaken by the learner, in an appropriate environment.

Secondly, it can be assumed that the same “content”, once “packaged,” is appropriate for universal delivery; materials in support of learning need to be at the appropriate level, expressed in appropriate language and pedagogical style, and to address the concerns of the learner.

Thirdly, it can be forgotten that a vital source of expert knowledge is local; this may be a better foundation for new course materials. Often those who prepare new course materials learn as much as the intended recipients. This benefit should be experienced by local course designers, taking advantage of the state of the art in educational technology. Course development is an invaluable form of staff development.

New technologies form part of the answer, but content and methods of production should be locally determined. Experience suggests that this is less than straightforward. Human networking needs to complement electronic networking.

6. WORK LIFE SOUTH

The aforementioned arguments were presented in outline at the 5th Pan African Conference on Occupational Health, held in Tunis, Tunisia, in October 1999. There has been a division in Africa, between anglophone and francophone communities, not simply in terms of language, but also in the approach taken to occupational health and safety, in terms of research and dissemination. Experience in Europe of bridging cultural divides had resonance across the Mediterranean Sea.
The initial ICOH pilot project supported by the network for Occupational Health Education in Developing Countries is with the diploma course for occupational health nurses at the National School of Public Health in South Africa. The course is based on four intensive blocks of face-to-face teaching, and continued work-based study by nurses at remote rural locations, augmented by distance learning, using computers and other new technology. Initial external inputs come in particular from Sweden, building on a locally defined syllabus. In the past, occupational health nursing expertise in South Africa tends to have been concentrated in the private sector, and in urban areas, leaving a lack of coverage of rural areas. There was neglect of the needs of the informal sector, which is largely comprised of small-scale enterprises, but has an increasing role in the economy. Priority has been given by the new administration to redressing this perceived imbalance, which has also involved some redefinition of subject content (Sekobe, 2000).

A second venture with ICOH is led by the Nelson R. Mandela School of Medicine at the University of Natal in Durban, South Africa, where a new integrated program of public health education and training is under development, again using distance learning and high technology facilities on campus (Kistnasamy, 2000). The intention is to break away from the traditional “silo” model of professional education and training in occupational and environmental health, with separate development of the specialisms, to meet the needs of public health, especially in rural areas. This new set of courses is being planned in association with the restructuring of public health services at a provincial level; graduates of the new courses should thus join departments that are implementing the new agenda, rather than experiencing frustration when returning to conventional organizations.

The new courses are intended to develop to cater for needs of students in the 14 countries of the SADC (Balfour, 2000), in light of the need to recruit, retain, and develop occupational health professionals. The networking has begun, through the SADC health sector. There is considerable existing expertise in occupational health in South Africa, dating from the previous administration (Myers, 2000; Rees, 2000). As confidence increases in the coherence of a new program for public health, we can see the beginning of new patterns of public-private partnership, blending old and new expertise. South Africa combines elements of both industrialized and developing economies; the capacity to draw on multiple traditions, learning from differences, is vital. Success in occupational health education thus depends on more than medical expertise; it requires a grasp of politics,
7. THE HEALTHY WORK CHANNEL

Technologies are available, in daily commercial operation, which offer considerable potential benefits for occupational health education in developing countries. One example is the network of geostationary satellites operated by Worldspace Corporation, supporting digital audio radio broadcasts to the developing world. Services include data downloading facilities, using personal computers linked to custom-built low-cost digital receivers, and, now being tested, multimedia transmissions. The initial motivation for this development, the idea of Ethiopian satellite technologist Noah Samara, was the growing information gap between rich and poor, affecting in particular rural residents in Africa for whom electricity and telephones are unavailable or unreliable. Communication via satellite, with line of site to the antenna of the local receiver, offers a way forward. The technology is now in place, but the “target market” lacks economic power, posing challenges if the opportunity is to be seized.

ICOH and Worldspace have proposed a combination of the needs for technology support for human networks, and for human users of technology networks. Building initially on the needs of the occupational health nurses, assisting in developing the new integrated public health professionals, and following consultation with a consortium of public and private sector partners, a proposal has been developed for The Healthy Work Channel (Ennals & Turner, 2001). This is to be a dedicated digital radio channel with an initial focus in Southern Africa, but available for reception across Africa, Asia, and South America, with signals in Europe.

The Healthy Work Channel takes up the conclusions from a recent SADC workshop on occupational health, that the core specialist occupational health expertise is available in the region, and needs to be more effectively deployed and coordinated, with external support. The region is grappling with a number of crises, in particular HIV/AIDS, which require responses in the workplace as well as in the community and in homes. There are few professionals currently in post, and both technology and education are vital. The Healthy Work Channel would contribute to the developing WHO (World Health Organization) and ILO (International
Labour Organization) Joint Effort in Occupational Health, which started with pilot projects in the informal sector in five African cities (Eijkemans, 2000). It could increase the effectiveness of current initiatives by, for example, Voluntary Service Overseas (with 350 volunteers in the region; Odamten, 2001) and Unilever (with HIV/AIDS programs in 12 African countries).

The Healthy Work Channel, complementing current digital radio channels in numerous languages, catering for three regional “footprints” covering Africa, could be an invaluable aid to the francophone FORST program in occupational health, which is just completing its initial phase. This project, supported by McGill University Montreal, Canada, and the University of Lille, France, (Patry, 2000), has been supporting Master’s level education in occupational health in the French language in Africa, using a model of occupational health that is primarily concerned with occupational physicians. Groups in Ghana (Odamten, 2000) and Cameroon are bilingual, and able to relate to both anglophone and francophone traditions, offering a cultural bridge.

8. CROSSING CULTURES

So far, the work by ICOH has been at an experimental pilot level, extending dialogue and identifying external expertise to assist in delivering local agendas. The potential has been demonstrated; it is important not to raise expectations beyond what can be delivered. It is not financially possible to support large-scale intercontinental mobility by lecturers or consultants; the emphasis must be on developing local resources, aided by technology and selective personal travel.

Effective progress in occupational health education in developing countries requires the commitment of sizeable funds for a sustained period. The present crisis of HIV/AIDS in Africa (Kistnasamy, 2000; Loewenson, 1999, 2000) highlights the severity of the problems facing the workplace, and the long-term perspective that must be taken. The workplace is a less confrontational setting in which to address issues of prevention, and workplaces in Africa will have to adjust to the requirements of the changed working population as a result of the AIDS pandemic. The long-term impact of HIV/AIDS will include a change in the demographic balance of the workforce, necessitating changes in the design and organization of work, and possibly learning from experience in Finland with Work Ability.
ILMARINEN, 1999*), modifying the nature of work to accommodate an ageing and weakening workforce.

ICOH is moving into a new era. ICOH members across the world collectively constitute a unique cross-cultural expert network. The traditional Scientific Committees are now complemented by Networks. Operating as an international NGO, ICOH can partner funding agencies, and ensure that good value for money is achieved. This means moving forward, from the current phase of benign small-scale pilot research, to the conduct of sustainable international collaborative programs with partners from both the private and public sectors. This conclusion has also been reached by the South African Department of Health, and SADC Health Sector, concerned with developments in 14 countries in the region. The necessary ingredients have been identified: It is now a matter of what Allan Larsson, when Director-General for Employment and Social Affairs in the European Commission, termed Partnership for a New Organisation of Work (European Commission, 1997; Larsson, 1999).

REFERENCES

References to research reported at “Work Life 2000: Quality in Work” workshops, indicated with an asterisk (*), can be pursued, using the name indexes, in


Other references, with a scope beyond Europe, include